

Government Gazette
Staatskoerant

REPUBLIC OF SOUTH AFRICA
REPUBLIEK VAN SUID AFRIKA

Vol. 681 25 March Maart 2022 No. 46088

PART 1 OF 6

N.B. The Government Printing Works will not be held responsible for the quality of "Hard Copies" or "Electronic Files" submitted for publication purposes

ISSN 1682-5845

9 771682 584003 46088

AIDS HELPLINE: 0800-0123-22 Prevention is the cure

IMPORTANT NOTICE:

THE GOVERNMENT PRINTING WORKS WILL NOT BE HELD RESPONSIBLE FOR ANY ERRORS THAT MIGHT OCCUR DUE TO THE SUBMISSION OF INCOMPLETE / INCORRECT / ILLEGIBLE COPY.

NO FUTURE QUERIES WILL BE HANDLED IN CONNECTION WITH THE ABOVE.

Contents

No.		Gazette No.	Page No.
GOVERNMENT NOTICES • GOEWERMENTSKENNISGEWINGS			
Agriculture, Land Reform and Rural Development, Department of / Landbou, Grondhervorming en Landelike Ontwikkeling, Departement van			
1920	Agricultural Product Standards Act (119/1990): Standards and Requirements regarding control of the Export of Leguminous Seeds: Amendment	46088	8
1921	Restitution of Land Rights Act (22/1994), as amended: Amendment of Government Gazette Number 29004 notice 889 dated 14 July 2006 in relation to the Land Claim that was lodged by the Late Mr. Masesebe Mutheiwana Philemon on behalf of Matshisevhe Community	46088	9
Employment and Labour, Department of / Indiensneming en Arbeid, Departement van			
1922	Labour Relations Act (66/1995) as amended: Du Toit Agri (Pty) Ltd and The National Bargaining Council for the Road Freight and Logistics Industry	46088	10
Forestry, Fisheries and the Environment, Department of / Bosbou, Visserye en die Omgewingsake, Departement van			
1923	National Environmental Management: Protected Areas Act (57/2003): Correction notice: Meerkat National Park declared in terms of the Act	46088	11
1924	National Environmental Management Act (107/1998): Consultation on the intention to publish the National Biodiversity Offset Guideline	46088	12
Health, Department of / Gesondheid, Departement van			
1925	Hazardous Substances Act (15/1973): Group I, Category B, Hazardous Substances: Declaration	46088	79
1926	Hazardous Substances Act (15/1973): Group I, Category A, Hazardous Substances: Declaration	46088	82
1927	Health Professions Act (56/1974): Regulations relating to the Registration of Forensic Pathology Officers	46088	86
1928	Occupational Diseases in Mines and Works Act (78/1973): Increase of Pension Benefits	46088	89
1928	Wet op Bedryfsiektes in Myne en Bedrywe (78/1973): Verhoging van Pensioen Voordele	46088	89
1929	Dental Technicians Act (19/1979): The South African Dental Technicians Council: Notice regarding Annual Fees payable to the Council	46088	90
1930	Occupational Diseases in Mines and Works Act (78/1973): Amendment of Amounts to Increase Benefits	46088	93
1930	Wet op Bedryfsiektes in Myne en Bedrywe (78/1973): Wysiging van Bedrae om Voordele te Verhoog	46088	94
Higher Education and Training, Department of / Hoër Onderwys en Opleiding, Departement van			
1931	Higher Education Act (101/1997), as amended: Report of the Independent Assessor into the Affairs of the Mangosuthu University of Technology, Professor Anthony Staak to the Minister of Higher Education, Science and Innovation, Dr BE Nzimande	46088	95
Trade, Industry and Competition, Department of / Handel, Nywerheid en Kompetisie, Departement van			
1932	The Sugar Industry Agreement, 2000, as amended: Notice under Clause 82 of the Sugar Industry Agreement, 2000 as amended	46088	194
1933	Standards Act (8/2008): Standards matters: Drafts for comments: Amendment of existing standards; Withdrawal of the South African National Standards; Withdrawal of informative and normative documents; Issuing of the South African National Standards	46088	198
GENERAL NOTICES • ALGEMENE KENNISGEWINGS			
Agriculture, Land Reform and Rural Development, Department of / Landbou, Grondhervorming en Landelike Ontwikkeling, Departement van			
905	Marketing of Agricultural Products Act (47/1996), (MAP Act) as amended: SAGIS Statutory Measures: Amendments and new measure	46088	202
906	Marketing of Agricultural Products Act (47/1996), (MAP Act) as amended: SAGIS Statutory Measures: Wheat import intention for comments	46088	204

907 Marketing of Agricultural Products Act (MAP Act) (47/1996): Request for the continuation of Statutory measures relating to levies, registration and records & returns in the Pork Industry: Request for comments/inputs from role players in the Pork Industry 46088 207
908 Marketing of Agricultural Products Act (47/1996), as amended: National Agricultural Marketing Council: Request for the continuation of statutory measures relating to levies, registration and records & returns in the Red Meat Industry in terms of the Act 46088 210
909 Restitution of Land Rights Act (22/1994), as amended: Portion 0 (remaining extent) of the Farm Wheatlands A No. 9139 ..... 46088 213
910 Restitution of Land Rights Act (22/1994): Lot 447, Queensburgh 46088 214

Independent Communications Authority of South Africa / Onafhanklike Kommunikasie-owerheid van Suid-Afrika

911 Section 34 (2) and 34 (5) of the Electronic Communications Act (36/2005): Notice regarding the National Radio Frequency Plan, 2021 ..... 46088 215

Justice and Constitutional Development, Department of / Justisie en Staatkundige Ontwikkeling, Departement van

912 Magistrate Bill, 2022: Invitation for Public Comments on the Magistrate Bill, 2022 ..... 46088 560

Transport, Department of / Departement van Vervoer

913 International Air Service Act (60/1993): Grant/amendment of International Air Service License: Various names 46088 562
914 Air Service Licensing Act (115/1990): Grant/amendment of Domestic Air Service Licence: Various names 46088 563

BOARD NOTICES • RAADSKENNISGEWINGS

226 Construction Industry Development Regulations, 2004 (as amended): Findings and Sanctions of the Investigating Committee published in terms of the Regulations 46088 564
227 Auditing Profession Act, 2005, as amended: Notice of prescription of: The Disciplinary Rules of the Independent Regulatory Board for Auditors (IRBA) 46088 566
228 Promotion of Access to Information Act (2/2000): Manual in terms of section 14 of the Act 46088 636
229 Auditing Profession Act (26/2005): Proposed Amendments to the Code of Professional Conduct for registered Auditors 46088 687

government printing
Department:
Government Printing Works
REPUBLIC OF SOUTH AFRICA

HIGH ALERT: SCAM WARNING!!!

TO ALL SUPPLIERS AND SERVICE PROVIDERS OF THE GOVERNMENT PRINTING WORKS

It has come to the attention of the *GOVERNMENT PRINTING WORKS* that there are certain unscrupulous companies and individuals who are defrauding unsuspecting businesses disguised as representatives of the *Government Printing Works* (*GPW*).

The scam involves the fraudsters using the letterhead of *GPW* to send out fake tender bids to companies and requests to supply equipment and goods.

Although the contact person's name on the letter may be of an existing official, the contact details on the letter are not the same as the *Government Printing Works*'. When searching on the Internet for the address of the company that has sent the fake tender document, the address does not exist.

The banking details are in a private name and not company name. Government will never ask you to deposit any funds for any business transaction. *GPW* has alerted the relevant law enforcement authorities to investigate this scam to protect legitimate businesses as well as the name of the organisation.

Example of e-mails these fraudsters are using:

PROCUREMENT@GPW-GOV.ORG

Should you suspect that you are a victim of a scam, you must urgently contact the police and inform the *GPW*.

GPW has an official email with the domain as **@gpw.gov.za**

Government e-mails DO NOT have org in their e-mail addresses. All of these fraudsters also use the same or very similar telephone numbers. Although such number with an area code 012 looks like a landline, it is not fixed to any property.

GPW will never send you an e-mail asking you to supply equipment and goods without a purchase/order number. *GPW* does not procure goods for another level of Government. The organisation will not be liable for actions that result in companies or individuals being resultant victims of such a scam.

Government Printing Works gives businesses the opportunity to supply goods and services through RFQ / Tendering process. In order to be eligible to bid to provide goods and services, suppliers must be registered on the National Treasury's Central Supplier Database (CSD). To be registered, they must meet all current legislative requirements (e.g. have a valid tax clearance certificate and be in good standing with the South African Revenue Services - SARS).

The tender process is managed through the Supply Chain Management (SCM) system of the department. SCM is highly regulated to minimise the risk of fraud, and to meet objectives which include value for money, open and effective competition, equitability, accountability, fair dealing, transparency and an ethical approach. Relevant legislation, regulations, policies, guidelines and instructions can be found on the tender's website.

Fake Tenders

National Treasury's CSD has launched the Government Order Scam campaign to combat fraudulent requests for quotes (RFQs). Such fraudulent requests have resulted in innocent companies losing money. We work hard at preventing and fighting fraud, but criminal activity is always a risk.

How tender scams work

There are many types of tender scams. Here are some of the more frequent scenarios:

Fraudsters use what appears to be government department stationery with fictitious logos and contact details to send a fake RFQ to a company to invite it to urgently supply goods. Shortly after the company has submitted its quote, it receives notification that it has won the tender. The company delivers the goods to someone who poses as an official or at a fake site. The Department has no idea of this transaction made in its name. The company is then never paid and suffers a loss.

OR

Fraudsters use what appears to be government department stationery with fictitious logos and contact details to send a fake RFQ to Company A to invite it to urgently supply goods. Typically, the tender specification is so unique that only Company B (a fictitious company created by the fraudster) can supply the goods in question.

Shortly after Company A has submitted its quote it receives notification that it has won the tender. Company A orders the goods and pays a deposit to the fictitious Company B. Once Company B receives the money, it disappears. Company A's money is stolen in the process.

Protect yourself from being scammed

- If you are registered on the supplier databases and you receive a request to tender or quote that seems to be from a government department, contact the department to confirm that the request is legitimate. Do not use the contact details on the tender document as these might be fraudulent.
- Compare tender details with those that appear in the Tender Bulletin, available online at **www.gpwonline.co.za**
- Make sure you familiarise yourself with how government procures goods and services. Visit the tender website for more information on how to tender.
- If you are uncomfortable about the request received, consider visiting the government department and/or the place of delivery and/or the service provider from whom you will be sourcing the goods.
- In the unlikely event that you are asked for a deposit to make a bid, contact the SCM unit of the department in question to ask whether this is in fact correct.

Any incidents of corruption, fraud, theft and misuse of government property in the *Government Printing Works* can be reported to:

Supply Chain Management: Ms. Anna Marie Du Toit, Tel. (012) 748 6292.
Email: **Annamarie.DuToit@gpw.gov.za**

Marketing and Stakeholder Relations: Ms Bonakele Mbhele, at Tel. (012) 748 6193.
Email: **Bonakele.Mbhele@gpw.gov.za**

Security Services: Mr Daniel Legoabe, at tel. (012) 748 6176.
Email: **Daniel.Legoabe@gpw.gov.za**

Closing times for ORDINARY WEEKLY GOVERNMENT GAZETTE 2022

The closing time is 15:00 sharp on the following days:

- 31 December 2021, Friday for the issue of Friday 07 January 2022
- 07 January, Friday for the issue of Friday 14 January 2022
- 14 January, Friday for the issue of Friday 21 January 2022
- 21 January, Friday for the issue of Friday 28 January 2022
- 28 January, Friday for the issue of Friday 04 February 2022
- 04 February, Friday for the issue of Friday 11 February 2022
- 11 February, Friday for the issue of Friday 18 February 2022
- 18 February, Friday for the issue of Friday 25 February 2022
- 25 February, Friday for the issue of Friday 04 March 2022
- 04 March, Friday for the issue of Friday 11 March 2022
- 11 March, Friday for the issue of Friday 18 March 2022
- 17 March, Thursday for the issue of Friday 25 March 2022
- 25 March, Friday for the issue of Friday 01 April 2022
- 01 April, Friday for the issue of Friday 08 April 2022
- 07 April, Thursday for the issue of Thursday 14 April 2022
- 13 April, Wednesday for the issue of Friday 22 April 2022
- 21 April, Thursday for the issue of Friday 29 April 2022
- 29 April, Thursday for the issue of Friday 06 May 2022
- 06 May, Friday for the issue of Friday 13 May 2022
- 13 May, Friday for the issue of Friday 20 May 2022
- 20 May, Friday for the issue of Friday 27 May 2022
- 27 May, Friday for the issue of Friday 03 June 2022
- 03 June, Friday for the issue of Friday 10 June 2022
- 09 June, Thursday for the issue of Friday 17 June 2022
- 17 June, Friday for the issue of Friday 24 June 2022
- 24 June, Friday for the issue of Friday 01 July 2022
- 01 July, Friday for the issue of Friday 08 July 2022
- 08 July, Friday for the issue of Friday 15 July 2022
- 15 July, Friday for the issue of Friday 22 July 2022
- 22 July, Friday for the issue of Friday 29 July 2022
- 29 July, Friday for the issue of Friday 05 August 2022
- 04 August, Thursday for the issue of Friday 12 August 2022
- 12 August, Friday for the issue of Friday 19 August 2022
- 19 August, Friday for the issue of Friday 26 August 2022
- 26 August, Friday for the issue of Friday 02 September 2022
- 02 September, Friday for the issue of Friday 09 September 2022
- 09 September, Friday for the issue of Friday 16 September 2022
- 16 September, Friday for the issue of Friday 23 September 2022
- 23 September, Friday for the issue of Friday 30 September 2022
- 30 September, Friday for the issue of Friday 07 October 2022
- 07 October, Friday for the issue of Friday 14 October 2022
- 14 October, Friday for the issue of Friday 21 October 2022
- 21 October, Friday for the issue of Friday 28 October 2022
- 28 October, Friday for the issue of Friday 04 November 2022
- 04 November, Friday for the issue of Friday 11 November 2022
- 11 November, Friday for the issue of Friday 18 November 2022
- 18 November, Friday for the issue of Friday 25 November 2022
- 25 November, Friday for the issue of Friday 02 December 2022
- 02 December, Friday for the issue of Friday 09 December 2022
- 08 December, Thursday for the issue of Thursday 15 December 2022
- 15 December, Thursday for the issue of Friday 23 December 2022
- 22 December, Thursday for the issue of Friday 30 December 2022

LIST OF TARIFF RATES

FOR PUBLICATION OF NOTICES

COMMENCEMENT: 1 APRIL 2018

NATIONAL AND PROVINCIAL

Notice sizes for National, Provincial & Tender gazettes 1/4, 2/4, 3/4, 4/4 per page. Notices submitted will be charged at R1008.80 per full page, pro-rated based on the above categories.

Pricing for National, Provincial - Variable Priced Notices		
Notice Type	**Page Space**	**New Price (R)**
Ordinary National, Provincial	1/4 - Quarter Page	252.20
Ordinary National, Provincial	2/4 - Half Page	504.40
Ordinary National, Provincial	3/4 - Three Quarter Page	756.60
Ordinary National, Provincial	4/4 - Full Page	1008.80

EXTRA-ORDINARY

All Extra-ordinary National and Provincial gazette notices are non-standard notices and attract a variable price based on the number of pages submitted.

The pricing structure for National and Provincial notices which are submitted as **Extra ordinary submissions** will be charged at R**3026.32** per page.

IMPORTANT NOTICE:

THE GOVERNMENT PRINTING WORKS WILL NOT BE HELD RESPONSIBLE FOR ANY ERRORS THAT MIGHT OCCUR DUE TO THE SUBMISSION OF INCOMPLETE / INCORRECT / ILLEGIBLE COPY.

NO FUTURE QUERIES WILL BE HANDLED IN CONNECTION WITH THE ABOVE.

GOVERNMENT NOTICES • GOEWERMENTSKENNISGEWINGS

DEPARTMENT OF AGRICULTURE, LAND REFORM AND RURAL DEVELOPMENT

NO. 1920 **25 March 2022**

AGRICULTURAL PRODUCT STANDARDS ACT NO.119 OF 1990

STANDARDS AND REQUIREMENTS REGARDING CONTROL OF THE EXPORT OF LEGUMINOUS SEEDS: AMENDMENT

I, Billy Malose Makhafola, appointed as Executive Officer in terms of section 2(1) of the Agricultural Product Standards Act No. 119 of 1990, hereby give notice under section 4(3) (c) of the said Act, that –

(a) the standards and requirements regarding control of the export of leguminous seeds as stipulated in Government Notice No. R. 1983 of 23 August 1991 and promulgated by Government Notice No. 521 of 23 June 1995 and amended by Government Notices No. 1081 of 18 August 2006 and No. 1265 of 12 October 2007 are hereby further amended; and

(b) the standards and requirements mentioned in paragraph (a) –

(i) shall be available for inspection at the Office of the Executive Officer: Agricultural Product Standards, Harvest House, 30 Hamilton Street, Arcadia, Pretoria;

(ii) may be obtained from the Executive Officer: Agricultural Product Standards, Department of Agriculture, Forestry and Fisheries, Private Bag X 343, Pretoria, 0001, Tel. (012) 319 6171 or Fax (012) 319 6265 or Email: VictorMa@dalrrd.gov.za on payment of the prescribed fees or from the website http://www.dalrrd.gov.za; and

(iii) shall come into operation seven days (7) after the publication of this notice.

B.M MAKHAFOLA
Executive Officer: Agricultural Product Standards

DEPARTMENT OF AGRICULTURE, LAND REFORM AND RURAL DEVELOPMENT

NO. 1921 **25 March 2022**

AMENDMENT OF GOVERNMENT GAZETTE NUMBER 29004 NOTICE 889 DATED 14 JULY 2006 IN RELATION TO THE LAND CLAIM THAT WAS LODGED BY THE LATE MR. MASESEBE MUTHEIWANA PHILEMON ON BEHALF OF MATSHISEVHE COMMUNITY

Notice is hereby given in terms of the proviso to section 11A(4) of the Restitution of Land Rights Act, Act No. 22 of 1994 of the amendment of Notice 889 dated 14 July 2006 in Government Gazette number 29004.

Notice 889 dated 14 July 2006 in Government Gazette number 29004 is hereby amended by removing land features listed in schedule 1 to this notice.

In addition, notice 889 dated 14 July 2006 in Government Gazette number 29004 is hereby amended by including the farm Bangor 759 MS listed in schedule 2 which was describe by land feature (Charlestroom).

Schedule 1

NO	Property Description	Current owner of the property	Title Deed Number	Extent of property	Endorsements	Holder
1.	AASVELKOP	-	-	-	-	-
2.	CHARLESTROOM	-	-	-	-	-

Schedule 2

NO	Property Description	Current owner of the property	Title Deed Number	Extent of property	Endorsements	Holder
1.	Bangor 759 MS	John Rosmarin Family Trust	T14916/1994PTA	-1164.2900 H	K3078/1999SPTA K5313/2002SPTA K6953/1996SPTA CONVERTED FROM PTA FROM-755&PTN1,754, MS	- - - - -

The Office of the Regional Land Claims Commissioner: Limpopo has investigated this land claim and any party that has an interest in the above-mentioned property is hereby invited to submit in writing, within 30 days of publication of this notice, any comment, objection or information under reference 11501

The Regional Land Claims Commissioner:Limpopo
Private Bag X 9552
Polokwane
0700

Submissions may also be delivered to:

Koos Smit Building
61 Biccard Street
Polokwane
0700

OR

13th-15th Floor Thabakgolo Nedbank Building
50—58 Landros Mare Street
Polokwane
0700

MR. L.H MAPHUTHA
REGIONAL LAND CLAIMS COMMISSIONER
DATE: 2022/03/08

DEPARTMENT OF EMPLOYMENT AND LABOUR

NO. 1922 **25 March 2022**

NOTICE IN TERMS OF SECTION 62 (7) OF THE LABOUR RELATIONS ACT 66 OF 1995 (AS AMENDED)

PLEASE TAKE NOTICE THAT:-

Du Toit Agri (Pty) Ltd is a company based in Ceres that operates in the agricultural sector. It owns vehicles and employs drivers who deliver the company's own produce, and on occasion a small amount of produce for other agricultural businesses. The company alleges that this constitutes no more than 0,3 % of the company's business.

The National Bargaining Council for the Road Freight and Logistics Industry has claimed jurisdiction over the company in respect of the portion of its business that falls within the Council's jurisdiction (being the transport of goods by means of motor transport on behalf of others, for reward). The company opposes this claim and has filed an application for demarcation with the Commission for Conciliation, Mediation and Arbitration (CCMA).

The CCMA believes that the question raised by this demarcation dispute is potentially of wider application in that there may be a number of other parties (including trade unions) who have an interest in this dispute, and those parties may well be affected by the outcome of this application. Such entities should have the right to make representations to the CCMA. The CCMA therefore invites written representations in relation to the issue in dispute by any interested party.

Written representations may be made within 21 calendar days of the date of publication of this notice, and should be clearly marked with reference number **WECT 1034-22** and directed to:-

Ms Winifred Cupido
Tel:
Email: WinifredC@CCMA.org.za
Hand-delivered: 6th Floor
CCMA Cape Town office
78 Darling Street,
Cape Town
8001

DEPARTMENT OF FORESTRY, FISHERIES AND THE ENVIRONMENT

NO. 1923 **25 March 2022**

NATIONAL ENVIRONMENTAL MANAGEMENT: PROTECTED AREAS ACT, 2003 (ACT NO. 57 OF 2003)

CORRECTION NOTICE: MEERKAT NATIONAL PARK DECLARED IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT: PROTECTED AREAS ACT, 2003

I, Barbara Dallas Creecy, Minister of Forestry, Fisheries and the Environment, under section 20(1)(a)(i) of the National Environmental Management: Protected Areas Act, 2003 (Act No. 57 of 2003) declared the Meerkat National Park, and in terms of section 38(1)(a) assigned the management of the Meerkat National Park to the South African National Parks under Government Notice No. 15, published in the Government *Gazette* No. 43145 of 27 March 2020.

According to the Surveyor General Diagram File No. F9557/1953, the following Deeds of Transfers, namely T1117/2018, T3318/2017 and T745934/2008, contain inaccurate size description of properties.

I, therefore, correct the size descriptions as they appear in the Schedule to the above-mentioned Government Notice as follows:

(a) "Remainder of the Farm Swartfontein No. 496, situated in the Kareeberg Municipality, in the Administrative District of Carnarvon, Northern Cape Province and measuring 2288.3240 hectares, held by the Deed of Transfer T1117/2018", as it appears in the Schedule, is substituted with "Remainder of the Farm Swartfontein No. 496, situated in the Kareeberg Municipality, in the Administrative District of Carnarvon, Northern Cape Province and measuring 3234.1240 hectares, held by the Deed of Transfer T1117/2018";

(b) "Portion 1 of the Farm Swartfontein No. 496, situated in the Kareeberg Municipality, in the Administrative District of Carnarvon, Northern Cape Province and measuring 2288.8077 hectares, held by the Deed of Transfer T3318/2017", as it appears in the Schedule, is substituted with "Remainder of Portion 1 of the Farm Swartfontein No. 496, situated in the Kareeberg Municipality, in the Administrative District of Carnarvon, Northern Cape Province and measuring 2288.8077 hectares, held by the Deed of Transfer T3318/2017"; and

(c) "Farm Los Berg No. 73, measuring 6534.97 hectares, according to SG No. F4069/1935 held by the Deeds of Transfer T745934/2008", as it appears in the Schedule, is substituted with "Portion 1 of the farm Los Berg No. 73, situated in the Karoo Hoogland Municipality, in the Administrative District of Fraserburg, Northern Cape Province and measuring 1831.5806 hectares, held by the Deeds of Transfer T745934/2008" and "Remainder of the farm Los Berg No. 73, situated in the Karoo Hoogland Municipality, in the Administrative District of Fraserburg, Northern Cape Province and measuring 4703.3903 hectares, held by the Deeds of Transfer T745934/2008".

BARBARA DALLAS CREECY
MINISTER OF FORESTRY, FISHERIES AND THE ENVIRONMENT

DEPARTMENT OF FORESTRY, FISHERIES AND THE ENVIRONMENT

NO. 1924 **25 March 2022**

NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998
(ACT NO. 107 OF 1998)

CONSULTATION ON THE INTENTION TO PUBLISH THE NATIONAL BIODIVERSITY OFFSET GUIDELINE

I, Barbara Dallas Creecy, Minister of Forestry, Fisheries and the Environment, hereby consult on my intention to publish, under section 24J of the National Environmental Management Act, 1998 (Act No. 107 of 1998), the National Biodiversity Offset Guideline, set out in the Schedule hereto.

Members of the public are invited to submit written comments or inputs, within 30 days after publication of this Notice in the Government *Gazette*, to the following address:

By post to: The Director-General
Department of Forestry, Fisheries and the Environment
Attention: Ms Pamela Kershaw
Private Bag X447
PRETORIA
0001

By hand at: Environment House
473 Steve Biko Road
ARCADIA
0083

By email: pkershaw@dffe.gov.za

Please note that anyone entering the Department's buildings will be subjected to COVID-19 procedures. However, due to the COVID-19 pandemic, delivering comments by hand at the Department is discouraged.

Any enquiries in connection with the draft Notice can be directed to Ms Pamela Kershaw at Tel: 012 399 9585.

Comments or inputs received after the closing date may not be considered.

BARBARA DALLAS CREECY
MINISTER OF FORESTRY, FISHERIES AND THE ENVIRONMENT

SCHEDULE

1. Section 2(4)(a)(i) of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA) provides that "*sustainable development requires the consideration of all relevant factors including the following: ... that the disturbance of ecosystems and loss of biodiversity are avoided, or, where they cannot be altogether avoided, are minimised and remedied.*".

2. The term "remedy" in that principle includes the rehabilitation and/or restoration of areas disturbed by development as well as biodiversity offsetting. Biodiversity offsetting is required when a proposed activity would have a significant residual negative biodiversity impact after all efforts have been made to avoid and minimise negative impacts on biodiversity and to rehabilitate and/or restore areas disturbed by development.

3. Biodiversity offsetting is an underutilised mitigation option in South Africa, and where it is utilised, it often does not result in tangible biodiversity outcomes. Several provinces have therefore adopted biodiversity offset guidelines to assist competent authorities, environmental assessment practitioners and other stakeholders in implementing biodiversity offsets in practice. However, a response on a national level is also necessary to promote consistency in biodiversity offsetting practice in the country.

4. The Department of Forestry, Fisheries and the Environment has developed a draft Overall Policy on Environmental Offsetting (Draft Policy), which will be published for public comment in the near future. The Draft Policy sets out broad principles on environmental offsetting and recommends the development of more detailed sector-specific environmental offsetting guidance.

5. The Draft National Biodiversity Offset Guideline (Draft Guideline) is one of the sector-specific guidelines contemplated in the Draft Policy. It is aligned with the principles of the Draft Policy and is designed to give practical guidance on biodiversity offsetting in the environmental authorisation application process contemplated in NEMA. As such, it is proposed that the Draft Guideline is published as a guideline contemplated in section 24J of NEMA.

6. The guideline would therefore not be directly applicable to regulatory processes other than environmental authorisation applications in terms of NEMA, but it is hoped that it could be useful to stakeholders in those processes.

7. A colour copy of the draft guideline is available at www.environment.gov.za.

GOVERNMENT NOTICE

DEPARTMENT OF FORESTRY, FISHERIES AND THE ENVIRONMENT

NO. **2021**

NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998
(ACT NO. 107 OF 1998)

CONSULTATION ON THE INTENTION TO PUBLISH THE NATIONAL BIODIVERSITY OFFSET GUIDELINE

I, Barbara Dallas Creecy, Minister of Forestry, Fisheries and the Environment, hereby consult on my intention to publish, under section 24J of the National Environmental Management Act, 1998 (Act No. 107 of 1998), the National Biodiversity Offset Guideline, set out in the Schedule hereto.

Members of the public are invited to submit written comments or inputs, within 30 days after publication of this Notice in the Government *Gazette*, to the following address:

By post to: The Director-General
Department of Forestry, Fisheries and the Environment
Attention: Ms Pamela Kershaw
Private Bag X447
PRETORIA
0001

By hand at: Environment House
473 Steve Biko Road
ARCADIA
0083

By email: pkershaw@dffe.gov.za

Please note that anyone entering the Department's buildings will be subjected to COVID-19 procedures. However, due to the COVID-19 pandemic, delivering comments by hand at the Department is discouraged.

Any enquiries in connection with the draft Notice can be directed to Ms Pamela Kershaw at Tel: 012 399 9585.

Comments or inputs received after the closing date may not be considered.

BARBARA DALLAS CREECY
MINISTER OF FORESTRY, FISHERIES AND THE ENVIRONMENT

SCHEDULE

1. Section 2(4)(a)(i) of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA) provides that "*sustainable development requires the consideration of all relevant factors including the following: … that the disturbance of ecosystems and loss of biodiversity are avoided, or, where they cannot be altogether avoided, are minimised and remedied*.".

2. The term "remedy" in that principle includes the rehabilitation and/or restoration of areas disturbed by development as well as biodiversity offsetting. Biodiversity offsetting is required when a proposed activity would have a significant residual negative biodiversity impact after all efforts have been made to avoid and minimise negative impacts on biodiversity and to rehabilitate and/or restore areas disturbed by development.

3. Biodiversity offsetting is an underutilised mitigation option in South Africa, and where it is utilised, it often does not result in tangible biodiversity outcomes. Several provinces have therefore adopted biodiversity offset guidelines to assist competent authorities, environmental assessment practitioners and other stakeholders in implementing biodiversity offsets in practice. However, a response on a national level is also necessary to promote consistency in biodiversity offsetting practice in the country.

4. The Department of Forestry, Fisheries and the Environment has developed a draft Overall Policy on Environmental Offsetting (Draft Policy), which will be published for public comment in the near future. The Draft Policy sets out broad principles on environmental offsetting and recommends the development of more detailed sector-specific environmental offsetting guidance.

5. The Draft National Biodiversity Offset Guideline (Draft Guideline) is one of the sector-specific guidelines contemplated in the Draft Policy. It is aligned with the principles of the Draft Policy and is designed to give practical guidance on biodiversity offsetting in the environmental authorisation application process contemplated in NEMA. As such, it is proposed that the Draft Guideline is published as a guideline contemplated in section 24J of NEMA.

6. The guideline would therefore not be directly applicable to regulatory processes other than environmental authorisation applications in terms of NEMA, but it is hoped that it could be useful to stakeholders in those processes.

7. A colour copy of the draft guideline is available at www.environment.gov.za.

forestry, fisheries & the environment

Department:
Forestry, Fisheries and the Environment
REPUBLIC OF SOUTH AFRICA

NATIONAL BIODIVERSITY OFFSET GUIDELINE

issued under section 24J of the National Environmental Management Act

FIRST EDITION (OCTOBER 2021)

This gazette is also available free online at **www.gpwonline.co.za**

Preface

This guideline has been published in terms of section 24J of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA) and must therefore be read together with the provisions of NEMA, including the national environmental management principles in section 2 of NEMA, as well as the Environmental Impact Assessment Regulations, 2014 (EIA Regulations) and other guidelines published under section 24J of NEMA. Of importance, the guideline must be read in the context of the mitigation hierarchy provided for in section 2(4)(a)(i) of NEMA as well as the Overall Policy on Environmental Offsetting.

This gazette is also available free online at **www.gpwonline.co.za**

Table of content

1. Introduction 11
2. Background 12
3. Legislative framework....13
4. Outcome statement and principles....14
4.1 Desired outcomes of biodiversity offsets....15
4.2 Principles for biodiversity offsetting....15
5. Biodiversity offsets in the environmental authorisation application process....19
5.1 An overview of the steps involved in the biodiversity offsetting process....19
5.1.1 Identifying the need for a biodiversity offset....20
5.1.2 Determining the requirements of a biodiversity offset....21
5.1.3 Selecting a biodiversity offset site....22
5.1.4 Securing the biodiversity offset site....22
5.1.5 Preparing a Biodiversity Offset Management Plan....23
5.1.6 Preparing biodiversity offset conditions for an environmental authorisation....23
5.1.7 Concluding a Biodiversity Offset Implementation Agreement....24
5.2 The roles and responsibilities of the different role-players in the biodiversity offsetting process 26
6. When are biodiversity offsets required? 28
6.1 Residual impacts 29
6.2 Impact significance....30
7. Determining biodiversity offset requirements....34
7.1 Obtaining a measure of the significant residual negative biodiversity impacts....35
7.2 Determining the right size of the biodiversity offset....35
7.2.1 Standard approach to determining the required size of a biodiversity offset....36
7.2.2 Different approaches to determining the required size of the biodiversity offset 39
7.3 Taking into consideration unique or special biodiversity features....40
7.4 Selecting and securing candidate biodiversity offset sites....41
7.4.1 Selecting candidate biodiversity offset sites 41
7.4.2 Assessing the potential for securing candidate biodiversity offset sites 43
7.4.3 Ensuring that the biodiversity offset options would be acceptable to the relevant conservation authority 44

This gazette is also available free online at **www.gpwonline.co.za**

7.5 Selecting the biodiversity offset site 44
7.6 Planning for biodiversity offset implementation 45
7.6.1 Management of the biodiversity offset site 45
7.6.2 Financing the biodiversity offset 48
7.7 Preparing the Biodiversity Offset Report 50
8. Engaging with conservation authorities and commenting authorities 53
9. Drafting biodiversity offset conditions for environmental authorisations 54
9.1 The biodiversity outcomes that must be achieved by a particular biodiversity offset 54
9.2 The selection and securing of a biodiversity offset site 55
9.3 The obligation to prepare a Biodiversity Offset Management Plan for the biodiversity offset site 55
9.4 Entering into a Biodiversity Offset Implementation Agreement 56
9.5 Financial security for the biodiversity offset 56
9.6 Timeframes for taking the steps in the biodiversity offset process 57
9.7 The period of validity of the environmental authorisation 57
9.8 Suspensive and resolutive conditions 57
10. Biodiversity Offset Implementation Agreements 58
11. The National Biodiversity Offset Register 60
12. Implementation, monitoring and auditing 60
References 61

List of figures and tables

Figure 1 Flow diagram: When is a biodiversity offset required? 29
Figure 2 The calculation of biodiversity offset ratios ....**Error! Bookmark not defined.**

Table 1 Biodiversity thresholds, impact significance and implications for mitigation and biodiversity offsets 31
Table 2 Example of the application of the standard approach to calculating biodiversity offset ratios. ....**Error! Bookmark not defined.**
Table 3 Example of the application of the standard approach to calculating biodiversity offset ratios with the CBA adjustment factor ....**Error! Bookmark not defined.**

This gazette is also available free online at **www.gpwonline.co.za**

Abbreviations and acronyms.

BAR	Basic assessment report		**FEPA**	Freshwater Ecosystem Priority Area
CA	Competent authority		**I&AP**	Interested and affected party
CBA	Critical Biodiversity Area		**NBA**	National Biodiversity Assessment (2018)
CR	Critically Endangered		**NEMA**	National Environmental Management Act, 1998 (Act No. 107 of 1998)
DFFE	Department of Forestry, Fisheries and the Environment		**NEMBA**	National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004)
EA	Environmental authorisation		**NEMPAA**	National Environmental Management: Protected Areas Act, 2003 (Act No. 57 of 2003)
EAP	Environmental assessment practitioner		**NFA**	National Forests Act, 1998 (Act No. 84 of 1998)
EEI	Ecosystem Extent Index		**NPAES**	National Protected Area Expansion Strategy
EIA	Environmental impact assessment, and includes basic assessment, and scoping and environmental impact assessment		**NWA**	National Water Act, 1998 (Act No. 36 of 1998)
EMPr	Environmental management programme		**SANBI**	South African National Biodiversity Institute
EN	Endangered		**SWSA**	Strategic Water Source Area
EPL	Ecosystem Protection Level			
ESA	Ecological Support Area			
ETS	Ecosystem Threat Status			

This gazette is also available free online at **www.gpwonline.co.za**

Definitions

In this guideline, unless expressly provided otherwise, or if the context provides otherwise, a word or expression to which a meaning has been assigned in the National Environmental Management Act, 1998 (Act No. 107 of 1998) (**NEMA**) or the Environmental Impact Assessment Regulations, 2014 (**EIA Regulations**), has the same meaning, and –

"biodiversity" means the variability among living organisms from all sources including, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part and also includes diversity within species, between species, and of ecosystems;

"biodiversity offset", for the purposes of this guideline, means the measurable outcome of compliance with a formal requirement contained in an environmental authorisation to implement an intervention that has the purpose of counterbalancing the residual negative impacts of an activity, or activities, on biodiversity, through increased protection and appropriate management, after every effort has been made to avoid and minimise impacts, and rehabilitate affected areas;

Offsets and trade-offs

Biodiversity offsets should be distinguished from trade-offs. A trade-off in the biodiversity context involves exchanging a negative outcome for biodiversity with another positive outcome, which does not necessarily benefit biodiversity. Trading off biodiversity for other positive outcomes is not a form of mitigation, like biodiversity offsetting. It falls outside of the scope of the mitigation hierarchy.

The following are examples of trade-offs in the biodiversity context:

- Ecological compensation (please see the definition below);
- Financial compensation: a financial contribution to a biodiversity initiative to compensate for a significant residual negative impact on biodiversity; and

Trade-offs should only be considered when biodiversity offsetting is not possible and where there are imperative reasons for overriding public interest. They should also be approached with extreme caution in the context of environmental authorisation applications given that our law demands a rational link between impacts on the environment and conditions of environmental authorisations directed at addressing those impacts.

The focus of this guideline is biodiversity offsetting. It, however, also tangentially deals with ecological compensation. It does not deal with other forms of trade-offs.

This gazette is also available free online at **www.gpwonline.co.za**

"Biodiversity Offset Implementation Agreement" means a legally binding agreement that is entered into between the holder of an environmental authorisation and a third party, or third parties, for the implementation of a biodiversity offset, more fully described in Chapter 10;

"Biodiversity Offset Management Plan" means a plan setting out the management actions to be taken at a biodiversity offset site to achieve and maintain specific conservation outcomes in the long term, more fully described in Chapter 7.6.1;

"biodiversity offset receiving area" means an area identified in an official policy, plan or programme as an optimal area for locating biodiversity offsets;

"Biodiversity Offset Report" means a specialist report prepared by a relevant specialist, or specialists, and submitted to a competent authority together with a basic assessment report, or environmental impact assessment report, setting out the findings of a biodiversity offset assessment, more fully described in Chapter 7.7;

"biodiversity offset site" means a suitable area in the landscape which meets the offset requirements in an environmental authorisation and is secured for biodiversity conservation in the long term;

"biodiversity priority area" means an area identified as a priority for biodiversity conservation in a spatial biodiversity plan, and includes Critical Biodiversity Areas, Ecological Support Areas, Freshwater Ecosystem Priority Areas and focus areas for protected area expansion;

"biodiversity target",

(a) when used in the context of ecosystems, means the minimum proportion of each ecosystem type that needs to be kept in good ecological condition in the long term in order to maintain viable representative samples of all ecosystem types and the majority of species associated with them, and is expressed as a percentage of the historical extent of an ecosystem type, measured as area, length or volume; or
(b) when used in the context of a species, means the minimum number of individuals in a population required to ensure the viability and persistence of that population, or the minimum number of populations of a species required to ensure the viability and persistence of that species, within a particular landscape context or defined in a provincial, national, continental or global conservation programme or strategy;

"candidate biodiversity offset site" means one of the potential biodiversity offset sites identified in a Biodiversity Offset Report;

"CBA Map" means a map of Critical Biodiversity Areas and Ecological Support Areas, based on a systematic biodiversity plan;

"coastal protection zone" means the area contemplated in section 16 of the National Environmental Management: Integrated Coastal Management Act, 2008 (Act No. 24 of 2008) (**NEMICMA**);

This gazette is also available free online at **www.gpwonline.co.za**

"coastal public property" means the area contemplated in section 7 of NEMICMA;

"conservation area" means an area with a conservation designation that is effective at achieving *in-situ* conservation of biodiversity outside of protected areas in the long term;

"conservation servitude" means a servitude registered against the title deed of a property placing restrictions on the landowner and successors-in-title for the purposes of conservation of biodiversity on the relevant property;

"Critical Biodiversity Area" (CBA) means an area that must be maintained in a good ecological condition (natural or near-natural state) in order to meet Biodiversity Targets for ecosystem types as well as for species and ecological processes that depend on natural or near natural habitat, that have not already been met in the protected area network;[1]

"Critical Biodiversity Area (CBA): Irreplaceable (CBA 1)" means a CBA that is essential for meeting biodiversity targets because there are insufficient other options for meeting biodiversity targets for the features associated with the site;[2]

"Critical Biodiversity Area: Optimal (CBA 2)" means a CBA that has been selected as the best option for meeting Biodiversity Targets based on complementarity, spatial efficiency, connectivity and/or avoidance of conflict with other land or resource use;[3]

CBA Maps

CBAs are identified in Biodiversity Plans, such as CBA Maps and bioregional plans, which can be found at http://biodiversityadvisor.sanbi.org]

"ecological compensation" means the outcome of measurable actions to protect, restore and manage priority biodiversity, aimed at compensating for residual negative impacts on irreplaceable biodiversity and ecological infrastructure where these impacts cannot be offset and which should, instead and in the first instance, be avoided;

"ecological condition" means the extent to which the composition, structure and function of an area or biodiversity feature has been modified from a reference condition of "natural";

"ecosystem extent" means the proportion of an ecosystem type that remains intact (i.e. in a natural, near-natural or semi-natural condition) relative to its historical distribution;

[1] Please note that some provinces, such as the Western Cape Province, uses different methodologies for setting their biodiversity targets in systematic biodiversity plans.
[2] Please see footnote 1 above.
[3] Please see footnote 1 above.

This gazette is also available free online at **www.gpwonline.co.za**

"ecological infrastructure" means naturally functioning ecosystems that deliver valuable services to people, such as water and climate regulation, soil formation and disaster risk reduction;

"ecological processes" means the natural functions and processes that operate in a land- or seascape to maintain and generate biodiversity;

"Ecological Support Area" (ESA) means an area that must be maintained in at least fair ecological condition (semi-natural/ moderately modified state in which ecological function is maintained even though composition and structure have been compromised) in order to support the ecological functioning of a CBA or protected area, to generate or deliver key ecosystem services (e.g. water), or to meet remaining biodiversity targets for ecosystem types or species when it is not possible or necessary to meet them in natural or near-natural areas;

CBA Maps

CBAs are identified in Biodiversity Plans, such as CBA Maps and bioregional plans, which can be found at http://biodiversityadvisor.sanbi.org]

"ecosystem" means an assemblage of living organisms, the interactions between them and their physical environment.

"ecosystem protection level" means the indicator of how well represented an ecosystem type is in the protected area network, in which ecosystem types are categorised as well protected, moderately protected, poorly protected or unprotected, based on the proportion of the biodiversity target for each ecosystem type that is included in one or more protected areas;

"ecosystem services" means services and benefits to people and the economy provided by ecosystems, often classified into three broad categories: provisioning services, regulating services and cultural services;

"ecosystem threat status" means the indicator of how threatened an ecosystem type is (in other words the degree to which it is still intact or alternatively losing vital aspects of its function, structure or composition) in which Ecosystem types are categorised as Critically Endangered, Endangered, Vulnerable or Not Threatened, based on the proportion of ecosystem type that remains in good ecological condition relative to a series of biodiversity thresholds;

Ecosystem threat status

The status of the different ecosystem types in South Africa can be found in the National Biodiversity Assessment (NBA), or the list of ecosystems that are threatened or in need of protection published in terms of the National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004) (**NEMBA**), whichever is more recent.]

This gazette is also available free online at **www.gpwonline.co.za**

"ecosystem type" means an ecosystem unit, or set of ecosystem units, that has been identified and delineated as part of a hierarchical classification system, based on biotic and/ or abiotic factors, with ecosystems of the same type to likely share broadly similar ecological characteristics and functioning;

"fatal flaw" means a major defect or deficiency in a project proposal that should result in environmental authorisation being refused, and from a biodiversity perspective, a residual negative impact that would have a Very High significance rating as determined in Chapter 6.2;

"mitigation" means to avoid negative impacts, and where they cannot altogether be avoided, to minimise and remedy them, including through rehabilitation, restoration, and/or offsetting;

"Other Natural Area" means an area in good or fair ecological condition (natural, near-natural or semi-natural) that is not required to meet biodiversity targets for ecosystem types, species or ecological processes;

"protected area" means an area recognised as a protected area in the National Environmental Management: Protected Areas Act, 2003 (Act No. 57 of 2003) (**NEMPAA**);

"rehabilitation" means returning a disturbed, degraded or destroyed ecosystem to sustainable, productive use, with the emphasis on repairing ecological processes and ecosystem services;

"residual negative impacts" means negative impacts that remain after the proponent has made all reasonable and practicable changes to the location, siting, scale, layout, technology and design of the proposed development, in consultation with the environmental assessment practitioner and specialists (including a biodiversity specialist), in order to avoid and minimise negative impacts, and/or rehabilitate and/or restore impacted areas within 30 years;[4]

"restoration" means returning a disturbed, degraded or destroyed ecosystem to its natural condition, with the species present being representative of the ecosystem that occurred on the site prior to disturbance, and ecological processes supporting the long-term persistence of the ecosystem and species, and the associated ecosystem services, through active (with interventions) or passive (without interventions) means;

"spatial biodiversity plan" means a spatial plan that identifies one or more categories of biodiversity priority area, using the principles and methods of systematic biodiversity planning, and which has been adopted in terms of relevant legislation;

"special habitat" means a biodiversity feature found nested within an ecosystem or spanning adjacent ecosystems, which contains or comprises unique elements that underpin or support species diversity,

[4] *It is acknowledged that the time it takes for full restoration differs from ecosystem type to ecosystem type, as well as the local conditions. Given that there is no readily accessible information on the recovery times of the different ecosystem types in South Africa, a general timeframe had to be used. The 30-year general timeframe in the definition of "residual impact" reflects that the difficulty in restoring South African ecosystems once they have been disturbed. It is based on the risk-averse and cautious approach.*

This gazette is also available free online at **www.gpwonline.co.za**

interaction or ecological processes within that ecosystem, and which can often only be identified at a finer scale than, for example, ecosystem assessments undertaken at national or provincial level;

"Strategic Water Source Areas" means areas of land that –

(a) supply a disproportionate (i.e. relatively large) quantity of mean annual surface water runoff in relation to their size and so are considered nationally important;
(b) have high groundwater recharge and where the groundwater forms a nationally important resource; or
(c) areas that meet both criteria (a) and (b);

Strategic water source areas
SWSAs can be found at http://biodiversityadvisor.sanbi.org

"threatened ecosystem" means an ecosystem with an Ecosystem Threat Status of Critically Endangered, Endangered or Vulnerable as determined by the latest edition of the NBA, or the list of ecosystems that are threatened or in need of protection published in terms of NEMBA, whichever is more recent;

1. Introduction

The purpose of this guideline is to indicate when biodiversity offsets are likely to be required as mitigation by any competent authority (**CA**), to lay down basic principles for biodiversity offsetting and to guide offset practice in the environmental authorisation **(EA)** application context.

This guideline is an implementation guideline contemplated in section 24J of the National Environmental Management Act, 1998 (**NEMA**). Guidelines published in terms of that section give guidance on, *inter alia*, "the implementation, administration and institutional arrangements of [the Environmental Impact Assessment Regulations, 2014 (**EIA Regulations**) or subsequent regulations regarding the environmental impact assessment process]."

This guideline is therefore applicable to applications for EA in terms of section 24 of NEMA. However, it can also be used to inform other administrative processes that may involve biodiversity offsetting, including applications for EA in terms of section 24G of NEMA, emergency directives contemplated in section 30A of NEMA, applications for licences under the National Water Act, 1998, the National Forests Act, 1998 and the National Environmental Management: Waste Act, 2008, applications for development rights in terms of the Spatial Planning and Land Use Management Act, 2013 and requests for the de-proclamation, or the withdrawal of declarations, of protected areas in terms of provincial legislation or NEMPAA.

This guideline is applicable in the terrestrial and freshwater realms. It is therefore not applicable in the offshore marine realm and estuarine ecosystems. The guideline focuses on ecosystems as the primary unit for expressing ecosystem-based offset requirements, given the strong foundation that

This gazette is also available free online at **www.gpwonline.co.za**

the EIA Regulations and EIA implementation already have in ecosystem concepts. However, some guidance on species and other biodiversity features are given, but to a lesser extent.

The guideline does not replace NEMA's provisions regarding EA processes, or the EIA Regulations. It guides the implementation of NEMA and the EIA Regulations in the context of mitigation of biodiversity impacts and use of biodiversity offsets, and should therefore be read in conjunction with those laws.

Biodiversity offsetting is a mitigation measure that is potentially applicable in all EA application processes regardless of the identity of the applicant. This guideline is therefore applicable to EA applications made by private persons or entities, as well as organs of state.

The guideline is for CAs, environmental assessment practitioners (**EAPs**), specialists in environmental assessment processes, commenting authorities, statutory conservation authorities, interested and affected parties (**I&APs**), applicants for EA (or other authorisations or licences) and financial institutions funding proposed projects that require EA.

2. Background

Biodiversity is fundamental to the health and well-being of people, as well as economic activity and socio-economic upliftment. The National Biodiversity Assessment (2018) (**NBA 2018**) states that South Africa's biodiversity assets and ecological infrastructure contribute significantly towards meeting national development priorities.

Ecosystem services are delivered by ecological infrastructure, including healthy mountain catchments, rivers, wetlands, coastal dunes, and nodes and corridors of natural habitat, which together form a network of interconnected structural elements in the landscape. Ecosystem services are essential for human well-being and supports economic activities.

Many economic activities are directly linked to biodiversity: it was estimated in 2018 that more than 400 000 people are employed in the biodiversity economy in South Africa (NBA 2018). There is still an immense opportunity to further unlock the value of biodiversity and ecosystems in support of the country's development path, especially as the knowledge base on the value of ecosystems and their effective management expands.

South Africa has a rich natural and biodiversity heritage. It is classified as a megadiverse country, which means that South Africa's biodiversity is also important in an international context.

South Africa's biodiversity is being gradually eroded and degraded (NBA 2018). South Africa's primary development plan, the National Development Plan (2012-2030) (NDP), notes that South Africa is currently in "ecological deficit".[5] The loss of biodiversity has negative socio-economic impacts (such

[5] An ecological deficit occurs when the footprint of a population exceeds the biocapacity of the area available to that population.

This gazette is also available free online at **www.gpwonline.co.za**

as adverse impacts on health, loss of livelihoods and the absence of protection against natural disasters or hazards).

One specific challenge identified through the trends analysis in developing the National Framework for Sustainable Development (2008) was the need to reverse the "continuing degradation or loss of biodiversity and functioning ecosystems" on which sustainable development depends. Biodiversity offsetting has been identified as one way in which biodiversity loss can be slowed down. In the NDP, it is recommended that measures are adopted "to protect the country's natural resources including an environmental management framework in which developments that have serious environmental or social effects need to be *offset* by support for improvements in related areas and a target for the amount of land and oceans under protection" (emphasis added). *Biodiversity* offsets are specifically recognised as a policy option to slow the degradation and erosion of South Africa's biodiversity in the National Biodiversity Framework, 2017-2022 published under the National Environmental Management: Biodiversity Act, 2004 (**NEMBA**).

Biodiversity offsetting, if done correctly, can advance the environmental right in the Constitution of the Republic of South Africa, 1996 (**Constitution**). Section 24 of the Constitution provides that everyone has the right to, amongst other things, have the environment protected for the benefit of present and future generations through reasonable legislative and other measures that, amongst other things, promote conservation and secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development. Biodiversity offsetting is one of the ways in which South Africa's protected and conservation areas can be expanded, thereby promoting conservation. It may well also help to secure ecologically sustainable development as it mitigates the adverse impact of economic and social development on biodiversity, which, in turn, underpins such development.

In short, biodiversity offsetting has the potential to encourage more rigorous consideration of feasible development alternatives which avoid and minimise negative impacts on biodiversity, to help remedy and counterbalance the degradation and loss of biodiversity through increased protection and appropriate management, and to help South Africa to meet its international biodiversity and protected area targets. Biodiversity offsetting can therefore play a role in ensuring that biodiversity and ecological infrastructure can continue to provide the ecosystem services on which people depend for their livelihoods, and contribute to the achievement of the environmental right in section 24 of the Constitution.

Biodiversity offsetting is a relatively novel practice in South Africa. Unfortunately, it has not always been implemented in a defensible and consistent manner. This guideline intends to address the shortcomings of biodiversity offset practice in South Africa.

3. Legislative framework

As already noted, section 24 of the Constitution gives everyone the right to an environment that is not harmful to health or well-being, and to have the environment protected, through reasonable

This gazette is also available free online at **www.gpwonline.co.za**

legislative and other measures. NEMA, including the EIA Regulations, is one of the legislative measures that have been taken to advance that right. Biodiversity offsets are an integral part of the environmental management system created under NEMA. One of the national environmental management principles, principles that guide all environmental decision making, is that the disturbance of ecosystems and loss of biodiversity should be avoided, or where it cannot altogether be avoided, is minimised and remedied.[6] Biodiversity offsetting is one of the best means of remedying such disturbance or loss.

In the environmental management context, biodiversity offsetting consists of actions that are taken to comply with biodiversity offset outcomes required in conditions in EAs, Biodiversity Offset Implementation Agreements and environmental management programmes (EMPrs). The environmental management system provided for by NEMA and the EIA Regulations provide for a CA to grant EAs subject to conditions.[7] In appropriate circumstances (please see Chapter 6), a CA may grant an EA subject to the condition that a measurable biodiversity offset is implemented by the EA holder.

As already noted, this guideline is an implementation guideline contemplated in section 24J of NEMA. It must, in accordance with section 24O of NEMA and regulation 18 of the EIA Regulations, be taken into account by a CA when considering an application for an EA. It is therefore not absolutely binding can be deviated from when justifiable under the circumstances.

Given that this is a guideline contemplated in section 24J of NEMA, it is not directly applicable to regulatory processes other than environmental authorisation applications in terms of NEMA, which could culminate in decisions to issue approvals subject to biodiversity offset conditions. Parts of this guideline could however be used to support decision-making as part of those regulatory processes. When this guideline is used in the context of other regulatory processes, stakeholders, and decision-makers in particular, should take into consideration the differences between the EIA Regulations and the law governing those other regulatory processes. Examples of such other laws include the National Water Act, 1998 (Act No. 36 of 1998), the Spatial Planning and Land Use Management Act, 2013 (Act No. 16 of 2013), the National Forests Act, 1998 (Act No. 84 of 1998) and section 24G of NEMA.

The principles and policy statements on biodiversity offsetting in the Overall Policy on Environmental Offsetting are applicable to all biodiversity offsetting in all regulatory contexts. The overall principles and outcomes recommended in this guideline are aligned with those principles and policy statements.

4. Outcome statement and principles

The outcome statements and principles in this chapter serve as the general framework within which it must be determined if a biodiversity offset is required and within which biodiversity offsets must be

[6] Section 2(4)(a)(i) of NEMA.
[7] See Regulation 26(d) and (i) of the EIA Regulations.

This gazette is also available free online at **www.gpwonline.co.za**

designed and implemented. The outcome statement and principles should also guide decision-making and, as relevant, the setting of conditions regarding biodiversity offsets.

4.1 Desired outcomes of biodiversity offsets

The desired outcome of biodiversity offsets is to ensure the following:

1. That biodiversity is secured in the long term through the protection and appropriate management of ecosystems and species.

2. That efforts to secure biodiversity in the long term contribute to the expansion of South Africa's protected area network, and are focussed in areas identified as biodiversity priorities, with particular emphasis on the consolidation of priority areas and securing effective ecological links between priority areas.

3. That ecological infrastructure and the services and benefits it provides are maintained and where necessary restored.

4. That the cumulative impact of the authorised activity, or activities, and land and resource use change does not –
    - result in the loss of irreplaceable biodiversity or jeopardise the ability to meet biodiversity targets;
    - lead to any ecosystem with a threat status of Vulnerable or Least Concern becoming Endangered, or any Endangered ecosystem becoming Critically Endangered;
    - cause an irreversible decline in the conservation status of species and the presence of special habitats; and
    - cause a significant loss in ecosystem services.[8]

4.2 Principles for biodiversity offsetting

The following principles must be considered by a CA when taking decisions in relation to biodiversity offsets. All the principles in this Chapter apply equally to ecological compensation.

- ***Offsets are the final option in the mitigation hierarchy*** - Biodiversity offsets must only be considered once all the foregoing steps in the mitigation hierarchy have been considered to their full and feasible extent. The mitigation hierarchy dictates that the degradation and loss of biodiversity must be avoided, or where impacts cannot altogether be avoided, they should be minimised and the area adversely impacted by relevant activity should be rehabilitated. When,

[8] Sometimes the loss of ecosystem services can be compensated for through artificial provision of a replacement service. However, this guideline does not deal with that type of compensation. It only deals with required mitigation (focussing on biodiversity offsets) for impacts on biodiversity, i.e., the *natural* ecosystem components that provide the ecosystem service.

This gazette is also available free online at **www.gpwonline.co.za**

after taking the aforementioned mitigation measures, there are likely to be residual negative impacts on biodiversity of medium to high significance, they must be offset.

- ***Ecological equivalence (like-for-like) is the preferred offset type*** – Only when offsets remain the only mechanism to manage residual negative impacts and in order to counterbalance a residual impact, biodiversity offsets should comprise - or benefit - the same or similar biodiversity components as those components that would be negatively affected by the development. ***Trading-up offset types***, or biodiversity offsets which secure priority areas of greater importance or priority to biodiversity conservation than the area being impacted, may however be considered under certain circumstances in order to contribute to conservation objectives.

- ***Residual impacts on irreplaceable biodiversity cannot be offset –*** Where there are no options left in the landscape to counterbalance a residual impact in accordance with the ecological equivalence (like-for-like) principle (see above), that residual impact cannot be offset. That is, there would be a residual impact on irreplaceable biodiversity, which would prevent national biodiversity targets from being met. In these cases development would generally not be acceptable and the impacts should be avoided. Ecological compensation for residual impact which cannot be offset should only be considered only in *highly* exceptional circumstances, when there are imperative reasons for overriding public interest.[9] Ecological compensation requirements should be punitive in scale and cost (see Chapter 7.2.1).

  When dealing with ecological compensation, compensation measures should -
  - target priority areas of agreed equal or greater importance or priority to biodiversity conservation than the area being impacted; and
  - be designed to benefit the specific biodiversity components that will be negatively impacted by the development.

  Biodiversity offsets and ecological compensation may never be used as a reason why a particular EA application should be approved. Biodiversity offsets are mitigation measures that must be implemented when EA is granted for other, overriding, reasons.

[9] Please see the textbox below, the definition for "biodiversity offset" in the definitions section of this guideline as well as footnote 1 above. Please also consult DEA (2017), Guideline on Need and Desirability, Department of Environmental Affairs (DEA), Pretoria, South Africa

This gazette is also available free online at **www.gpwonline.co.za**

"Reasons for overriding public interest"

"Reasons for overriding public interest" should not be equated with socio-economic benefits. The allegation that an activity, or activities, such as the construction of low-cost housing or municipal infrastructure, in priority biodiversity areas will have socio-economic benefits would not be sufficient *on its own* to constitute "reasons for overriding public interest" given the extreme importance of conserving priority biodiversity. The loss of irreplaceable biodiversity cannot be replaced by socio-economic benefits. The circumstances under which an activity, or activities, could be authorised when it is likely to have a negative impact on irreplaceable biodiversity – in other words, when it is fatally flawed from a biodiversity perspective - must be truly exceptional

- ***Additionality*** **-** Biodiversity offset interventions must be additional to, or over and above, biodiversity conservation measures that are already required by law, or that would have occurred had the biodiversity offset not taken place.

- ***The quality and quantity of residual impacts on biodiversity must be considered in decision making involving biodiversity offsetting*** – When considering the significance of the residual impact to be counterbalanced by an offset intervention, the nature of the impacted biodiversity (e.g. whether it is part of a priority area), its threat status and protection level, ecological condition, and the size of the impacted area must be considered at the very least.

- ***Biodiversity offsets should embody the ecosystems approach and promote connectivity in the wider landscape*** **-** Biodiversity offsets should ideally involve the integrated management of land, water and living resources in a way that promotes ecological functionality and persistence. Biodiversity offsetting should therefore take a landscape-scale, rather than a site-specific view, to enable consideration of cumulative impacts, to promote connectivity between biodiversity priority areas.

Integrated landscape scale interventions

Integrated landscape-scale interventions are more likely to yield far greater, and more sustained, conservation benefits at less cost and reduced administrative burden than a number of small-scale, isolated interventions. A 'patchwork' of small-scale, isolated offset interventions poses a number of challenges including, among others: the high risk of failure if upstream or bordering degradation is not addressed in some way; increased demands on ecological management, enforcement and compliance monitoring capacity; the potentially limited environmental value of small, unconnected pockets of natural features; and reduced opportunities for maximising the benefits that could be accrued by integrated, landscape-scale interventions.

This gazette is also available free online at **www.gpwonline.co.za**

- ***Biodiversity offsets must result in long-term security and management of priority biodiversity -*** Biodiversity offsets should contribute to the long-term security of biodiversity priority areas and maintain or improve their ecological condition, thereby resulting in tangible and measurable positive outcomes for biodiversity conservation 'on the ground'. Biodiversity that is in good ecological condition promotes human well-being in the long term.

Timespan of a biodiversity offset

An offset can only contribute to the principal objective of slowing the loss and progressively reversing the degradation of biodiversity if it continues to counterbalance the residual negative impacts of the development to which it applies for as long as those residual impacts persist. For practical purposes, the counterbalancing outcomes of an offset intervention should ideally endure for a minimum of 99 years from the time that the residual impacts occurred or for as long as the residual impacts persist in the unlikely event that this is less than 99 years. The 99 year period should not be confused with the duration of the responsibility of the EA holder to implement the biodiversity offset.

- ***Biodiversity offset design must be defensible and transparent*** - The measure of the size and significance of the residual impacts on biodiversity caused by a proposed activity, as well as the design and implementation of biodiversity offsets, should be based on the best available biodiversity information and sound science, and should incorporate local, traditional and conventional knowledge and values as appropriate. Offsets must consider all significant residual impacts on biodiversity including direct, indirect and cumulative impacts. The scope of assessment must include the due consideration of impacts on priority biodiversity areas; impacts on biodiversity pattern (compositional and structural aspects of biodiversity, at the genetic, species or ecosystem level) and ecological processes (the functions and processes that operate to maintain and generate biodiversity); and impacts on ecosystems or species on which there is high dependence for health, livelihoods, safety and wellbeing. The Biodiversity Offset Report and audits of the offset performance, as well as biodiversity offset registers, should be made publicly available.

- ***Offsets must follow a risk averse and cautious approach*** - A biodiversity offset must be designed in a risk-averse and cautious way to take into account uncertainties about the measure of the extent and significance of the residual impacts (including uncertainties about the effectiveness of planned measures to avoid, minimize and rehabilitate impacts), and the uncertainties relating to the successful outcome and/ or timing of the biodiversity offset intervention.

- ***Offsets must be fair and equitable*** - The determination of residual impacts, and the design and implementation of biodiversity offsets to counterbalance these impacts, must be undertaken in an open and transparent manner, providing for stakeholder engagement, respecting recognised

This gazette is also available free online at **www.gpwonline.co.za**

rights, and seeking positive outcomes for affected parties. Biodiversity offsets should not displace negative impacts on biodiversity to other areas, or cause significant negative effects that in turn would need to be remedied.

- ***Offset intervention timing*** - Implementation of a biodiversity offset should preferably take place before the impacts of the activity occur, or as soon thereafter as reasonable and feasible.

Biodiversity offset options

For practical purposes, at the very least, biodiversity offset options must be fully described in the Biodiversity Offset Report submitted as part of a basic assessment or environmental impact assessment report to inform a biodiversity offset condition in an EA. This information should be formulated in a way that facilitates and enables the efficient and effective monitoring and enforcement of compliance with the implementation of the approved offset intervention, its timing and required outcome.

- ***Biodiversity offsets must be measurable, auditable and enforceable*** **-** The required outcomes of a biodiversity offset must be practically measurable on the ground. Once the development is underway, residual impacts should be monitored and measured to ensure that the counterbalancing offset remains adequate. The offset's counterbalancing adequacy must, in turn, be monitored and audited in terms of clear and measurable management, performance and desired outcome targets, and provision must be made for corrective or adaptive actions where needed to ensure that targets are achieved.

5. Biodiversity offsets in the environmental authorisation application process

As already mentioned, this guideline is intimately linked with the environmental management system provided for in NEMA and the EIA Regulations. In this Chapter, the various steps of the biodiversity offsetting process are placed in the context of the **EA** application process provided for in NEMA and the EIA Regulations. The roles of the various role-players in both the EA application process in the context of biodiversity offsets are also explained.

For the purposes of this guideline, "EIA" must be taken to mean both "basic assessment" and "scoping and environmental impact assessment" as contemplated in the EIA Regulations.

5.1 An overview of the steps involved in the biodiversity offsetting process

This chapter gives a broad overview of the various steps of the biodiversity offsetting process in the context of the EA application process. More details on those steps are given in chapters 6, 7, 8, 9, 10,

This gazette is also available free online at **www.gpwonline.co.za**

11 and 12 below. For the purposes of this chapter, the EA application process is divided up into 4 phases: **the pre-application phase** (before the process for an EA application is commenced) ; t**he EIA phase** (the process of preparing a basic assessment report (**BA Report**), or environmental impact assessment report (**EIA Report**), and a draft EMPr) in the period between which the application for environmental authorisation is received by a CA and the date on which the EIA Report or BA Report is submitted by an applicant to a CA; **the decision-making phase** (the process for taking a decision to grant or refuse EA, and to approve or reject an EMPr) ; and t**he post-authorisation phase** (any steps taken after a decision has been made to grant EA and approve an EMPr).

The biodiversity offsetting process, which only applies when a biodiversity offset is required (see Chapter 6) involves the following steps:

- Identifying the need for a biodiversity offset.
- Determining the requirements of a biodiversity offset and compilation of a Biodiversity Offset Report.
- Selecting a biodiversity offset site.
- Securing the biodiversity offset site.
- Preparing a Biodiversity Offset Management Plan.
- Preparing biodiversity offset conditions for an EA.
- Concluding a Biodiversity Offset Implementation Agreement.

These steps are summarised in chapters 5.1.1, 5.1.2, 5.1.3, 5.1.4, 5.1.5, 5.1.6, and 5.1.7 below in relation the four phases of the EA application process identified in the first paragraph of this Chapter.

5.1.1 Identifying the need for a biodiversity offset

Please see **Chapter 6** of this guideline for more information on this step.

In this step, the proponent's EAP, or a relevant specialist or specialists, assesses whether it is likely that there would be unavoidable significant residual negative impacts on biodiversity which could require a biodiversity offset. It is strongly recommended that this step is taken in the pre-application phase. However, the need for a biodiversity offset is sometimes only identified after a report has been

This gazette is also available free online at **www.gpwonline.co.za**

generated through the National Environmental Web-based Screening Tool[10] or the EIA phase by the applicant's EAP or specialist, the CA,[11] a commenting authority or an interested or affected party.

It is important for a proponent, or applicant, to engage with relevant commenting authorities, including municipalities and, especially, conservation authorities when assessing whether or not a biodiversity offset is likely to be required (please see Chapter 8 below).

It is also important for a proponent, or applicant, to consult other environmental legislation or land use and planning legislation that could be applicable to the proposed development. Such legislation includes the National Forests Act, 1998, which imposes restrictions on development in natural forest ecosystems. Biodiversity offsets can also be required in regulatory approvals provided for in those laws.

It is emphasised here that biodiversity offsets may never be used as a reason why a particular EA application should be approved. Biodiversity offsets are mitigation measures that must be implemented when EA is granted for other, overriding, reasons. A BA Report or EIA Report must always explain how the mitigation hierarchy has been applied to arrive at the conclusion that a biodiversity offset is required.

As assessment of whether or not a biodiversity offset is likely to be required may well reveal a significant residual negative impact on irreplaceable biodiversity, which cannot be offset. In those instances, it is extremely unlikely that an EA should and will be granted. However, under highly exceptional circumstances, when there is imperative reasons for overriding public interest, an EA may be granted subject to the condition that, inter alia, ecological compensation is delivered.

5.1.2 Determining the requirements of a biodiversity offset

Please see **Chapter 7** of this guideline for more information on this step.

This step involves the preparation by a relevant specialist, or specialists, of a Biodiversity Offset Report, which sets out, amongst other things, the biodiversity outcomes that must be achieved in implementing a biodiversity offset and the candidate biodiversity offset sites where those objectives could be achieved. As with the previous step, it is strongly recommended that this step is commenced, and if possible, completed, in the pre-application phase. Taking steps in the biodiversity offsetting process in the pre-application phase could save the applicant time and costs since it will likely result

[10] Applicants for EAs must submit reports generated by the National Web-based Environmental Screening Tool, available at https://screening.environment.gov.za/screeningtool/, as part of applications for EA. That screening tool often provides an indication of the biodiversity sensitivity of the affected project area.

[11] A CA can, at any stage during the pre-application and EIA phases, advise a proponent, or applicant, of the likelihood that an environmental authorisation would be granted (based on the biodiversity sensitivity of the relevant area), or of a biodiversity offset being required in terms of Regulation 8(b) of the EIA Regulations. That regulation provides that a CA must advise the proponent or applicant of any matter that may prejudice the success of an application. The likelihood of a biodiversity offset being required is a factor that may well prejudice the success of an application.

This gazette is also available free online at **www.gpwonline.co.za**

in a smoother application process and avoid potential legal and practical complications later on in the process.

However, if the need for a biodiversity offset has only been identified when a report has been generated through the National Environmental Web-based Screening Tool or EIA phase, it should be completed in the EIA phase. It is strongly advised that a Biodiversity Offset Reports is submitted to a relevant CA together with a BA Report or EIA Report, and draft EMPr, at the end of the EIA phase to enable a CA to take a decision regarding the EA application. The absence of a Biodiversity Offset Report may well result in an EA being refused by a CA, or the decision to grant an EA being set aside on appeal or judicial review.

As with the previous step, it is crucial for the proponent, or applicant, to engage with commenting authorities, including municipalities, and especially, conservation authorities during this phase of the biodiversity offsetting process. The proponent, or applicant, or his or her EAP or specialist, would also need to engage with landowners, holders of rights in land and other stakeholders in the landscape during this phase.

When there may be overriding reasons of public interest for granting an EA when activity, or activities, would have a significant residual negative impact on irreplaceable biodiversity, it is strongly advised that the proponent or applicant instructs a specialist, or specialists, to prepare an Ecological Compensation Report, which sets out the biodiversity outcomes that must be achieved in implementing ecological compensation. An Ecological Compensation Report is to be submitted to a CA together with a BA Report or EIA Report, and draft EMPr at the end of the EIA phase. The absence of an Ecological Compensation Report may well result in an application for EA being refused, or the decision to grant an EA being set aside on appeal or judicial review.

5.1.3 Selecting a biodiversity offset site

Please see **Chapter 7.5** for more information on this step.

This step involves the selection of a biodiversity offset site that meets the biodiversity offset requirements specified in a Biodiversity Offset Report and/or the conditions of an EA. Preferably, the biodiversity offset site should be selected from the portfolio of candidate biodiversity offset sites given in a Biodiversity Offset Report. It is advisable that the site is selected in the pre-application phase, but if the need for a biodiversity offset was only identified after a report has been generated through the National Environmental Web-based Screening Tool or EIA phase, the site could be selected during the EIA phase or the post-application phase.

Some guidance is given on the selection of a site for ecological compensation in **Chapter 7 below.**

5.1.4 Securing the biodiversity offset site

More information is given on this step in **Chapter 7.6.1**.

This gazette is also available free online at **www.gpwonline.co.za**

During this step, the proponent, applicant or EA holder takes the necessary steps to secure the biodiversity offset site in perpetuity. Ideally, the biodiversity offset site should be secured by the declaration of the site as a protected area in terms of the National Environmental Management: Protected Areas Act, 2003, or by the registration of a conservation servitude in respect of such land if the declaration of a protected area is not possible under the circumstances. This step could be taken in the pre-application phase, but if the need for a biodiversity offset was only identified after a report has been generated through the National Environmental Web-based Screening Tool or EIA phase, the site could be secured in the EIA phase or post-application phase.

Sites on which ecological compensation would be implemented must also be secured in perpetuity.

5.1.5 Preparing a Biodiversity Offset Management Plan

More information on this step is given in **Chapter 7.6.1**.

In this step, the proponent's, applicant's or EA holder's specialist, or specialists, prepares a management plan for the biodiversity offset site. A Biodiversity Offset Management Plan sets out the specific measures that must be undertaken to achieve the required biodiversity outcomes on the biodiversity offset site. At which stage in the EIA process a Biodiversity Offset Management Plan is prepared depends on when the biodiversity offset site is selected, since a Biodiversity Offset Management Plan can only be prepared once the biodiversity offset site has been selected.

In the case of ecological compensation, the relevant specialist, or specialists must prepare an Ecological Compensation Management Plan.

5.1.6 Preparing biodiversity offset conditions for an environmental authorisation

Chapter 9 gives more information on this step.

This step is applicable when the CA has decided to grant EA for an activity, or activities, subject to the condition that a biodiversity offset is implemented. It involves the CA preparing EA conditions that require that a biodiversity offset is implemented. In the event that a draft Biodiversity Offset Management Plan has already been prepared by a specialist and it has been submitted to the CA, and the activity, or activities, have a lifespan of at least as long as the applicant's biodiversity offset liability, the CA can incorporate the provisions of the Biodiversity Offset Management Plan into the EMPr that is binding on the EA holder.

At the very least, a biodiversity offset condition in an EA must specify the biodiversity outcomes that must be achieved in implementing a biodiversity offset and that the EA holder must enter into a Biodiversity Offset Implementation Agreement with a third party (please see chapter 5.1.7 below). It must also, depending on the information before the CA, require the holder of the EA to select a biodiversity offset site, secure that site and prepare a Biodiversity Offset Management Plan for that site, if such Biodiversity Offset Management Plan was not prepared prior to the granting of the EA.

This gazette is also available free online at **www.gpwonline.co.za**

Pre-application studies and engagement

In this Chapter, it is recommended that certain steps are taken before the EA application process is commenced. The rationale for the recommendation is to simply the steps in the biodiversity offsetting process. The biodiversity offsetting process can take years to complete: effective offsetting often requires significant investigation into suitable biodiversity offset sites, negotiation with landowners around securing those sites, engagement with conservation authorities, clarifying the roles and responsibilities of multiple parties and, in most cases, the declaration of a protected area. By contrast, the EIA phase is 90 days (for a basic assessment) or 150 days (for a scoping and environmental impact assessment) in length. It is therefore strongly advised to pursue most of the steps involved in the biodiversity offsetting process prior to submitting an application, to avoid being inappropriately pressured by regulatory timelines.

If the need for a biodiversity offset is only identified after a report has been generated through the National Environmental Web-based Screening Tool or during or the EIA phase, it is highly unlikely that a biodiversity offset site would have been selected and secured by the end of the EIA phase. This, in turn, would mean that the CA needs to include lengthy, and sometimes complicated, biodiversity offset conditions in the EA and that the validity period of the EA has to be extended until certain steps in the biodiversity offset process can be completed in the post-application phase. In addition, given the short timeframes within which to conduct the assessments necessary to prepare a Biodiversity Offset Report in the EIA phase, there would be a risk of a CA refusing an EA application on the basis of insufficient information in a Biodiversity Offset Report to justify granting EA subject to a biodiversity offset condition.

Pre-application studies and engagement do not mean that an offset can 'leapfrog' other, preferred forms of mitigation earlier in the mitigation hierarchy. A CA will require evidence of the effort invested to exhaust other mitigation measures and project alternatives, before resorting to biodiversity offsets. Pre-application studies are therefore not guarantees that EA will be granted for an activity, or activities – biodiversity offsets and ecological compensation should never be used as the reason to grant EA.]

5.1.7 Concluding a Biodiversity Offset Implementation Agreement

More information on this step is given in **Chapter 11** below.

During this step, the applicant enters into a Biodiversity Offset Implementation Agreement with an implementing party. The agreement must incorporate the terms of a Biodiversity Offset Management Plan, and make those terms binding on both parties. This step is applicable when the terms of a Biodiversity Management Plan has not been incorporated into the EA holder's EMPr. This step is typically taken in the post-application phase.

This gazette is also available free online at **www.gpwonline.co.za**

The flow diagrams below show two permutations of the possible sequence of the steps involved in the biodiversity offsetting process in the context of the EA application process. The first diagram shows the sequence of events when a Biodiversity Offset Management Plan is available before the decision-making phase. The second diagram shows the sequence of events when the need for a biodiversity offset is only identified after a report has been generated through the National Environmental Web-based Screening Tool.

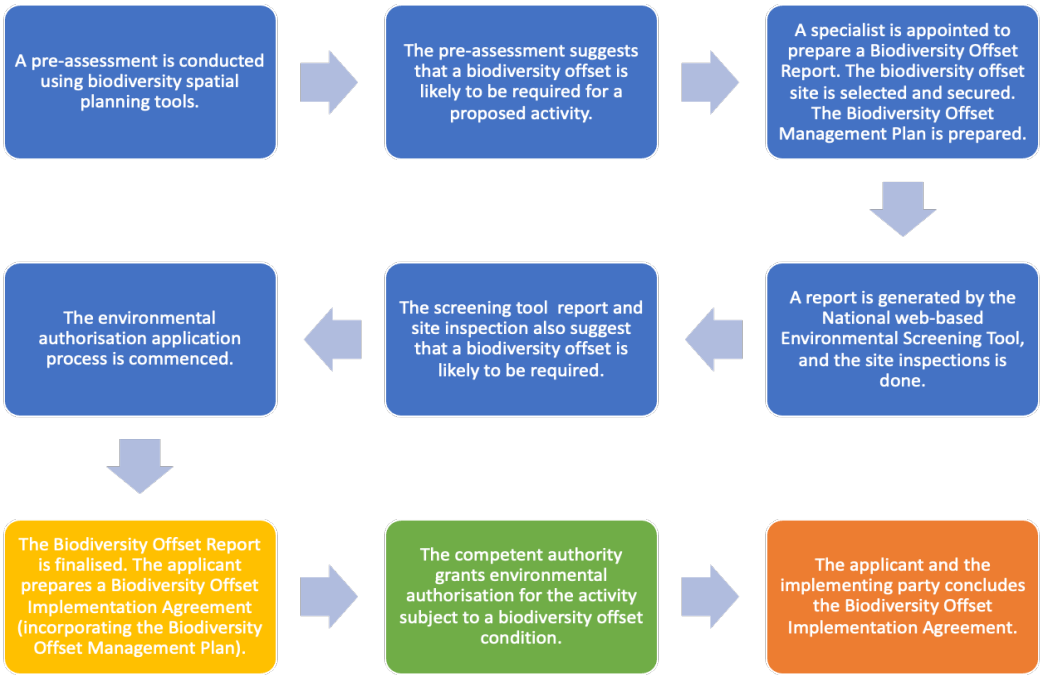


Figure 1 the sequence of events in the biodiversity offsetting process where the need for a biodiversity offset is identified before a report is generated through the National Environmental Web-based Screening tool. The blue boxes represent the pre-application phase, the yellow box, the EIA phase, the green box, the decision-making phase, and the orange box, the post-authorisation phase.

This gazette is also available free online at **www.gpwonline.co.za**

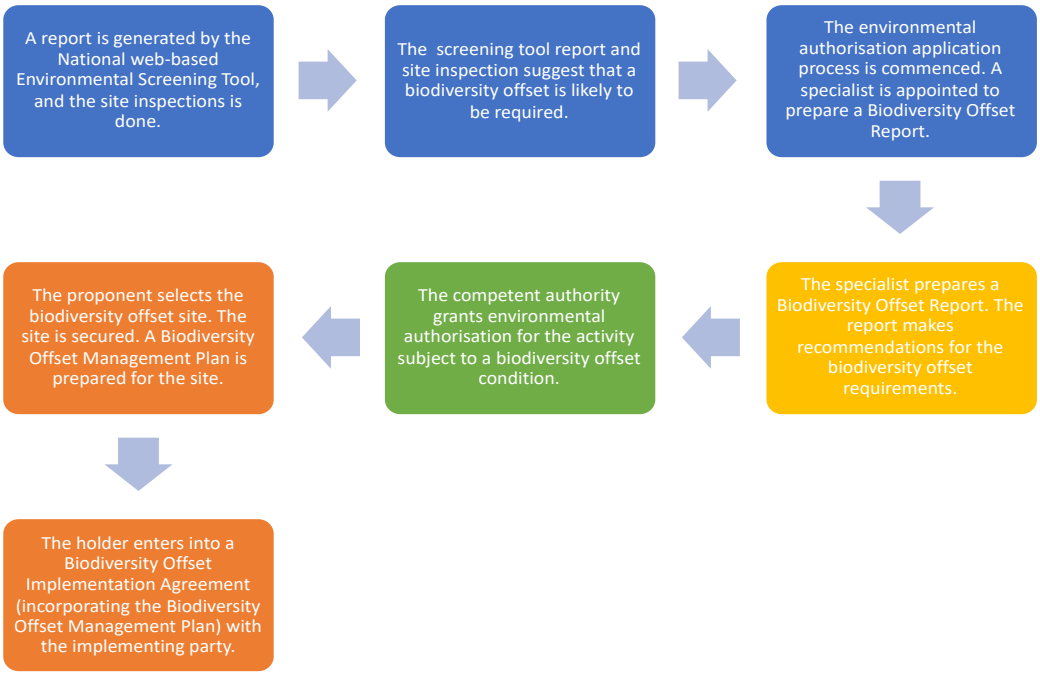


Figure 2 the sequence of events in the biodiversity offsetting process when the likely need for a biodiversity offset is only identified after a report has been generated through the National Environmental Web-based Screening Tool or during the EIA phase. The blue boxes represent the pre-application phase, the yellow box, the EIA phase, the green box, the decision-making phase and the orange boxes, the post-decision phase.

5.2 The roles and responsibilities of the different role-players in the biodiversity offsetting process

- **The proponent/ applicant** must appoint an EAP to carry out an EIA process on their behalf. When biodiversity offsets are likely to be required, the applicant should also appoint appropriately qualified specialists to compile relevant documentation for review by the CA, including but not limited to biodiversity specialist reports, Biodiversity Offset Reports, Biodiversity Offset Management Plans and Biodiversity Offset Implementation Agreements. All costs related to the investigation of biodiversity offsets would be to the applicant's account. If environmental authorisation is granted, the implementation of the biodiversity offset condition in the EA will be to the **EA holder's** account. These costs include the costs related to the design of the biodiversity offset (such as engaging landowners, preparing a Biodiversity Offset Management Plan and concluding necessary contracts), requesting the declaration of a protected area in respect of the biodiversity offset site, the management of the biodiversity offset site as well as the costs of auditing implementation against the Biodiversity Offset Management Plan.

- **The environmental assessment practitioner** (EAP) is responsible for coordinating the EIA process, drawing up Terms of Reference for specialists, and synthesising specialists' inputs. The EAP must ensure that the mitigation hierarchy has been adhered to (with due consideration of reasonable

This gazette is also available free online at **www.gpwonline.co.za**

and feasible alternatives) and, where residual negative impacts on biodiversity are likely to be significant, may need to appoint biodiversity specialists (and other specialists, as appropriate) to investigate and evaluate potential biodiversity offsets. The EAP must also ensure that all relevant I&Aps, including conservation authorities and other organs of state as well as the owners of land in which candidate biodiversity offset sites (see Chapter 7 below) are situated, have been adequately engaged about a proposed biodiversity offset and that offset-related issues and comments are accurately captured in the EIA documentation. Where offsets are required for terrestrial ecosystems as well as wetland ecosystems and/ or forest ecosystems, the EAP should strive to integrate these different requirements in the Biodiversity Offset Report with input from the relevant specialists, and select candidate offset areas which would meet all offset requirements, where at all possible.

- **Specialists** will give site- and context-specific information, assess potential impacts of activities on biodiversity and ecological infrastructure and evaluate their significance, recommend lower-impact project alternatives where feasible, provide an estimate of residual negative biodiversity impacts, propose appropriate biodiversity offset metrics and components, and, where appropriate, investigate and advise on securing, protecting, restoring and managing biodiversity offset sites. Specialists must have experience and expertise in biodiversity offset design and implementation, and must be registered with the South African Council for Natural Scientific Professions and/ or the Environmental Assessment Practitioners Association of South Africa. As part of the process of preparing Biodiversity Offset Reports, specialists engage the owners of land that could be selected as candidate biodiversity offset sites or biodiversity offset sites.

- **National and provincial conservation authorities** play a lead role in advising the CA[12] on proposed biodiversity offsets. Biodiversity specialists and EAPs must involve these authorities in EIA processes when the activities involved could have significant residual negative impacts on biodiversity or protected areas, and engage staff with regard to finding optimum biodiversity offsets that align with national and provincial protected area expansion strategies. The management authorities for protected areas that would be expanded by the inclusion of a biodiversity offset site should report on those biodiversity offsets as part of their statutory reporting responsibilities.[13]

- **The competent authority** is responsible for evaluating, and taking decisions on, EA applications. As part of that role, the CA reviews, amongst other documents, BA reports, scoping reports and EIA reports (**EIA reports**) submitted to them as part of EA applications. CAs may advise or instruct the proponent or applicant of the nature and extent of the processes that may or must be followed in an EA application process, or decision-support tools that must be used in order to comply with NEMA and the EIA Regulations. CAs should also advise the proponent or applicant of any matter

[12] In some instances, organs of state other than conservation authorities may also need to advise on appropriate offset measures, in particular the Department of Human Settlements, Water and Sanitation.
[13] See generally the National Environmental Management: Protected Areas Act, 2003.

This gazette is also available free online at **www.gpwonline.co.za**

that may prejudice the success of an application, such as unacceptable loss of biodiversity. In the context of biodiversity offsets, a CA must advise an applicant or its EAP when it is of the view that a biodiversity offset will be required, and that this guideline must be considered. The CA is also responsible for formulating the biodiversity offset condition(s) in an EA.

- **Local authorities** are primarily responsible for taking decisions on how land in their respective municipal areas is used. Municipalities are therefore required to be consulted during the EIA phase to ensure that biodiversity offset areas may be used for conservation purposes. Some municipalities also have their own Biodiversity Targets and therefore need to be consulted on the identification of a biodiversity offset site. Municipalities are also authorised to require biodiversity offsets in terms of SPLUMA and applicable municipal by-laws (see the bullet point below).

- **Organs of state responsible for processing applications for other applicable regulatory approvals** should also be consulted during the biodiversity offsetting process. Other regulatory approvals, other than an EA in terms of NEMA, may well be required for the same development, such as licences in terms of the National Water Act, 1998, licences in terms of the National Forests Act, 1998, development rights in terms of SPLUMA (and applicable municipal by-laws) and requests for the de-proclamation, or withdrawal of the declaration, of protected areas in terms of provincial legislation or NEMPAA . As alluded to in Chapter 1, biodiversity offsets could also be required as conditions to those regulatory approvals. It is therefore important for the CA and applicant to liaise with those organs of state to ensure that only one biodiversity offset is required, to avoid duplication.

- **Organs of state whose functions could be affected by a proposed biodiversity offset**: A proposed biodiversity offset could have implications for the performance of certain functions by organs of state. Those organs of state should be consulted to resolve potential conflicts.

6. When are biodiversity offsets required?

A biodiversity offset is required when a proposed listed or specified activity, or activities, is/are likely to have **residual negative impacts on biodiversity of moderate or high significance.** These negative impacts could affect biodiversity pattern (e.g. threatened ecosystems, species or special habitats), ecological processes (e.g. migration patterns, climate change corridors enabling shifts in species distributions over time,[14] or wetland function), ecosystem services (e.g. provision of clean water) or a combination of all three.

In this Chapter, the concepts of residual impacts and impact significance are discussed. A flow diagram of the steps that need to be taken to determine if a biodiversity offset is required is given in **Figure 1**.

[14] *Climate change modeling projects shifts in climatic envelopes that are likely to affect biodiversity. There is however some uncertainty as to how it might affect biodiversity.*

This gazette is also available free online at **www.gpwonline.co.za**

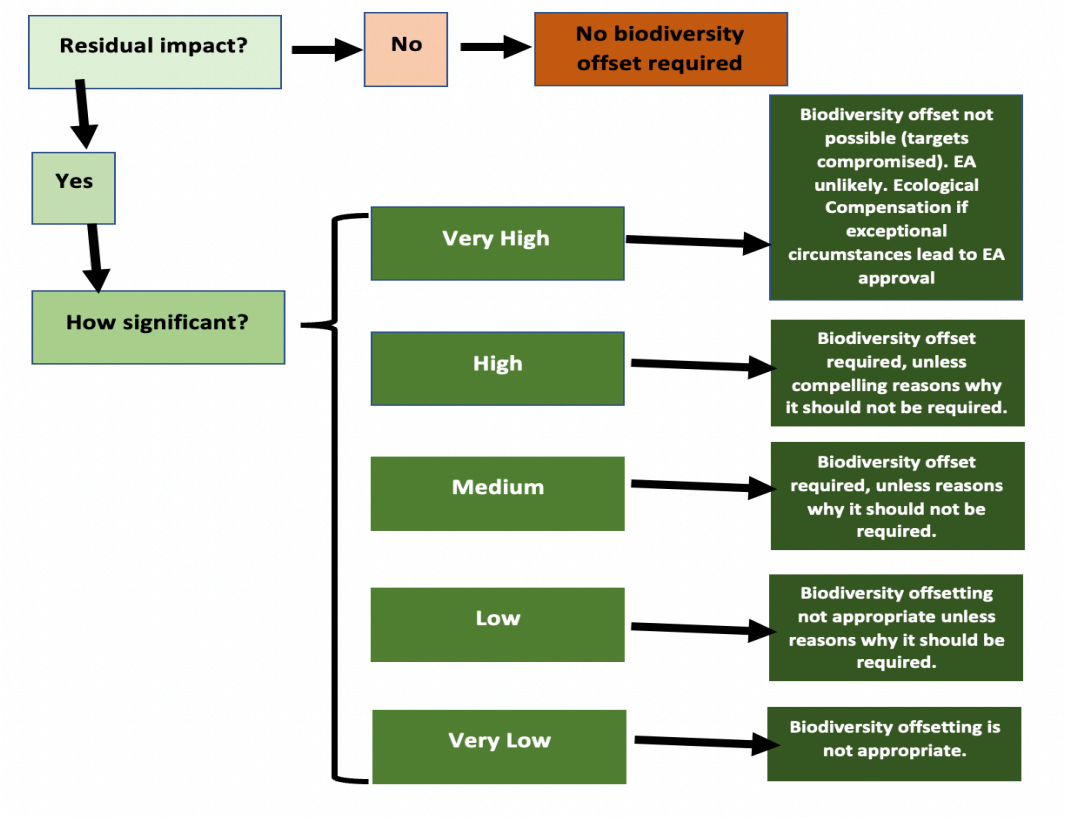


Figure 3 Flow diagram: When is a biodiversity offset required?

6.1 Residual impacts

A residual biodiversity impact is the impact of an activity, or activities, on biodiversity that remains after all efforts have been made to avoid and minimise the impacts of the activity, or activities, and to rehabilitate or restore the affected area to the fullest extent possible.

As part of an EIA, an EAP or a specialist is required to predict the possible negative impacts of an activity, or activities, on biodiversity, including direct impacts, indirect impacts, and cumulative impacts.[15] After those impacts have been identified, the EAP or specialist must investigate alternative project locations, designs, technologies, scales and layouts to determine if and how potentially significant negative impacts on biodiversity could be avoided or minimised. The EAP or specialist must also determine if, and how successfully, impacted areas could be rehabilitated or restored.

If predictions in the EIA state that all negative impacts on biodiversity cannot be avoided, and/or that impact minimisation and rehabilitation or restoration of the affected area cannot, with a high degree

[15] See Department of Environmental Affairs (2017), *Guideline on Need and Desirability, Department of Environmental Affairs (DEA), Pretoria, South Africa* at p14 for a description of "cumulative impacts."

This gazette is also available free online at **www.gpwonline.co.za**

of certainty, fully mitigate the impacts of the activity, or activities, on biodiversity, the proposed development would have residual negative biodiversity impacts.

The mitigation hierarchy, as set out in section 2(4)(a)(i) of NEMA, and applicable guidelines, should be followed to determine if there will likely be residual impacts.

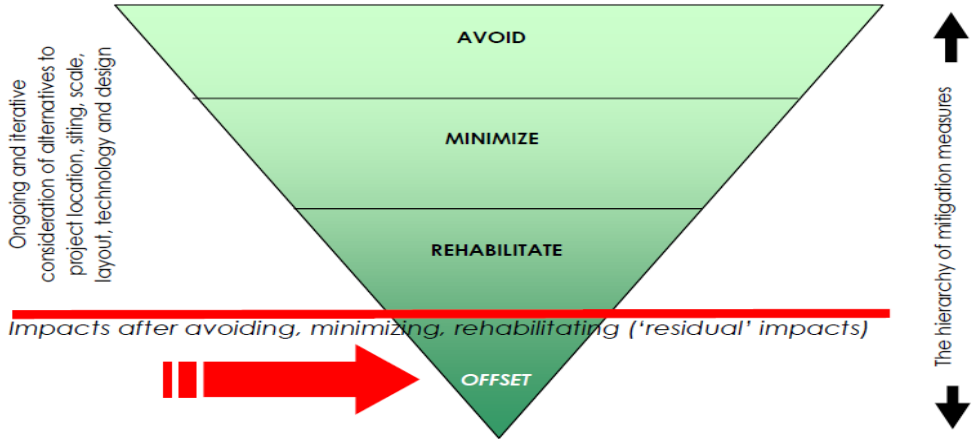


Figure 4 The mitigation hierarchy

6.2 Impact significance

Where residual negative biodiversity impacts are evaluated to be of medium or high significance, a biodiversity offset would be required. Biodiversity offsets are unlikely to be required when the residual negative impacts of a proposed activity, or activities, on biodiversity are evaluated to be of low significance. Biodiversity offsets are not appropriate when an activity, or activities, will have residual impacts on biodiversity of very high significance, including when residual negative impacts will result in loss of irreplaceable biodiversity.

Sufficient rigour and adherence to specific guidance on assessing biodiversity impacts and evaluating their significance must be demonstrated to the CA, drawing in particular on the applicable biodiversity[16] and species[17] protocols, used in conjunction with the National Environmental Web-

[16] Procedures for the assessment and minimum criteria for reporting on identified environmental themes in terms of sections 24(5)(a) and (h) and 44 of the National Environmental Management Act, 1998, when applying for environmental authorisation, published under Government Notice No. 320 in Government Gazette 43110 of 20 March 2020. These protocols cover terrestrial and freshwater biodiversity, and not marine biodiversity.
[17] Procedures for the assessment and minimum criteria for reporting on identified environmental themes in terms of sections 24(5)(a) and (h) and 44 of the National Environmental Management Act, 1998, when applying for environmental authorisation, published under Government Notice No. 1150 in Government Gazette 43855 of 30 October 2020. These protocols cover terrestrial and freshwater species and not marine species.

This gazette is also available free online at www.gpwonline.co.za

based Screening Tool (Screening Tool).[18] The report generated through the Screening Tool could give an early indication of the significance of the possible negative impacts of an activity, or activities, on biodiversity.

The approach for assessing impact significance for the purposes of this guideline is firstly, determining the biodiversity importance of the area negatively impacted by a proposed activity, or activities and the implications of the impacts – expressed in this guideline as a set of biodiversity thresholds, and secondly, determining if other factors related to impact significance render the impact of higher or lower significance than the threshold suggests.

There are no hard and fast rules for determining the biodiversity importance of an area and the implications of negative impacts on those areas. The thresholds given in Table 1 contain broad guiding factors to make such a determination. However, more nuance may well be required in the circumstances of a particular application for EA. Significance assessments should also take into account, for instance, the extent to which impacts would be reversible (i.e. if the pre-impact biodiversity could be reinstated within at most a 30-year period) and/ or would lead to irreplaceable loss of resources (i.e. a permanent loss of biological diversity).[19]

Table 1 Biodiversity thresholds, impact significance and implications for mitigation and biodiversity offsets

Threshold: the importance of biodiversity and/ or ecological infrastructure	**Impact Significance rating**	**Implications for mitigation and offsets**
'Exclusionary' threshold: residual impacts in this category cannot be fully compensated by offsets because of the high threat status or irreplaceability of affected biodiversity or ecosystem services. Impacts in this category would generally be unacceptable and could lead to – • irreversible and irreplaceable loss of ecosystem or species, such as impacts on – o Critical Biodiversity Areas: Irreplaceable (CBA 1), especially where the feature(s) driving the designation as a CBA 1 is significantly negatively affected or will be compromised beyond its Biodiversity Target;[20] o protected areas, and more particularly, the natural or near natural parts[21] of protected areas;	**Very High**	Activity should not be authorised except in exceptional circumstances. If an application is authorised, ecological compensation is required unless there are reasons

[18] Available at https://screening.environment.gov.za. The notice in terms of which the use of the screening tool was made compulsory was published under Government Notice No. 960 in Government Gazette No. 42561 of 5 July 2019.

[19] Adapted from Department of Environmental Affairs and Development Planning (DEA&DP) 2015. Western Cape Guideline on Biodiversity Offsets. Prepared by Susie Brownlie and Mark Botha for DEA&DP, Cape Town.

[20] Please take note that CBA 1s in some CBA Maps, such as the Western Cape Biodiversity Spatial Plan (2017), are not necessarily all regarded as irreplaceable. It is recommended that reasons are requested from a relevant conservation authority, such as CapeNature, as to why a particular area is a CBA 1.

[21] Development in protected areas, including the modified parts of protected areas (such as accommodation facilities and roads) require the consent of the relevant management authority. Development must also be

This gazette is also available free online at **www.gpwonline.co.za**

○ Critically Endangered ecosystems outside of CBAs; ○ confirmed habitats of Critically Endangered species, where those areas have not been included in CBA 1s; and ○ Ramsar sites; and • irreplaceable loss of key ecological corridors recognised as important for evolutionary processes and climate change adaptation where no spatial options to safeguard these processes exist; and • irreversible or irreplaceable loss of highly valued ecological infrastructure at national or provincial scale and/or where there is a high level of dependence on the associated ecosystem services by local communities for livelihoods and health, and no feasible substitutes.		why ecological compensation should not be required.
Threshold of major potential concern: residual impacts in this category could lead to – • loss of vulnerable or potentially irreplaceable biodiversity in areas of recognised importance, such as – ○ Critical Biodiversity Areas: Optimal (CBA 2); ○ Endangered ecosystems outside of CBAs; ○ Natural forests; ○ Strategic Water Source Areas; ○ buffer zones around protected areas and protected area expansion zones identified in protected area management plans; ○ the Coastal Protection Zone; ○ areas seawards of development setback lines, and where development setback lines have been determined, within 1 km of the High Water Mark; or ○ areas within 100 meters of a watercourse; or • irreversible loss or deterioration of valued ecosystem services at provincial level.	**High**	Biodiversity offsets are likely to be required, unless there are *compelling* reasons why a biodiversity offset should not be required.
Threshold of potential concern: Residual impacts in this category could lead to – • irreversible loss of vulnerable biodiversity, such as - ○ Ecological Support Areas; ○ Strategic Water Source Areas; ○ Ecological infrastructure that provides highly significant ecosystem services, which is not within a SWSA and is not identified as an ESA; ○ conservation areas; ○ Vulnerable ecosystems or species; or ○ areas that have two or more of the following characteristics: Threatened Ecosystem, confirmed habitat for Threatened Species; or important ecological process area or corridor; or • irreversible loss or deterioration of valued ecosystem services at local level.	Medium	Biodiversity offsets are likely to be required, unless there are reasons why a biodiversity offset should not be required.

aligned with the management plan for a specific protected area as well as the reasons for declaration of the relevant protected area.

This gazette is also available free online at **www.gpwonline.co.za**

Threshold of Low concern: Residual impacts in this category include – • Other Natural Areas; or • impacts on Not Threatened or Least Concerned ecosystems or species, where those species or ecosystems do not – o support Protected or Threatened ecosystems or species; o constitute important ecological process areas or corridors; or o provide important ecosystem services.	Low	Biodiversity offsets are unlikely to be required, unless there are reasons why a biodiversity offset should be required.
Threshold of negligible concern: Impacts in this category are on highly modified areas.	Very Low	Biodiversity offsets will not be required.

The different thresholds have different implications for impact significance:

- If an exclusionary threshold is breached, impact significance is Very High and the proposed project is therefore fatally flawed and should not be approved. Biodiversity offsetting would not be feasible when there is loss of irreplaceable biodiversity, although ecological compensation would be required when such loss is considered justifiable under exceptional circumstances, unless there are reasons, based on the factors in the paragraph below, that ecological compensation should not be required.

- If a threshold of major concern is breached, impact significance is High and a biodiversity offset would be required unless, there are *compelling* reasons based on the factors in the paragraph below that a biodiversity offset should not be required.

- If a threshold of potential concern is breached, impact significance is Medium and a biodiversity offset would be required, unless the factors in the paragraph below suggest that no biodiversity offset should be required under the circumstances.

- If a threshold of low concern is breached, impact significance is Low and a biodiversity offset would not be required, unless the factors in the paragraph below suggest that a biodiversity offset should be required.

- If a threshold of negligible concern is breached, impact significance is Very Low and no biodiversity offset would be required.

'Significance' is a combination of the consequence and likelihood of an impact occurring. At least the following factors must be considered as part of the process of assessing the significance of a negative impact on biodiversity:

- The **consequence** of an impact is a combination of the intensity, extent and duration of the impact.

This gazette is also available free online at **www.gpwonline.co.za**

- Intensity (severity) of the ecological impact: the intensity of an ecological impact is given at a defined (usually spatial) scale. It is in influenced by such considerations as the condition or quality of the affected resource and the vulnerability of receptors to impacts. The biodiversity features of an area described in Table 1 are relevant considerations in intensity ratings. The greater the intensity, the greater the consequence, and the more significant the impact.

- Extent: the scale of expected impacts as a proportion or range of a given biodiversity feature, inversely related to viability of the remaining portion of that feature when the biodiversity feature impacted on is ecosystems, ecosystem extent (available in the look-up table), and specific provincial biodiversity targets, should be considered as part of this factor. The greater the extent, the greater the consequence, and the more significant the impact.

- Duration: how long the impact will last, from short-term to permanent, where permanent is a period of thirty years and above (unless the receiving environment justifies a shorter consideration of permanent). The longer the duration, the greater the consequence, and the more significant the impact.

- Likelihood of the occurrence of the impact: The more likely the impact, the greater the certainty of the impact significance. However, it is important to keep in mind that a risk-averse and cautious approach needs to be followed when the likelihood is more remote.

Where the significance ratings for biodiversity impacts are contentious or contested, leading to uncertainty about the need for a biodiversity offset, the CA could call for independent peer review of a biodiversity specialist study and/ or biodiversity offset report.[22]

7. Determining biodiversity offset requirements

Once it has been determined that a biodiversity offset is needed, the requirements for that biodiversity offset must be determined. The requirements for a biodiversity offset are set out in a Biodiversity Offset Report, which must be prepared by a relevant specialist, or specialists, and be submitted to a CA together with a BA Report or EIA Report at the end of the EIA phase. In preparing the Biodiversity Offset Report, the specialist, or specialists, must take the following steps:

1. Obtain a measure of the significant residual negative biodiversity impacts as a consequence of the proposed development.

[22] Section 24I of NEMA provides that the Minister or MEC may appoint an external specialist reviewer, and may recover costs from the applicant, in instances where - (a) the technical knowledge required to review any aspect of an assessment is not readily available within the competent authority; (b) a high level of objectivity is required which is not apparent in the documents submitted, in order to ascertain whether the information contained in such documents is adequate for decision making or whether it requires amendment.

This gazette is also available free online at **www.gpwonline.co.za**

2. Determine the required size of the biodiversity offset and, where applicable, its optimum location.

3. Consider unique or special biodiversity features of the area impacted by the authorised activity, or activities.

4. Investigate candidate offset sites that could meet the offset requirements.

5. Identify feasible implementation arrangements, governance structures and related protection and management considerations.

6. Ensure that the biodiversity offset site(s) and implementation arrangements would be acceptable to the relevant CA and conservation authority, and other relevant planning authorities.

7. Plan for implementation: consider the relevant protection and management measures needed for at least a 30-year period, and calculate the corresponding estimated financial requirements.

8. Prepare the Biodiversity Offset Report.

In this Chapter, guidance is given regarding each of the steps outlined above.

7.1 Obtaining a measure of the significant residual negative biodiversity impacts

The significant residual negative impact on biodiversity is calculated with reference to the factors listed and explained in Chapters 6.1 (residual impacts) and 6.2 (impact significance) above. In the context of residual negative impacts on ecosystems (both terrestrial and freshwater), the significant residual negative impact on biodiversity is expressed in hectares. Biodiversity offsets may well be required for significant residual negative impacts on biodiversity features other than ecosystems (e.g. threatened species). In those cases, relevant specialist advice is required, over and above the guidance given for ecosystems in this guideline.

7.2 Determining the right size of the biodiversity offset

This guideline gives a standard, area-based approach to calculating the size requirements for biodiversity offsets when the significant negative residual impact is on ecosystems (terrestrial (including coastal) and freshwater, but excluding offshore marine and estuarine). However, residual negative impacts on biodiversity cannot always be easily specified in terms of area. Negative residual impacts on species of conservation concern, ecological processes or ecosystem services, are examples of such instances. In those cases, the size of the biodiversity offset must be determined based on the advice of an appropriate specialist, or specialists. In some cases, the biodiversity offset site(s) targeted to remedy residual impacts on ecosystems may also accommodate offset activities that address the particular needs of impacted species. In other instances, additional offset site(s) and activities may be

This gazette is also available free online at **www.gpwonline.co.za**

required to counterbalance residual impacts on ecosystems, species of conservation concern and/ or key ecosystem services.

7.2.1 Standard approach to determining the required size of a biodiversity offset

The starting point for determining the size of a biodiversity offset is calculating an applicable ecosystem-based biodiversity offset ratio. A biodiversity offset ratio provides the area-based size of a biodiversity offset relative to the area of the residual negative biodiversity impact. Determining the size requirement of a biodiversity offset entails (1) determining a basic offset ratio based on Ecosystem Extent, Ecosystem Protection Level **(EPL)** and Ecosystem Threat Status **(ETS)**; and (2) adjusting the basic offset ratio based on an applicable CBA Map.

(1) Determining the basic offset ratio

The standard approach to determining a basic biodiversity offset ratio is based on biodiversity targets. Those targets are, in turn, based on Ecosystem Extent, Ecosystem Protection Level) and Ecosystem Threat Status (see text box on page 31) of the various ecosystem types identified in the ecosystem assessment conducted as part of the determination of ecosystems that are threatened and in need of protection in terms of the National Environmental Management: Biodiversity Act, 2004.[23] The applicable ratios are listed in the table hosted on the Department of Forestry, Fisheries and the Environment's website: www.environment.gov.za. The table will be reviewed periodically and updated, if and when necessary.

In terms of the standard approach, the following general rules apply:

- A 30:1 ratio applies in –
    - Critically Endangered ecosystems regardless of their Ecosystem Extent or EPL;
    - ecosystems with an Ecosystem Extent of 30% or less, regardless of their EPL or ETS; and
    - the case of ecological compensation.

- Sometimes biodiversity offsets are required for an activity, or activities, that are likely to have significant residual negative impacts on ecosystems with an Ecosystem Extent of 70% or greater. In those instances, a biodiversity offset ratio would need to be set based on the information before the decision-maker.

- For ecosystems with an Ecosystem Extent greater than 30% and less than 70%, the basic biodiversity offset ratio is adjusted according to the EPL of a given ecosystem (as shown in Figure 5). There are, however, exceptions to this general rule:

[23] Reference to be added soon.

This gazette is also available free online at **www.gpwonline.co.za**

- If the relevant ecosystem type's ETS is Endangered, the minimum biodiversity offset ratio is 10:1; and when it is Vulnerable, its minimum biodiversity offset ratio is 5:1.

- If the area is a CBA 1, the ratio is 30:1, and if it's a CBA 2, the ratio must be adjusted in the manner described in part (2) of this sub-Chapter below.

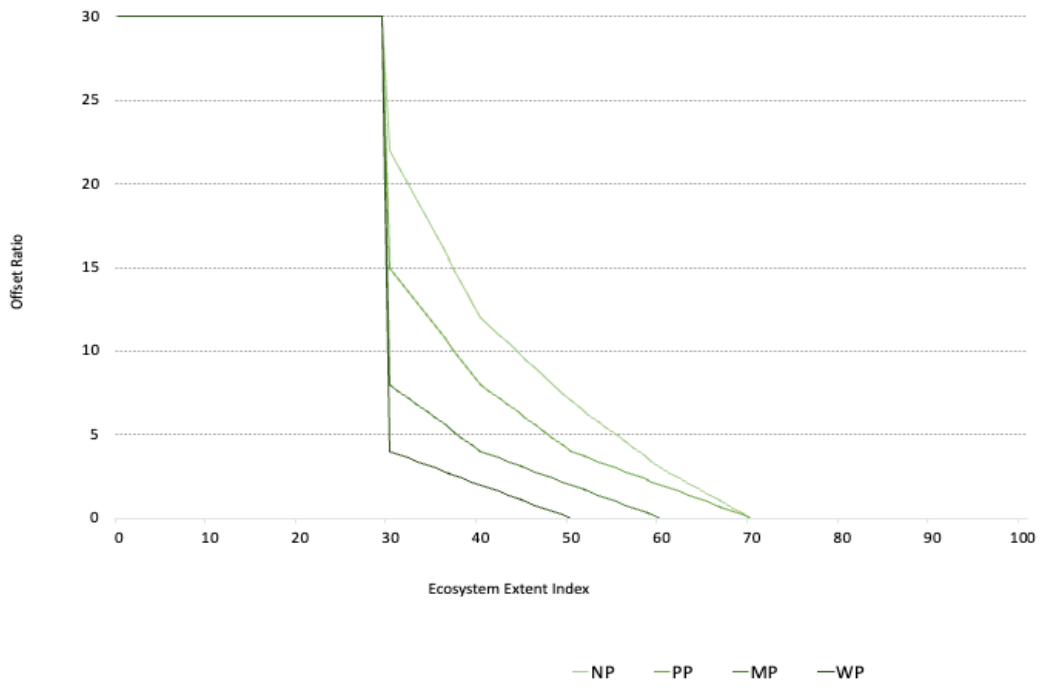


Figure 5 Biodiversity offset ratios based on Ecosystem Extent and EPL.

Please note that ETS has been factored into the standard approach in order to ensure that ecosystems that are threatened for reasons other than habitat loss also have higher offset ratios (please see the look-up table referred to above).

The latest ecosystem threat status assessment

The most recent **Ecosystem Threat Status** assessment was done in 2021. Like the assessment that was done as part of the NBA 2018, it is based on five criteria, namely the reduction in geographic distribution, restricted geographic distribution, environmental degradation, disruption of biotic processes and interactions, and a quantitative analysis that estimates the probability of ecosystem collapse. The approach for calculating the basic offset ratio is primarily based on the first of those criteria. The other criteria, however, also need to be taken into account when calculating the basic offset ratio. The fact that an ecosystem has restricted geographic distribution, or is generally in a poor ecological condition, for example, may well mean that the basic biodiversity offset ratio needs to be higher than it would have been in the absence of those factors.

This gazette is also available free online at **www.gpwonline.co.za**

Some provincial conservation authorities or CAs have adopted, or may in future adopt, province-specific approaches to determining biodiversity offset ratios, based on province-specific biodiversity targets. Those approaches take precedence over the standard approach provided for in this guideline. However, a strong motivation would need to be given for applying the province-specific approach when the province-specific approach would yield a lower ratio than the standard approach provided for in this guideline.

Consideration also needs to be given to how ratios are determined for development within the urban edges of cities and towns. It is more likely that there would be good reasons for adjusting biodiversity offset ratios down for activities within the urban edges of cities and towns given the relative scarcity of space and natural areas in those areas. In this regard, consideration should be given to approaches for determining biodiversity offset ratios for development within urban edges adopted by local authorities or provinces, when available.

'Like-for-better' biodiversity offsetting/ 'trading-up'

Wherever possible, a 'like-for-like' biodiversity offset should be required and provided to ensure that residual negative impacts on the affected biodiversity features are appropriately compensated. In exceptional cases, targeting biodiversity of greater conservation concern (for example, ecosystems that have higher threat status than the impacted ecosystem, or areas of higher biodiversity priority as indicated in applicable systematic biodiversity plans), may be justifiable. Where such an approach of 'trading up' is being considered, a strong motivation should be provided for this choice (for example, when it can be shown that there are no suitable areas of the same or proxy habitat available). Such motivation should also show the relationship between the biodiversity offset site's biodiversity and impacted biodiversity.

(2) Determining the adjusted biodiversity offset ratio

To ensure that biodiversity priorities are considered as part of the determination of the size requirement for a biodiversity offset, the relevant CBA Map must also be considered as part of that process. While any loss in a CBA 1 is generally considered irreplaceable[24], if it is found that the negative significant impact on biodiversity will take place in a CBA 2, the basic biodiversity offset ratio should be adjusted by increasing it by a factor of 1.5 up to a maximum of 30:1 as illustrated in Table 3.

Given that the ratio for ecological compensation is already 30:1, the adjustment covered in this section is not applicable.

[24] Please take note that CBA 1s in some CBA Maps, such as the Western Cape Biodiversity Spatial Plan (2017), are not necessarily all regarded as irreplaceable. It is recommended that reasons are requested from a relevant conservation authority, such as CapeNature, as to why a particular area is a CBA 1.

This gazette is also available free online at **www.gpwonline.co.za**

7.2.2 Different approaches to determining the required size of the biodiversity offset

Biodiversity offsets require that ecosystems are considered, protected and managed within their landscape and functional context (also see the principle that biodiversity offsets should embody the ecosystems approach and promote connectivity in the wider landscape in Chapter 4.2 above). Some ecosystems, namely forests and wetlands, require a slightly different approach to determining the size of offsets from the standard approach described above. For these ecosystems, historical guidance,[25] mitigation practice, and/or specific legal protection, necessitate this different approach. However, it is desirable for there to be alignment between the different approaches to biodiversity offsetting wherever possible. The approaches for natural forests and wetlands are discussed below.

Forest ecosystem types

Activities which have residual negative impacts on forest ecosystems often require both an EA and a licence in terms of the National Forests Act, 1998 (NFA). The NFA, the primary law for the protection of natural forests in South Africa, provides that natural forests must not be destroyed save in exceptional circumstances.[26] This implies that the target for conserving remaining forests is the remaining extent of the forest ecosystem type (i.e. they constitute irreplaceable biodiversity). Where an activity would have the effect of negatively impacting on a natural forest, and the "exceptional circumstances" referred to in the NFA are present, ecological compensation would be required. This compensation may include, but is not necessarily limited to, removing or reducing the activities or processes that impede or threaten forest regeneration, or that result in ongoing loss of that forest type, or a nearby related type. The strong protection given to natural forests by the National Forests Act, 1998 due the rarity of the biome and its high ecosystem services, in practice means that any impacts on such forests are regarded as serious, and in the case of endangered forest types, as fatally flawed.

As already stated, an offset may well be required where a listed or specified activity would involve the removal of one or more protected tree species,[27] despite the fact that application of this guideline's approach for determining when an offset is required suggests that no biodiversity offset is required. In such instances, the biodiversity offset requirements should involve an offset area to maintain or increase viable populations of the same tree species as those impacted, or involve reducing or removing other activities or processes that threaten the persistence, recruitment or survival of protected trees, or both.

[25] See, for example, Department of Agriculture, Forestry and Fisheries *Policy principles and guidelines for control of development affecting natural forests*(2010); and Macfarlane, D., Holness, S.D., von Hase, A., Brownlie, S. & Dini, J., 2014. *Wetland offsets: a best-practice guideline for South Africa.* South African National Biodiversity Institute and the Department of Water Affairs. Pretoria. 69 pages.
[26] Section 3(3)(a) of the National Forests Act, 1998.
[27] The latest list of protected tree species was published under Government Notice No. 155 in Government Gazette No. 44204 of 1 March 2021.

This gazette is also available free online at **www.gpwonline.co.za**

Wetland ecosystem types

Wetland ecosystems require mitigation for the loss of biodiversity (i.e. wetland ecosystem type and wetland species), and for impacts on wetland (hydrological) functioning. The standard approach described in Chapter 7.1 above also applies to wetlands. However, the negative impacts of an activity, or activities, on wetland functioning need to be addressed through the rehabilitation or restoration of degraded wetland systems, careful location of biodiversity offset sites in the wider hydrological landscape, and/or the removal, reversal or curbing of activities or processes threatening their effective functioning. Increasing wetland offset area is often not a suitable substitute for improving wetland functioning as an offset. Please consult Wetland Offsets: A Best Practice Guideline for South Africa (2016) for more guidance on wetland offsets. That guideline must be read in conjunction with this guideline.

7.3 Taking into consideration unique or special biodiversity features

Once the adjusted biodiversity offset ratio has been determined, biodiversity features other than Ecosystem Extent, EPL, ETS and biodiversity priority status must be considered to adjust the biodiversity offset requirements, if necessary. Those features include, but is not limited to, the following:

(a) **The condition of the affected habitat and potential offset site(s)**: The ecological condition of the biodiversity offset site should be comparable to, or better than, the ecological condition of the area impacted by the relevant activity, or activities.

(b) **The presence of any threatened or restricted range species**: The biodiversity offset site(s) must cater for these species.

(c) **The presence of any special habitats**: The biodiversity offset site should include these habitats (e.g. wetlands, quartzite/ calcrete patches, unique geological or hydrological features).

(d) **The role of the affected area in the bigger landscape with regard to ecological processes**: If it has been found that the affected area acts, for example, as an important fixed or flexible ecological corridor across a gradient, then the biodiversity offset should provide an effective substitute corridor/ link.

(e) **The presence of ecological infrastructure in the area**: If there is ecological infrastructure in the area on which local human communities and/ or society as a whole are reliant for ecosystem services, the biodiversity offset should contain or re-establish similar ecological infrastructure to benefit the significantly affected dependants. Where it is not feasible for this ecological infrastructure to be secured and managed through a biodiversity offset, compensation to provide acceptable services to the affected community should be provided.

This gazette is also available free online at **www.gpwonline.co.za**

The factors listed above would be of lesser importance in the case of ecological compensation than they are for biodiversity offsetting, but they are still relevant when selecting sites for ecological compensation (see Chapter 7.4.1 below).

7.4 Selecting and securing candidate biodiversity offset sites

The Biodiversity Offset Report must include a portfolio of candidate biodiversity offset sites. This is the case even when the biodiversity offset site has already been selected before the Biodiversity Offset Report was completed. In such a case, the process for selecting the proposed biodiversity offset site needs to be clearly specified in the Biodiversity Offset Report, and reasons must be given why that particular site has been selected over other candidate biodiversity offset sites.

The potential for and viability of securing each candidate biodiversity offset site identified in the Biodiversity Offset Report should then be investigated and reported on. It is important to engage with the relevant conservation authority during the site selection process to ensure that they would consider biodiversity offset sites to be acceptable.

The identification of candidate biodiversity offset sites, assessing the potential of each of candidate biodiversity offsets to be selected as a biodiversity offset site, consulting with a relevant conservation authorities and the selection of a biodiversity offset site from a portfolio of candidate biodiversity offset sites are dealt with under chapters 7.4.1, 7.4.2, 7.4.3 and 7.4.4 below.

7.4.1 Selecting candidate biodiversity offset sites

Once the biodiversity offset requirements have been determined, the relevant specialist, or specialists, appointed by the applicant should identify and screen a number of potential biodiversity offset sites, called “candidate biodiversity offset sites” for the purposes of this guideline. Biodiversity offset sites should ideally be located in biodiversity priority areas as determined in spatial biodiversity plans. These include Critical Biodiversity Areas, Ecological Support Areas, Freshwater Ecosystem Priority Areas and focus areas for protected area expansion.

The overriding principle of site selection is that, where possible, and as the highest priority for biodiversity offsetting, biodiversity offsets should be used to protect and maintain the irreplaceable elements of our biodiversity and natural heritage. The following principles must also guide site selection:

- Biodiversity offset sites should be selected for ecological equivalence (the “like-for-like” principle) or, where appropriate, there could be “trading-up” to select an area of relatively high or more urgent conservation priority.

- Selection should be guided as far as possible by existing biodiversity priority areas in the landscape (for example, the CBA and ESA network, Freshwater Ecosystem Priority Areas, and focus areas for

This gazette is also available free online at www.gpwonline.co.za

protected area expansion) and/or areas identified as strategic from an ecological infrastructure perspective (such as Strategic Water Source Areas).

- Biodiversity offsets should strive to secure the best examples of the features which have been impacted and to improve connectivity in the landscape between protected and priority areas for biodiversity.

- The final selection can be influenced by the reasonable consideration of factors other than the biodiversity value of the different candidate sites, such as: ease of the management of the site by a relevant management authority; and threats to conservation due to conflicting land use rights, claims or land use classification. These other factors should be considered cautiously and in the context of the outcomes and principles of biodiversity offsets given in Chapter 4.

For biodiversity offsets in **terrestrial ecosystems**, rehabilitation and preferably restoration of areas in modified condition (i.e. no longer natural or near-natural) is seen as an integral part of the required management of the offset site. For this reason, it is optimal for candidate biodiversity offset sites to be in a good ecological condition (natural or near-natural state), to minimise the additional burden of having to rehabilitate or restore an area.

In exceptional circumstances, where a specialist is considering selecting an area in a modified condition in the terrestrial realm as a candidate biodiversity offset site, the following principles need to be considered:

- The decline in condition of an ecosystem implies the loss of biodiversity pattern (i.e. species composition and ecosystem structure) and ecological functioning. The potential for rehabilitation or restoration decreases proportional to the extent of deterioration in condition, with growing effort and costs to achieve a return to a natural state. In areas of highly modified habitat, restoration is unlikely to be possible; an offset in such areas would not be acceptable.

- In terrestrial ecosystems, confidence in the success of restoration in reinstating biodiversity is generally low, and can take an extremely long time. The removal of invasive alien species is a key strategy in rehabilitation and restoration, but in many cases is already a legal requirement (i.e. it would not satisfy the 'additionality' principle of offsetting).

- If rehabilitation or restoration in the terrestrial realm is proposed as a distinct and measurable contribution to a biodiversity offset, robust and defensible motivation would be needed, with evidence-based assurance of outcomes for biodiversity, and specific, measurable, time-bound outcomes to determine when success has been achieved.

In **wetland and freshwater ecosystems**, on the other hand, it is more acceptable to select ecosystems in a modified state as candidate biodiversity offset sites. Rehabilitation and restoration are recognised as delivering improvements in ecosystem function, and they are explicitly accounted for in

This gazette is also available free online at **www.gpwonline.co.za**

determining offset requirements. That is, selecting areas with good potential for rehabilitation and restoration within recognised freshwater priority areas (FEPAs) or SWSAs may be advantageous. Those areas should be located in the same local or quaternary catchment, unless there are good reasons why they are not.

In the case of ecological compensation, an authorised activity, or activities, would result in the loss of irreplaceable biodiversity. Like-for-like offsetting is therefore not possible. The requirements of ecological compensation will depend on the circumstances of each case, but two general rules apply to site selection in those instances:

- A candidate site for ecological compensation must be an ecosystem of comparable type to the one that would be disturbed by the activity, or activities. For example, if the ecosystem that would be disturbed is a grassland type, the site for ecological compensation must be located in a grassland ecosystem.

- The site selected for ecological compensation should be of the same, or of higher, threat status, or at least a biodiversity priority area, such as a Critical Biodiversity Area, which is preferably located in a priority area for protected area expansion.

7.4.2 Assessing the potential for securing candidate biodiversity offset sites

Suitable biodiversity offset sites would need to be secured for biodiversity conservation in the long term. Ideally, sites need to be effectively protected in perpetuity. For this reason, a proponent would either have to own or purchase suitable land, or enter into a biodiversity stewardship agreement with owners of land situated in biodiversity offset sites, for at least 99 years. There are a host of legal mechanisms available for securing biodiversity offset sites, but the following mechanisms are the most common in practice:

- **The declaration of a protected area in terms of NEMPAA**: This is the preferred mechanism for securing a biodiversity offset site. Where possible, such declarations should be made in respect of areas adjacent to existing protected areas to increase the size of those protected areas. A written agreement underlying such a declaration should provide for ecological management in the long term, after the EA holder's responsibility in relation to the relevant development ends. Also note that protected areas can also be declared in terms of legislation other than NEMPAA. For example, forest nature reserves can be declared in terms of the National Forests Act, 1998, and World Heritage Sites can be declared in terms of the World Heritage Convention Act, 1999. However, given that NEMPAA comprehensively deals with the management of protected areas, declarations in terms of that Act is preferable.

- **Conservation servitudes**: A conservation servitude is a real right in the property of another that allows the beneficiary, usually a conservation authority or a conservation NPO/ PBO, certain circumscribed entitlements with regard to the conservation of biodiversity on another person's

This gazette is also available free online at **www.gpwonline.co.za**

property. Conservation servitudes are binding on successors-of-title and are enforceable against the world at large (not only one person). Conservation servitudes would work best when the EA holder is also the owner of the land constituting a biodiversity offset site. Ideally, a conservation servitude should be combined with a Biodiversity Offset Management Plan and penalties for breach, and be valid in perpetuity.

Servitudes and positive obligations

Servitudes cannot impose positive obligations on a landowner (only restrictions). If the EA holder is also the owner of the biodiversity offset site, and a conservation servitude has been elected as the measure for securing that area, it is recommended that the deed of servitude incorporates a restriction on the sale of the property. The restriction should specify that the property may not be sold to any person who is not willing to undertake to allow the implementing party to carry out the measures prescribed in a Biodiversity Offset Management Plan on the relevant land.

- **Purchasing credits from a recognised biodiversity offset bank**: A relevant authority may have approved a scheme that proactively delivers biodiversity offsets in biodiversity offset receiving areas and can sell credits. The purchase of specific credits must satisfy offset requirements; i.e. credits must trade in the same ecosystem or species habitat, and be of sufficient quantity. Please note that the different competent authorities may have specific governance frameworks for biodiversity offset banking.

The above mechanisms may require that the applicable land use, town-planning or zoning scheme be amended to ensure that the biodiversity offset site may be/ is used for conservation purposes.

The same mechanisms can be used to secure a site for ecological compensation.

7.4.3 Ensuring that the biodiversity offset options would be acceptable to the relevant conservation authority

As provided in Chapter 8 below, the specialist must engage conservation authorities and other relevant organs of state throughout the biodiversity offsetting process. As a general rule, a proposed biodiversity offset site should not be included as a candidate biodiversity offset site in a Biodiversity Offset Report (see below) unless it is acceptable to the relevant conservation authority. The Biodiversity Offset Report must confirm that the conservation authority has been engaged and supports the candidate biodiversity offset sites. The same general rule applies to selecting candidate sites for ecological compensation.

7.5 Selecting the biodiversity offset site

The selection of a biodiversity offset site is a crucial step in the biodiversity offset process. The content of a Biodiversity Offset Management Plan (see Chapter 7.6.1 below) depends heavily on which site

This gazette is also available free online at **www.gpwonline.co.za**

has been selected for the offset and the delineation of that site. In this Chapter, some principles regarding site selection and stakeholder engagement in the process of site selection are given.

Once the general requirements for a biodiversity offset have been set, a specific biodiversity offset site, or sites, must be selected, preferably from the portfolio of candidate biodiversity offset sites identified in the Biodiversity Offset Report. The site selection principles are given in Chapter 7.4.1 above.

Stakeholder engagement is an important component of the final site selection process. The owners and/ or occupiers of, and rights holders in, the land constituting the candidate biodiversity offset sites must be engaged to assess whether or not those owners or occupiers are willing to negotiate the use of their land for conservation purposes. As noted in Chapter 7.4.2, where candidate offset sites abut, or are close to, existing protected areas, discussions with the conservation authorities would be essential regarding future implementation and management arrangements and agreements to include the biodiversity offset site into the relevant protected area. In addition, conservation NPOs or PBOs, especially those that are active in the relevant landscape, could be engaged on the optimum location and design of a biodiversity offset to receive their suggestions and gauge their support.

Once the biodiversity offset site has been selected, the required biodiversity offset site must be effectively delineated, preferably by maps that are clearly georeferenced since the biodiversity offset site will not necessarily always coincide with cadastral boundaries.

The same guidance applies for selecting sites for ecological compensation. Please see Chapter 7.4.1 for general guidance on selecting candidate sites for ecological compensation.

7.6 Planning for biodiversity offset implementation

The applicant must consider the potential management arrangements for the biodiversity offset site as well as the financing of the relevant biodiversity offset. The management and financial arrangements must be recorded in a Biodiversity Offset Management Plan. However, if a biodiversity offset site cannot be selected before the decision-making phase, conceptual management and financial planning must be done during the EIA phase for each candidate biodiversity offset site identified in the Biodiversity Offset Report.

Managing the biodiversity offset site, and preparing Biodiversity Offset Management Plans is discussed in section 7.6.1 below. Financing biodiversity offsets is discussed in section 7.6.2 below. The same general guidance given in those chapters applies for planning for ecological compensation.

7.6.1 Management of the biodiversity offset site

Planning for the management of a biodiversity offset site involves considering how the biodiversity offset site will be managed and who will be responsible for that management: the implementing party. The management arrangements for a biodiversity offset site should be recorded in a Biodiversity

This gazette is also available free online at **www.gpwonline.co.za**

Offset Management Plan. A draft Biodiversity Offset Management Plan should ideally be submitted to the CA at the end of the EIA phase together with the Biodiversity Offset Report. However, when a biodiversity offset site has not been selected before the end of the EIA phase, conceptual management planning should be done for each candidate biodiversity offset site during the EIA phase, based on the ecosystem type and its typical management requirements, to aid the site selection process. That conceptual planning should then be included in the Biodiversity Offset Report.

A Biodiversity Offset Management Plan sets out any required demarcation, rehabilitation or restoration, ongoing conservation management activities and ecological outcomes required of the offset, as well as monitoring, adaptive or corrective management, auditing and reporting requirements. It furthermore specifies the roles and responsibilities of different parties for these activities and outcomes. Biodiversity Offset Management Plans must, as a minimum, specify -

- the biodiversity offset objectives and measurable biodiversity outcomes, against which performance will be evaluated;
- the management actions and where they must be conducted;
- the timelines for, and frequency of, implementation of actions;
- the roles and responsibilities of the various role-players;
- the monitoring requirements and a monitoring schedule;
- the auditing requirements and auditing schedule;
- periodic review of the Biodiversity Offset Management Plan; and
- reporting requirements with regard to the performance of the biodiversity offset.

Once a Biodiversity Offset Management Plan has been prepared for the biodiversity offset site, the EA holder would need to enter into a Biodiversity Offset Implementation Agreement (see Chapter 11 below) with the implementing party.

The identification of the implementing party and preparation of a Biodiversity Offset Management Plan should be done with the required legal mechanism used to secure the biodiversity offset site in mind. In cases where the biodiversity offset site will be secured through the declaration of a protected area, the chosen implementing party should meet the requirements of a management authority contemplated in NEMPAA and the Biodiversity Offset Management Plan would need to be aligned with the requirements for management plans in NEMPAA.

This gazette is also available free online at **www.gpwonline.co.za**

NEMPAA provides that a management authority must be appointed by the Minister or an MEC for the management of a protected area.[28] In terms of NEMPAA, any suitable person, organisation or organ of state can be appointed as the management authority for special nature reserves, nature reserves and protected environments.[29] A provincial conservation authority, municipality, non-profit organisation, public benefit organisation or conservation trust could therefore fill the role of implementing party. South African National Parks (SANParks) must however be appointed as the management authority for national parks.[30] SANParks would therefore need to be the implementing party in the case of a biodiversity offset resulting in the declaration of a new national park, or the extension of an existing national park.

The requirements for protected area management plans are set out in NEMPAA.[31] Ideally, the Biodiversity Offset Management Plan should meet those requirements to ensure that the terms of a Biodiversity Offset Management Plan can easily be translated into a protected area management plan, or incorporated into an existing protected area management plan, if an existing protected area will be expanded as part of a biodiversity offset. When a protected area is being expanded as part of a biodiversity offset, the management authority of the existing protected area must be consulted when the Biodiversity Offset Management Plan is being prepared.

When a biodiversity offset site will be secured by the declaration of a protected area, it is important to keep in mind that the EA holder will remain legally bound to deliver the required biodiversity outcomes despite the implementing party's appointment as the management authority of the protected area. It should also be kept in the mind that even though NEMPAA's requirements for protected area management plans, an existing management plan and consultations with a management authority should be taken into consideration when preparing a Biodiversity Offset Management Plan, the Biodiversity Offset Management must always be designed to deliver the biodiversity outcomes required in the conditions to an EA.

Where a conservation servitude is utilised to secure the biodiversity offset site, the EA holder will be directly responsible for implementing the biodiversity offset. The EA holder can delegate its management functions to a competent third party, but with the EA holder remaining ultimately responsible for the implementation of the biodiversity offset.

Partnerships between conservation NPOs, PBOs, organs of state, community-based organisations and/or developers are effective in helping to secure and manage offsets, integrate conservation with other activities and land uses, and potentially deliver a range of socio-economic benefits to communities in the area of the biodiversity offset site and the wider public.

[28] Section 38 of NEMPAA.
[29] Sections 38(1)(a) and (2) of the National Environmental Management: Protected Areas Act, 2003.
[30] Section 38(1)(aA) of the National Environmental Management: Protected Areas Act, 2003.
[31] See sections 40 and 41 of NEMPAA.

This gazette is also available free online at **www.gpwonline.co.za**

7.6.2 Financing the biodiversity offset

EA holders are responsible for covering all of the costs of a biodiversity offset. These include the costs of securing and protecting a suitable biodiversity offset site, establishing the biodiversity site, rehabilitating or restoring it, and managing it effectively for at least a 30-year period[32] or for the duration of the authorised activity, whichever is longer.

Please take note that this guideline does not deal with financial provisioning, as envisaged in section 24P of NEMA and the Financial Provisioning Regulations, 2015. Financial provisioning relates to financial security for the rehabilitation of areas disturbed by prospecting, mining, exploration and production, and related activities.[33] This guideline deals with financing biodiversity offsets (not rehabilitation) related to any of the listed or specified activities.

The costs of the biodiversity offset typically comprise -

- once-off funds needed up front (e.g. land purchase and/or lease and/ or transfer costs, notary fees, baseline ecological surveys, management plan, legal fees, infrastructure and equipment costs, declaration costs and any specialist advice);

- funds for rehabilitation, restoration and/or authorisations linked to these activities; and

- funds for ongoing management (e.g. staffing, transport, firebreaks and controlled burns, invasive alien species control, grazing management, predator or pest management, erosion control, annual monitoring and evaluation, independent audits, replacement of broken infrastructure or equipment, law enforcement, insurance, financial management fees, and a contingency amount).

Where developers enter into agreements with willing landowners to provide a biodiversity offset, payment to these landowners typically has two main components*, namely the amount of money required to finance biodiversity management of the offset site by the owner (covering any rehabilitation or restoration costs, specific and relevant management actions in line with a management plan, with monitoring and evaluation, and any specialist inputs), and a negotiable annual 'offset rental' to cover opportunity costs (i.e. change in market value of the site and/or income to the landowner because of the offset), administrative and/or management fees, and a profit and risk margin. These payments are negotiated between the landowner and developer.

* A landowner can sum these two amounts for the area to be made available as an offset, and divide by the number of hectares (or habitat units) of particular ecosystem or habitat to arrive at a price per ha (or habitat unit).

[32] It is widely accepted that 30 years is the minimum period within which meaningful biodiversity outcomes could be achieved. The 30-year period is also based on the length of a human generation, which is widely accepted to be more or less 30 years. In this way, biodiversity offsetting gives effect to the principle of inter-generational equity, espoused in the Constitution and NEMA.

[33] At the time of preparing this guideline, the National Environmental Management Laws Amendment Bill, 2017 was in Parliament. In that Bill, it is proposed that the scope of financial provisioning is extended to all listed or specified activities, and not only mining and mining-related activities.

This gazette is also available free online at **www.gpwonline.co.za**

The activities set out in the Biodiversity Offset Management Plan should be used to help determine the operational costs of the offset. Costs must be determined using current rates and adjusting for escalation over the 30-year period at least; i.e. the amount that needs to be invested to account for future management requirements. The funds required to implement a biodiversity offset must be subject to an annual financial audit by qualified independent financial auditors.

The funds for the implementation of a biodiversity offset must be provided by that organ of state, either as a lump sum payment up front and/ or by scheduled regular payments. When the developer is from the private sector, funds are best provided in full and up front as an endowment[34] or a 'sinking fund' to cover costs for the period of responsibility for the offset, or could make a series of regular payments.

Offset funds can be received, held and administered by organs of state[35], or by conservation NPOs/ PBOs or Trusts. Who is best placed to receive and administer the funds required to implement a biodiversity offset is determined by, *inter alia*, who is best placed to facilitate and expedite the relevant actions that must be conducted to implement the biodiversity offset; the regulatory regime and financial controls associated with the different financial vehicles; the type and timing of activities required on the ground; and financial and/ or investment decisions.

- It should be kept in mind that organs of state are bound by legislation on public finance, such as the Public Finance Management Act, 1999. If funds are held by an organ of state, appropriate steps should be taken to ensure that the funds are not absorbed into the National Revenue Fund at the end of a budget cycle.

- The funds required to implement a biodiversity offset could be received, held, invested and disbursed by a trust. The trust deed must determine how the trust will function, the roles and responsibilities of the trustees and the identity of the beneficiaries. The trust could be set up by the developer, or could be an independent trust set up by a conservation NPO/ PBO, or a voluntary association of persons with a constitution, or a combination.

There is a clear preference for a biodiversity offset that utilises an already established and dedicated entity such as a trust for the purposes of implementing the biodiversity offset and managing funds received from the project proponent. A trust is a dedicated, independent legal mechanism to cater for public interest objectives. It is better placed to offer perpetual succession and avoid being influenced by partisan (either private or public sector) interests. There are a number of examples of conservation trusts and associated funds in South Africa. The choice of financial instrument will, however, depend on the circumstances of each case.

[34] A fund based on the principal capital remaining intact for the duration of the period of responsibility for the offset, enabling it to be invested. The biodiversity offset is financed only through the income generated by the invested capital.
[35] To hold and administer funds for a biodiversity offset, an organ of state needs to be authorised to do so in terms of relevant legislation.

This gazette is also available free online at **www.gpwonline.co.za**

Tax and rates incentives provided for in relevant legislation should also be kept in mind when calculating the funds required for the implementation of a biodiversity offset. The Income Tax Act, 1962 gives tax incentives to set aside land for conservation, particularly in the case of national parks and nature reserves; a percentage of the value of the conservation land can be deducted from the landowner's taxable income[36]. In terms of the Local Government: Municipal Property Rates Act, 2004 a municipality may not levy municipal property rates in respect of most parts of special nature reserves, national parks and nature reserves. That Act also authorises municipalities to provide for municipal property rate exemptions, reductions or rebates for the owners of land that constitute protected areas or conservation areas in their rates policies.

7.7 Preparing the Biodiversity Offset Report

It is strongly advised that a Biodiversity Offset Report is prepared by a relevant specialist, or specialists, submitted to the CA at the end of the EIA phase. The content of a Biodiversity Offset Report will be depend on whether or not the biodiversity offset site has been selected by that phase or not. When a biodiversity offset has been selected in the pre-application or EIA phase, the Biodiversity Offset Report must, as a minimum, specify the following:

- That the mitigation hierarchy, including due consideration of project alternatives to avoid or minimise impacts, has been appropriately applied before considering biodiversity offsetting.

- A justification as to why a biodiversity offset or ecological compensation is required under the circumstances, and where relevant, why the "no-go" option is not recommended.

- The degree of risk that negative residual impacts cannot be offset (i.e. negative residual impacts on irreplaceable biodiversity and/or major constraints on finding suitable biodiversity offset sites to meet the offset requirements) and how the risk is to be addressed or mitigated.

- A measure of significant residual negative biodiversity impacts which must be offset.

- The applicable biodiversity offset ratios for impacted ecosystems.

- Any other considerations which are relevant to determining the size and characteristics of the biodiversity offset (for example, impacts on species of conservation concern with specific habitat requirements, impacts on ecological corridors and connectivity in the landscape, and impacts on important ecological infrastructure), and how the size of offset is to be adjusted to take these considerations into account.

[36] 'Allowance in respect of land conservation in respect of nature reserves or national parks'. Taxpayers are entitled to deduct the value of land declared as a nature reserve or national park at 4% per annum over 25 years in terms of Section 37D.

This gazette is also available free online at **www.gpwonline.co.za**

- An explicit statement on the required size of the biodiversity offset to remedy the residual negative biodiversity impacts, applying the basic offset ratio and adjustments as appropriate.

- The portfolio of candidate biodiversity offset sites, including the likelihood of each site's availability and feasibility.

- A description of the biodiversity offset site, and the reasons for the selection of that site from the portfolio of candidate biodiversity offset sites.

- The required biodiversity outcomes on the biodiversity offset site.

- The management measures that would need to be employed as part of the biodiversity offset for a defined period, for which the applicant would be responsible. Typically this period is not less than 30 years, and is longer if the impacting activity, or activities, will last beyond 30 years.

- An estimate of the financial needs related to securing, rehabilitating and managing a suitable biodiversity offset site for a minimum of 30 years.

- The legal mechanism, or mechanisms, in terms of which the biodiversity offset site has been/ will be secured**.**

- Any comments received from, or the outcomes of discussions with, a relevant conservation authority regarding the candidate biodiversity offset sites, the proposed mechanism for securing those sites and the proposed biodiversity offset outcomes for those sites.

If available by the end of the EIA phase, a copy of the Biodiversity Offset Management Plan must be appended to the Biodiversity Offset Report.

Where the biodiversity offset site cannot be identified before the decision-making phase, Biodiversity Offset Reports must, as a minimum, specify the following:

- That the mitigation hierarchy, including due consideration of project alternatives to avoid or minimise impacts, has been appropriately applied before considering biodiversity offsetting.

- The degree of risk that negative residual impacts cannot be offset (i.e. negative residual impacts on irreplaceable biodiversity and/or major constraints on finding suitable biodiversity offset sites to meet the offset requirements) and how the risk is to be addressed or mitigated.

- A measure of significant residual negative biodiversity impacts which must be offset.

- The applicable biodiversity offset ratios for impacted ecosystems.

This gazette is also available free online at **www.gpwonline.co.za**

- Any other considerations which are relevant to determining the size and characteristics of the biodiversity offset (for example, impacts on species of conservation concern with specific habitat requirements, impacts on ecological corridors and connectivity in the landscape, and impacts on important ecological infrastructure), and how the size of offset is to be adjusted to take these considerations into account.

- An explicit statement on the required size of the biodiversity offset to remedy the residual negative biodiversity impacts, applying the basic offset ratio and adjustments as appropriate

- The portfolio of candidate biodiversity offset sites, including the likelihood of each site's availability and feasibility.

- The required biodiversity outcomes on each of the candidate biodiversity offset sites identified in the Biodiversity Offset Report.

- The management measures that would need to be employed as part of the biodiversity offset for a defined period, for which the applicant would be responsible. Typically this period is not less than 30 years, and is longer if the impacting activity, or activities, will last beyond 30 years.

Where the relevant information is available, a Biodiversity Offset Report should in those instances, also include the following information:

- An estimate of the financial needs related to securing, rehabilitating and managing a suitable biodiversity offset site for a minimum of 30 years.

- The legal mechanism, or mechanisms, in terms of which the biodiversity offset site would be secured.

- Any comments received from, or the outcomes of discussions with, a relevant conservation authority regarding the candidate biodiversity offset sites, the proposed mechanism for securing those sites and the proposed biodiversity offset outcomes for those sites.

A biodiversity offset report may recommend specific conditions that can be considered by the CA, to give effect to the requirements, commitments, opportunities and limitations encountered during the determination of the offset, location of, and arrangements for security and management of the offset site, or offset sites, to be included in an EA as a biodiversity offset condition (see Chapter 9).

Care should be taken in the Biodiversity Offset Report to avoid including potentially sensitive information such as personal information, as contemplated in the Protection of Personal Information Act, 2013, of landowners and other third parties, or detailed property descriptions where landowners have not yet been engaged by the applicant.

This gazette is also available free online at **www.gpwonline.co.za**

"Biodiversity Offset Reports" and "Specialist Reports"

Biodiversity Offset Reports are not specialist reports as envisaged in the EIA Regulations. However, it is important that they are prepared by relevant specialists with expertise and experience in preparing biodiversity offset assessments and reports.

The same general guidance given in this Chapter applies to ecological compensation. A report to be submitted to the CA as part of a BA Report or EIA Report is called an Ecological Compensation Report.

8. Engaging with conservation authorities and commenting authorities

Applicants must engage with conservation authorities and other relevant organs of state in confirming offset requirements, locating suitable offset sites and developing offset proposals for consideration. In some instances, conservation authorities or organs of state will be involved in the implementation of biodiversity offsets, and Implementation Agreements will need to be negotiated (see 12.1 below). Reaching agreement between parties can require extensive consultation time which must be factored into timelines for the EA process.

The management authority of a protected area must be engaged if a candidate biodiversity offset site is aimed at expanding that protected area or if there are likely to be implementation, management, auditing or reporting implications for that management authority. In such cases, a letter of support or non-objection from a relevant management authority may be required by the CA on the suitability of the proposals in the biodiversity offset report.

Significant negative residual impacts on freshwater ecosystems (especially Freshwater Ecosystem Priority Areas) and/or hydrological regimes with biodiversity impacts, require careful consideration. Water-related biodiversity offsets or ecological compensation measures should be discussed with relevant staff in the Department of Water and Sanitation and a relevant catchment management agency (if one has been established for a particular region) to ensure alignment with relevant guidance and appropriate compliance with general authorisations or water use licence requirements.

Residual negative impacts on State forests, natural forests or woodlands or protected trees should be discussed with the Forestry Management Branch in the Department of Forestry, Fisheries and the Environment prior to finalising biodiversity offset or ecological compensation proposals. Conservation authorities and the management authorities for protected areas would need to consent to biodiversity offset or ecological compensation proposals where protected areas are impacted or where protected areas are the focus of mitigation measures.

This gazette is also available free online at **www.gpwonline.co.za**

The EIA report and/or the Biodiversity Offset Report should contain minutes or a record of outcomes of all meetings held with commenting and conservation authorities and relevant organs of state, as well as their comments submitted on the biodiversity offset proposals.

Engagement with conservation authorities and commenting authorities is an ongoing process, and is therefore relevant to all of the phases of the biodiversity offsetting process (please see Chapter 5.1).

Conservation authorities and commenting authorities should also be engaged in the manner contemplated in this Chapter in the case of ecological compensation.

9. Drafting biodiversity offset conditions for environmental authorisations

NEMA and the EIA Regulations make provision for EAs to be issued subject to conditions. Appropriate and carefully framed conditions are vital components of ensuring sound environmental management and to aid with compliance and enforcement. Given their complexity, biodiversity offsets often require lengthy and specific outcomes-focused conditions.

The principles of administrative justice apply when deciding on appropriate conditions. The key principles for offset conditions are that the conditions must not be vague (and must therefore be enforceable), they must be rationally related to the purpose for which the condition is being incorporated into the EA, and they must not be unreasonable.

In Chapters 9.1 to 9.8 below, guidance is given for particular elements of biodiversity offset conditions. The various elements given in Chapters 9.1 to 9.8 are not necessarily the only elements of an effective biodiversity offset condition: CAs are encouraged to apply their minds to each application to ensure that all of the elements of the biodiversity offsetting process is covered in biodiversity offset conditions.

The same guidance given in this chapter applies in the case of ecological compensation.

9.1 The biodiversity outcomes that must be achieved by a particular biodiversity offset

The most important component of a biodiversity offset condition is the one setting out the specific biodiversity outcomes that must be achieved through a biodiversity offset. This component includes the size of the relevant offset (see Chapter 7.2 above), the prescribed characteristics of the biodiversity that must be secured and managed as part of the biodiversity offset (see the like-for-like principle in Chapter 4.2 above, as well as the content of Chapters 7.3 and 7.4 above) and the specific outcomes that must be achieved in relation to a site that meets the size and biodiversity requirements.

If a biodiversity offset site has already been selected, and that site meets the requirements for a biodiversity offset under the circumstances, it would be unnecessary to specify the size and

This gazette is also available free online at **www.gpwonline.co.za**

biodiversity requirements as long as the site is described in detail (see Chapter 7 above). However, the prescribed biodiversity outcomes must still be specified.

9.2 The selection and securing of a biodiversity offset site

In instances where a biodiversity offset site has not already been selected or secured by the end of the EIA phase, the biodiversity offset conditions must require the EA holder to select a biodiversity offset site that meet the requirements for an offset under the circumstances (see Chapter 9.1 above) and to secure that site (see Chapter 7.6.1 above).

Given that a Biodiversity Offset Report includes a portfolio of candidate biodiversity offset sites, the biodiversity offset site should ideally be selected from that portfolio. It is therefore recommended that, if the CA is satisfied that candidate biodiversity offset sites in the Biodiversity Offset Report meets the requirements for a biodiversity offset under the circumstances, the CA requires the EA holder to select a biodiversity offset site from the portfolio of candidate biodiversity offset sites, and only if each option fails, can the EA holder select a biodiversity offset site that is not identified in the Biodiversity Offset Report, but still meets the requirements for a biodiversity offset under the circumstances.

In Chapter 7.6.1, it is stated that the preferred method for securing biodiversity offset sites is through the declaration of that site as a protected area in terms of NEMPAA. However, the EA holder does not have the legislative power to *declare* a protected area. That function may only be performed by the Minister responsible for the environment or a Member of the Executive Council responsible for the environment in a Province (**MEC**). The EA holder can, however, be required to submit a request for the declaration of the biodiversity offset site as a protected area to the Minister or an MEC, accompanied by required information. It is recommended that the EA holder is only given the option to pursue other means of securing the biodiversity offset site (such as the registration of a conservation servitude) if the Minister or MEC refuses to declare a protected area under the circumstances.

Even though it is recommended in this guideline that the EA holder should in most instances only be liable to implement a biodiversity offset for a 30 year period (see Chapter 9.5 below), the method of securing the site should afford the biodiversity offset site protection “in perpetuity,” or at minimum 99 years.

9.3 The obligation to prepare a Biodiversity Offset Management Plan for the biodiversity offset site

If a draft Biodiversity Offset Management Plan (see Chapter 7.6.1) was submitted to the CA at the end of the EIA phase, and the CA is satisfied that the Biodiversity Offset Management Plan would, if implemented, achieve the required biodiversity outcomes, the CA can either incorporate the terms of the Biodiversity Offset Management Plan into the EA holder’s EMPr, or require that the EA holder

This gazette is also available free online at **www.gpwonline.co.za**

enter into a Biodiversity Offset Implementation Agreement, in terms of which he, she or it undertakes to implement the terms of the Biodiversity Offset Management Plan (see Chapter 7.6.1 above).

However, if a Biodiversity Offset Management Agreement has not been submitted to the CA at the end of the EIA phase, the CA must require the EA holder to prepare a Biodiversity Offset Management Plan for the biodiversity offset site. It is strongly recommended that CAs require that Biodiversity Offset Management Plans contain the elements specified in Chapter 7.6.1 above.

If a Biodiversity Offset Management Plan is prepared in the post-application phase, it would not have to be approved by the CA. However, if it would not, if implemented, deliver the required biodiversity outcomes, compliance action can be taken against the EA holder for not complying with a condition of an EA.[37]

9.4 Entering into a Biodiversity Offset Implementation Agreement

If the terms of a Biodiversity Offset Management Plan has not been incorporated into an EMPr, the EA holder must be required to enter into a Biodiversity Offset Implementation Agreement with an implementing party, in terms of which agreement the EA holder undertakes to an implementing party to give effect to the terms of the Biodiversity Offset Management Plan. This will ensure that the specific activities required to deliver the prescribed biodiversity outcomes are enforceable against the EA holder. It would also obviate the need to make the validity period of the EA (see Chapter 9.7 below) at least as long as the EA holder is liable to implement the biodiversity offset.

When requiring an EA holder to enter into a Biodiversity Offset Implementation Agreement, care should be taken by the CA to include a "deadlock-breaking" condition. If the EA holder and implementing party are not able to come to an agreement, provision must be made for ways to break the deadlock between the two parties in order to ensure that the biodiversity offset condition is enforceable. An example of a dreadlock-breaking condition is a condition requiring that a dispute between the parties must be referred to arbitration for an arbitration award.

It is also advisable that the biodiversity offset condition specifies some essential clauses that must be included in a Biodiversity Offset Implementation Agreement. Biodiversity Offset Implementation Agreements are dealt with in more detail in Chapter 10 below.

9.5 Financial security for the biodiversity offset

In most instances, it would be most appropriate for an EA holder to make a lump sum payment of the funds estimated to be required for delivering a biodiversity offset into an appropriate financial vehicle. The rationale for such a requirement is that an EA holder may cease to exist before the lapse of the

[37] The failure to comply with a condition of an environmental authorisation is an offence in terms of section 49A of NEMA. An appropriately designated environmental management inspector may also issue a compliance notice to the EA holder for non-compliance with a condition of an environmental authorisation in terms of section 31L of NEMA.

This gazette is also available free online at **www.gpwonline.co.za**

30-year liability period. In some cases the EA holder can be required to make regular payments to the implementing party, such as when, for example, the EA holder is an organ of state or a mining company that has a mining right that authorises it to mine for at least 30 years.

When the EA holder is required to make a lump sum payment into a financial vehicle, the CA must specify the amount that must be paid and identify a financial vehicle. The amount must be equal to the estimated amount necessary for delivering the offset.

9.6 Timeframes for taking the steps in the biodiversity offset process

In most cases, the EA holder's responsibility to implement an offset will lapse after 30 years of the decision to grant EA subject to a biodiversity offset condition. However, in circumstances where the significant negative residual impacts on biodiversity are likely to endure for far longer, the period of liability can be linked to the lifespan of the activity that was authorised in the relevant EA (provided that such period exceeds 30 years). In the case of a mining operation conducted over a period in excess of 30 years, for example, an EA holder would be released from the obligation to implement a biodiversity offset only upon the receipt of a closure certificate, as contemplated in the Mineral and Petroleum Resources Development Act, 2002.

The CA could also specify the timeframes for the completion of specific steps in the biodiversity offsetting process, which are taken in the post-application phase, in the biodiversity offset condition. In other words, deadlines can be set for the selection of a biodiversity offset site, the securing of a biodiversity offset site, the completion of a Biodiversity Offset Management Plan and the conclusion of a Biodiversity Offset Implementation Agreement.

9.7 The period of validity of the environmental authorisation

The EIA Regulations[38] provide that the CA must specify when an EA lapses in the EA. The date on which it lapses is determined by when the authorised activity, or activities, are completed, or when all of the mitigation measures have been completed, whichever comes last. That does not however mean that EA containing a biodiversity offset condition must necessarily be valid for the full 30-year liability period. As a general rule, the EA must not lapse before the Biodiversity Offset Implementation Agreement (see Chapter 10) between the EA holder and the implementing party has been concluded.

9.8 Suspensive and resolutive conditions

In the context of biodiversity offsets, a suspensive condition would provide that the activities authorised in an EA may not commence until specified steps in the biodiversity offset process have been completed. Those steps may, for example, be the conclusion of a Biodiversity Offset Implementation Agreement between the EA holder and the implementing party (see Chapter 10), or

[38] See regulation 26 of the EIA Regulations.

This gazette is also available free online at **www.gpwonline.co.za**

the EA holder submitting proof of a financial guarantee of adequate financial resources to comply with the biodiversity offset condition to the CA, depending on the circumstances.

A resolutive condition in the biodiversity offset context would provide that an EA would lapse if specified steps in the biodiversity offset process have not been taken by a specific time, meaning that the activity, or activities, are no longer authorised. Resolutive conditions must be used with due regard to realistic timeframes within which the steps in the biodiversity offset process can be completed.

The relevant provisions of the EIA Regulations relating to monitoring, reporting and auditing apply for as long as the EA is valid.

10. Biodiversity Offset Implementation Agreements

When the provisions of a Biodiversity Offset Management Plan has not been included in an EMPr, those provisions must be incorporated into a Biodiversity Offset Implementation Agreement to ensure that the EA holder is legally bound to implement the specific measures required to deliver the biodiversity outcomes prescribed in a biodiversity offset condition in an EA.

Biodiversity Offset Implementation Agreements are contracts entered into between the EA holder and an implementing party in terms of which the implementing party undertakes to implement the measures specified in a Biodiversity Offset Management Plan, and the EA holder undertakes to support the implementing party financially and otherwise in so implementing that plan. A Biodiversity Offset Implementation Agreement therefore serves as a mechanism through which the outcomes and activities contained in the Biodiversity Offset Management Plan are made legally binding on, and therefore enforceable against, the EA holder.

A Biodiversity Offset Implementation Agreement must, as a minimum, contain the following clauses:

- Descriptions of the parties to the Biodiversity Offset Implementation Agreement.

- The required outcomes of the biodiversity offset which need to be achieved.

- The primary activities that need to be conducted to achieve the outcomes of the biodiversity offset as per the Biodiversity Offset Management Plan. The Biodiversity Offset Management Plan can also just be appended to the Biodiversity Offset Implementation Agreement and referred to in the agreement.

- The timeframes within which the primary activities specified in the Biodiversity Offset Management Plan must be completed to achieve the outcomes successfully.

- Descriptions of the roles and responsibilities of the parties to the agreement. As already stated, implementing party must be responsible for implementing the activities specified in the Biodiversity Offset Management Agreement, and the EA holder must be responsible for

This gazette is also available free online at **www.gpwonline.co.za**

supporting the implementing party financially or otherwise in doing so. While the implementing party will implement the Biodiversity Offset Management Plan, the EA holder must ultimately be liable for achieving the outcomes of the biodiversity offset.

- An undertaking on the part of the EA holder to make the funds necessary for the implementation of the biodiversity offset available to the implementing party. As stated in Chapter 7.6.2 above, the finances necessary for implementing an offset can be made available by means of the payment of a lump sum into a designated financial vehicle, or regular payments to the implementing party for the latter's services performed at specified milestones of the biodiversity offset implementation process. Note that it would not be necessary to include such a clause in a Biodiversity Offset Implementation Agreement if the biodiversity offset condition required the EA holder to pay a lump sum into a designated financial vehicle, and the EA holder has complied with that condition.

- When the EA holder will make regular payments (i.e. not a lump sum payment) to the implementing party at specified milestones of the biodiversity offset implementation process, the EA holder, if it is a private entity, must undertake to provide the implementing party with a guarantee of finances necessary to implement the relevant biodiversity offset. In cases where the EA holder is a subsidiary company or a local subsidiary of an offshore company, it would be ideal if the holding/parent company gives such guarantee, and/or that the holding/parent company is held jointly and severally liable for the funding of the biodiversity offset.

- A description of the structures that must be set up for monitoring the effectiveness of the activities undertaken to achieve the required outcomes, and joint decision making regarding corrective and/or adaptive steps that need to be taken, if necessary. Ideally, the relevant conservation authority should be part of that structure if it is not the implementing party.

- The auditing and reporting requirements of the EA holder: the EA holder must appoint, and pay for, an independent auditor to undertake periodic performance audits and to submit audit reports to the relevant conservation authority. For more detail on auditing, please see Chapter 12 below.

Ideally, a Biodiversity Offset Implementation Agreement should be structured in a way that incentivises early delivery of the biodiversity outcomes.

In contrast to the conditions of an EA, which can be enforced by the issuing of a compliance notice on a person who has not complied with the terms of such conditions in terms of section 31L of NEMA, the terms of a Biodiversity Offset Implementation Agreement are enforceable by one party against the other by force of the law of contract.

Agreements similar to Biodiversity Offset Implementation Agreements could be used in the context of ecological compensation, where they would be called Ecological Compensation Implementation Agreements.

This gazette is also available free online at **www.gpwonline.co.za**

11. The National Biodiversity Offset Register

It is recommended that the Department of Forestry, Fisheries and the Environment establishes, and maintains, an electronic register of biodiversity offset sites in South Africa, called the National Biodiversity Offset Register.

As soon as possible after a biodiversity offset site has been identified, it is recommended that the relevant CA records the site in the National Biodiversity Offset Register. The information in the National Biodiversity Offset Register should be updated regularly to ensure that a record is kept of the status of biodiversity offsets. The following information must be recorded in the National Biodiversity Offset Register:

- Province and municipal area
- Date on which the EA was issued
- EA number
- EA holder
- Biodiversity offset conditions and any amendments
- Date on which the Biodiversity Offset Management Plan was completed
- Date on which the biodiversity offset site was secured (i.e. the date on which the relevant protected area was declared, servitude was registered, etc.)
- Delineation of the biodiversity offset site
- Ecological description of the biodiversity offset site
- Date on which the Biodiversity Offset Implementation Agreement was concluded.

It is further recommended that a spatial layer representing the biodiversity offset sites is made publicly available online to ensure that the locations of biodiversity offset sites are known, and that they are avoided in development applications and approvals in so far as such development would prevent the EA holder and implementing party from achieving the required biodiversity offset outcomes.

12. Implementation, monitoring and auditing

A biodiversity offset must be implemented in accordance with the biodiversity offset condition(s) in theEA, read with a relevant Biodiversity Offset Implementation Agreement, or EMPr, if applicable.

This gazette is also available free online at **www.gpwonline.co.za**

That should mean that the EA holder is obligated to secure the biodiversity offset site and to implement the measures necessary to achieve the required biodiversity offset outcomes.

The EA holder or contracted implementing agent (as applicable) must track the performance of the biodiversity offset in terms of EA conditions and the required biodiversity outcomes stipulated in the Biodiversity Offset Management Plan through regular monitoring and evaluation. Where the intended outcomes are not being met and/or performance is inadequate, adaptive and corrective actions must be applied as necessary.

The independent auditor appointed by the EA holder must undertake audits on the implementation of the biodiversity offset at intervals that may be prescribed in an EA, an EMPr or a Biodiversity Offset Implementation Agreement, whichever is applicable. It is however recommended that auditing intervals are linked to other applicable audit intervals, such as reporting intervals relating to protected area management in terms of NEMPAA (when applicable). The auditor must submit its periodic audit reports to the relevant conservation authority at the end of each auditing interval. Audit reports must be made available to interested and affected parties on request to ensure transparency and public accountability.

The responsibilities of EA holders for biodiversity offsets are finite (i.e. at minimum 30 years). At the end of the period for which the EA holder is responsible, the management of the biodiversity offset site must be handed over to a suitable organ of state, person or organisation, with their consent, to ensure that its biodiversity is maintained. The process for planning for handing over the responsibility of managing the biodiversity offset site should be initiated early on in the 30-year period.

It is reiterated here that a biodiversity offset that does not meet the biodiversity offset requirements specified in an EA constitutes non-compliance with a condition of an EA. As already mentioned, the failure to comply with a condition of an EAis an offence in terms of section 49A(1)(c) of NEMA. An appropriately designated environmental management inspector could also serve a compliance notice on the holder of an EA found to be in non-compliance with a biodiversity offset condition in terms of section 31L of NEMA.

The same general guidance is applicable to the implementation, monitoring and auditing of ecological compensation.

References

DAFF (2007). Policy principles and guidelines for control of development affecting natural forests. https://www.environment.gov.za/sites/default/files/legislations/policyandguidelines_controlofdevelopmentaffecting_naturalforests.pdf (accessed 28 November 2020)

DEA (2017). Guideline on Need and Desirability, Department of Environmental Affairs (DEA), Pretoria, South Africa ISBN: 978-0-9802694-4-4

This gazette is also available free online at **www.gpwonline.co.za**

DEA&DP (2015). Western Cape Guideline on Biodiversity Offsets. PGWC. March 2015.

EKZNW (2013). Policy: Biodiversity Offsets in KwaZulu-Natal. Ver 4, 2013.

EKZNW (2019). Minimum Requirements for Biodiversity Offsets. Ver 1 November 2019.

SANBI and DWS (2016). Wetland offsets: A best practice guideline for South Africa. WRC Report No. TT 660/16, April 2016. ISBN 978-1-4312-0775-6.

South African National Biodiversity Institute (SANBI). 2019. National Biodiversity Assessment (NBA) 2018: The status of South Africa's ecosystems and biodiversity. Synthesis Report. South African National Biodiversity Institute, an entity of the Department of Environment, Forestry and Fisheries, Pretoria. pp. 1–214.

SANBI. 2016. Lexicon of Biodiversity Planning in South Africa. Beta Version, June 2016. South African National Biodiversity Institute, Pretoria. 72 pp.

The Constitution of the Republic of South Africa, 1996 (Act No. 108 of 1996).

National Environmental Management Act, 1998 (Act No. 107 of 1998).

National Environmental Management: Protected Areas Act, 2003 (Act No. 57 of 2003).

National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004).

National Environmental Management: Integrated Coastal Management Act, 2008 (Act No. 24 of 2008).

Le Maitre, D.C., Seyler, H., Holland, M., Smith-Adao, L., Nel, J.L., Maherry, A. and Witthüser, K. (2018) Identification, Delineation and Importance of the Strategic Water Source Areas of South Africa, Lesotho and Swaziland for Surface Water and Groundwater. Report No. TT 743/1/18, Water Research Commission, Pretoria.

National Environmental Web-based Screening Tool, available at http://screening.environment.gov.za.

Procedures for the assessment and minimum criteria for reporting on identified environmental themes in terms of sections 24(5)(a) and (h) and 44 of the National Environmental Management Act, 1998, when applying for environmental authorisation: agriculture, avifauna, biodiversity, noise, defence and civil aviation (protocols), published under Government Notice No. 320 in Government Gazette 43110 of 20 March 2020.

Environmental Impact Assessment Regulations, 2014, published under Notice No. R982 in Government Gazette 38282 of 4 December 2014.

Listing Notice 1, 2014, published under Notice No. R983 in Government Gazette 38282 of 4 December 2014, as amended.

This gazette is also available free online at **www.gpwonline.co.za**

Listing Notice 2, 2014, published under Notice No. R984 in Government Gazette 38282 of 4 December 2014, as amended.

Listing Notice 3, 2014, published under Notice No. R985 in Government Gazette 38282 of 4 December 2014, as amended.

National Planning Commission. National Development Plan 2030: It's our future – make it work (2012).

Department of Environment and Tourism. People-Planet-Prosperity: A National Framework for Sustainable Development in South Africa (2008).

National Biodiversity Framework (2009) published in terms of the National Environmental Management: Biodiversity Act, 2004, published under Government Notice No. 813 in Government Gazette 32474 of 3 August 2009.

Simmonds et al. Moving from biodiversity offsets to a target-based approach for ecological compensation (2019) *Conservation Letters*.

Pilgrim, J.D., Brownlie, S., Ekstrom, J.M., Gardner, T.A., Von Hase, A., Kate, K.T., Savy, C.E., Stephens, R.T., Temple, H.J., Treweek, J. & Ussher, G.T. 2013. A process for assessing the offsetability of biodiversity impacts. Conservation Letters, 6(5), pp.376-384.

International Union for the Conservation of Nature. Motion 101 – Setting area-based conservation targets based on evidence on what nature and people need to thrive. Submitted to the Congress of the Parties on 1 September 2020. Available at https://www.iucncongress2020.org/motion/101.

McFarlane, D, *et al*. Wetland Offsets: A Best Practice Guideline for South Africa. Report to the Water Research Commission. WRC Report No. TT 660/16. April 2016.

Susie Brownlie, Nicholas King & Jo Treweek (2013) Biodiversity tradeoffs and offsets in impact assessment and decision making: can we stop the loss?, Impact Assessment and Project Appraisal, 31:1, 24-33, DOI: 10.1080/14615517.2012.736763.

Lawrence, D.P. 'Impact significance determination – designing an approach' in *Environmental Impact Assessment Review*, volume 27, Issue 8, November 2007.

This gazette is also available free online at **www.gpwonline.co.za**

DEPARTMENT OF HEALTH

NO. 1925 **25 March 2022**

HAZARDOUS SUBSTANCES ACT, 1973 (ACT NO.15 OF 1973)

GROUP I, CATEGORY B, HAZARDOUS SUBSTANCES: DECLARATION

Minister of Health intend, in terms of section 2(1) (a) of the Hazardous Substances Act, 1973 (Act No. 15 of 1973), to declare the substances mentioned in the schedule hereto and mixtures containing such substances, products or materials to be Group I, Category B hazardous substances.

Interested persons are invited to submit substantiated comments or representations on the proposed declaration to the Director-General: Department of Health, Private Bag X 828, **PRETORIA,** 0001 (for the attention of the Chief Director: Environmental Health and Port Health Services), by fax to: 012- 395 8802, attention: Ms Aneliswa Cele, or by e-mail to: Aneliswa.Cele@health.gov.za, within three months from the date of publication of this Notice.

DR M.J PHAAHLA, MP
Minister of Health
Date: 21/02/2022

SCHEDULE

Definitions

1. In this Notice, and any word or expression to which a meaning has been assigned in that Act, shall have that meaning and unless the context indicates otherwise:-

"ECHA" means the European Chemicals Agency;

"Globally Harmonized System(GHS)" means the Globally Harmonized System of Classification and Labelling of Chemicals published by the United Nations, (This is an internationally adopted harmonized hazard communication system for identifying and evaluating all the physical, toxicological and ecotoxicological properties of a substance or mixture, to determine the classification of the substance or mixture using specified criteria); and

"the Act" means the Hazardous Substances Act, 1973 (Act No. 15 of 1973).

Group I, Category B hazardous substances

2. (1) All pesticides substances listed in Annexure III of the Rotterdam Convention; with an importation consent granted by the Designated National Authority of the Convention and /or with approved registration in terms of the Agricultural, Farm Feeds, Agricultural Remedies and Stock Remedies Act, 1947 (Act No. 36 of 1947).

(2) All pesticides substances listed in Part I, Annexure B of the Stockholm Convention; subject to specific exemptions prescribed in the Convention and or subject to subparagraph(3).

(3) All pesticides or agricultural remedies classified and registered under the red hazard colour code and/or as restricted in terms of the Agricultural, Farm Feeds, Agricultural Remedies and Stock Remedies Act, 1947 (Act No. 36 of 1947).

(4) The declaration in subparagraphs (1), (2) and (3) does not apply to:-

(a) Substances listed in the Classification and Labelling Inventory obtainable from the ECHA web site, https://echa.europa.eu, and classified as Explosives in terms of the United Nations (UN) Globally Harmonized System of Classification and Labelling of Chemicals – GHS, Purple Book;

(b) Radioactive substances as defined in terms of the Hazardous Substances Act, 1973 (Act No.15 of 1973);

(c) Prohibited substances or use of substances in terms of the Hazardous Substances Act, 1973 (Act No. 15 of 1973) as amended, or the Agricultural, Farm Feeds, Agricultural Remedies and Stock Remedies Act, 1947 (Act No. 36 of 1947), or the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004) as amended or National Environmental Management Act, 1998 (Act No. 107 of 1998) or any other legislation; and

(d) Substances and preparations and admixtures which are classified as scheduled substances under the Medicines and Related Substances Control Act, 1965 (Act No. 101 of 1965).

Applicability of Group I Hazardous Substances Regulations

4. Any person engaged in the sale of Group I, Category B hazardous substances must comply with the provisions of Regulations Relating to Group I Hazardous Substances GNR 453 published in Government *Gazette* No. 5467 of 25 March 1977, as amended.

Repeal

5. The Government Notice No. R 1381 published in Government *Gazette* 15907 dated 12 August 1994 is hereby repealed.

Commencement date

6. The Declaration comes into effect six months after the date of publication of this Notice.

Transitional arrangements

7. A license issued under section 4 of the Act, before the publication date of this Declaration Notice, shall be valid until expiry date.

Title

8. This Notice is called Declaration of Group I, Category B Hazardous Substances in terms of the Hazardous Substances Act, 1973 (Act No. 15 of 1973), 2021.

DEPARTMENT OF HEALTH

NO. 1926 **25 March 2022**

HAZARDOUS SUBSTANCES ACT, 1973 (ACT NO.15 OF 1973)

GROUP I, CATEGORY A, HAZARDOUS SUBSTANCES: DECLARATION

Minister of Health, intend, in terms of section 2(1) (a) of the Hazardous Substances Act, 1973 (Act No. 15 of 1973), to declare the substances mentioned in the schedule and mixtures containing such substances, products or materials to be Group I, Category A Hazardous Substances.

Interested persons are invited to submit substantiated comments or representations on the proposed declaration to the Director-General: Department of Health, Private Bag X 828, Pretoria, 0001 (for the attention of the Chief Director: Environmental Health and Port Health Services), by fax to: 012- 395 8802,attention: Ms Aneliswa Cele, or by e-mail to: Aneliswa.Cele@health.gov.za, within three (3) months from the date of publication of this Notice.

DR M.J PHAAHLA, MP
MINISTER OF HEALTH
DATE: 21/02/2022

SCHEDULE

Definitions

1. In this Notice, any word or expression to which a meaning has been assigned in that Act, shall have that meaning and unless the context indicates otherwise:-

"ECHA" means the European Chemicals Agency;

"Globally Harmonized System(GHS)" means the Globally Harmonized System of Classification and Labelling of Chemicals published by the United Nations, an internationally adopted harmonized hazard communication system for identifying and evaluating all the physical, toxicological and ecotoxicological properties of a substance or mixture, to determine the classification of the substance or mixture using specified criteria; and

"the Act" means the Hazardous Substances Act, 1973 (Act No. 15 of 1973).

Group I, Category A hazardous substances

2. The following are hereby declared as Group I Category A hazardous substances, namely:-

(a) All industrial substances listed in Annexure III of the Rotterdam Convention with allowed uses in the country and subject to paragraph 3;

(b) Mercury and mercury compounds for allowed for uses as prescribed in the Minamata Convention; and

(c) Any industrial substance or mixture of substances, products or materials which in the course of customary or reasonable handling or use, including ingestion, by reason of its;

(i) acute toxicity oral, skin or inhalation, category 1 or 2 or;
(ii) carcinogenicity, category 1, 1A or 1B or;
(iii) reproductive toxicity, category 1, 1A or 1B or;
(iv) germ cell mutagenicity, category 1A or 1B or;
(v) specific target organ toxicity-single exposure (STOT-SE), category 1 or;
(vi) specific target organ toxicity-repeated exposure (STOT-RE), category 1;

listed as harmonised in the Classification and Labelling Inventory obtainable from the ECHA web site, https://echa.europa.eu and classified according to the hazard classification prescribed in the latest version of the *United Nations (UN) Globally Harmonized System of Classification and Labelling of Chemicals – GHS, Purple Book.

Exclusions

3. The above declaration excludes:-

(a) Substances classified as Explosives in terms of the United Nations (UN) Globally Harmonized System of Classification and Labelling of Chemicals – GHS, Purple Book;
(b) Radioactive substances as defined in terms of the Hazardous Substances Act, 1973 (Act No. 15 of 1973) as amended;
(c) Prohibited substances or use of substances in terms of the Hazardous Substances Act, 1973 (Act No. 15 of 1973) as amended, or Agricultural, Farm Feeds, Agricultural Remedies and Stock Remedies Act, 1947 (Act No. 36 of 1947) as amended, or the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004) as amended or National Environmental Management Act, 1998 (Act No. 107 of 1998) as amended or any other legislation;
(d) Substances and preparations and admixtures which are classified as scheduled substances under the Medicines and Related Substances Control Act, 1965 (Act No. 101 of 1965) as amended;
(e) All industrial substances listed in the Stockholm Convention; and
(f) A substance, mixture of substances, products or materials declared as Group II hazardous substance.

Applicability of Group I Hazardous Substances Regulations

4. (1) Any person engaged in the sale of Group I, Category A hazardous substances must comply with the provisions of Regulations Regarding Group I hazardous substances published in Government Notice No. 453, *Gazette* No. 5467 of 25 March 1977,as amended.

(2) Subject to regulation 3(i) of the Regulations Regarding Group I Category A hazardous substances, the sale of mercury and mercury compounds for primary mercury mining and for use in artisanal and small-scale gold mining is prohibited.

Repeal

5. Government Notice R. 452 published in Government *Gazette* No. R. 5467 dated 25 March 1977 and GGN R. 1705 published in Government *Gazette* No. 16796 dated 3 November 1995 are hereby repealed.

Date of commencement

6. The declaration shall come into effect six months after the date of publication of this Notice.

Transitional arrangements

7. A license issued under section 4 of the Act, before the publication date of this Declaration Notice, shall be valid until expiry date.

Title

8. This notice is called Declaration of Group I Category A Hazardous Substances in terms of the Hazardous Substances Act, 1973 (Act No. 15 of 1973), 2021.

DEPARTMENT OF HEALTH

NO. 1927 **25 March 2022**

HEALTH PROFESSIONS ACT, 1974 (ACT NO.56 OF 1974)

REGULATIONS RELATING TO THE REGISTRATION OF FORENSIC PATHOLOGY OFFICERS

The Minister of Health has, under section 61 of the Health Professions Act, 1974 (Act No. 56 of 1974), and after consultation with the Health Professions Council of South Africa, made the regulations in the Schedule.

DR M.J. PHAAHLA, MP

MINISTER OF HEALTH

DATE: 21/02/2022

SCHEDULE

Definitions

1. In these regulations any word or expression to which a meaning has been assigned in the Act shall bear such meaning and, unless the context indicates otherwise –

"applicant" means any person who applies for registration as a forensic pathology officer;

"professional board" means the Professional Board for Medical Technology established in terms of section xx of the Act;

"the Act" means the Health Professions Act, 1974 (Act No. 56 of 1974 terms of section 15 of the Act.

Registration of a Forensic Pathology Officer

2. The registrar may register as a forensic pathology officer any person who is employed and is working as forensic pathology officer immediately prior to the date of the promulgation of these regulations

Application for registration

3. (1) A person who is employed and is working as a forensic pathology officer immediately prior to the promulgation of these regulations must apply to the registrar within six months after the promulgation of these regulations and on a form supplied by the professional board.

(2) An application referred to in these regulations must be accompanied by:

(a) a letter of confirmation of service duly signed by the employer;

(b) certified copy of the applicant's identity document or birth certificate, or if the applicant is unable to furnish either of these documents, such other proof of his or her age and correct names as may be acceptable to the registrar; and

(c) registration fee.

Short title

4. These Regulations are called Regulations Relating to the Registration of Forensic Pathology Officers, 2021.

DEPARTMENT OF HEALTH

NO. 1928 **25 March 2022**

OCCUPATIONAL DISEASES IN MINES AND WORKS ACT, 1973 (ACT NO. 78 OF1973): INCREASE OF PENSION BENEFITS

I, Dr MJ Phaahla, Minister of Health, hereby in terms of Section 105A of the Occupational Diseases in Mines and Works Act, 1973 (Act 78 of 1973), with the concurrence of the Minister of Finance, increase benefits which are payable from the State Account of the Compensation fund as follows:

1. Increase pension benefits by CPI of 3.2 % per pensioner beneficiary per month with effect from 1 April 2021;
2. Increase the one-sum benefit payable to the widow of the deceased pensioner from R46 022 to R47 495 with effect from 1 April 2021.

DR MJ PHAAHLA, MP
MINISTER OF HEALTH
DATE: 07/09/2021

DEPARTEMENT VAN GESONDHEID

NO. 1928 **25 March 2022**

WET OP BEDRYFSIEKTES IN MYNE EN BEDRYWE, 1973 (WET NO. 78 VAN 1973): VERHOGING VAN PENSIOEN VOORDELE

Ek, Dr MJ Phaahla, Waarnemende Minister van Gesondheid, ingevolge Artikel 105A van die Wet op Bedryfsiektes in Myne en Bedrywe, 1973 (Wet 78 van 1973), met die instemming van die Minister van Finansies, verhoog hiermee die pensioen voordele wat betaalbaar is uit die Staatsrekening van die Vergoedingsfonds as volg:

1. Die pensioen per bevoordeelde pensioenaris word vanaf 1 April 2021 verhoog met VPI van 3.2% per maand;
2. Die enkelbedrag voordeel betaalbaar aan die weduwee van die afgestorwe pensioenaris word verhoog vanaf 1 April 2021 van R46 022 na R47 495.

DR MJ PHAAHLA, LP
MINISTER VAN GESONDHEID
DATUM: 07/09/2021

DEPARTMENT OF HEALTH

NO. 1929 **25 March 2022**

THE SOUTH AFRICAN DENTAL TECHNICIANS COUNCIL

NOTICE REGARDING ANNUAL FEES PAYABLE TO THE COUNCIL

I, Dr Mathume Joseph Phaahla, the Minister of Health, hereby in terms of section 49 read with section 24(5) of the Dental Technicians Act, 1979 (Act No.19 of 1979) and on the recommendation of the South African Dental Technicians Council ("the Council"), fix the fees set out in the Schedule as the fees to be paid to the Council.

DR M.J PHAAHLA, MP

MINISTER OF HEALTH

DATE: 18/02/2022

SCHEDULE

Definitions

1. In this Notice, any word or expression to which a meaning has been assigned in the Act shall have that meaning and unless the context indicates otherwise –

"financial year" means the period of one year commencing on the first day of March of one year and concluding on the last day of February of the succeeding year, or such other reporting period as may be determined by the council;

"the Act" means the Dental Technicians Act, 19 of 1979; and

"VAT" means value-added tax as contemplated in the Value-Added Tax Act, 89 of 1991.

Annual fees payable by dental technicians and dental technologists

2. Any person registered in terms of section 18 of the Act –

(a) must pay to the Council an amount of **R 2,636-00** as an annual fee for the period 1 March 2022 to 28 February 2023; or

(b) pay to the Council a pro rata portion of the fee referred to in sub-paragraph (a), calculated from the date of application for registration, as an annual fee in respect of the unexpired portion of that year.

Liability

3. The annual fees referred to in –

(a) paragraph 2(a) is due on 1 March 2022 and is payable not later than 31 March 2022; and

(b) paragraph 2(b) is due on the day of the registration concerned and is payable within 90 calendar days from the date of registration.

Restoration fees

4. (1) A person whose name has been removed from a register in terms of section 24(1)(c) and who seeks to have his name to be restored to such register in terms of section 24(5) of the Act must submit a duly completed application for registration substantially in accordance with **Appendix A**.

(2) The restoration fee payable by a person contemplated in sub-regulation (1) must, if the application for restoration is submitted –

(a) within a period of six (6) months after the date on which his or her name was removed from the register concerned, be the equivalent of two (2) times the annual fee due by that person plus the outstanding fees due by that person;

(b) after a period of six (6) months has expired after the date on which his or her name was removed from the register concerned, be the equivalent of five (5) times the annual fee due by that person plus the outstanding fees due by that person.

Exemption

5. (1) The Council may by resolution direct the registrar to partially exempt any dental technician, dental technologist or dental technician contractor for an indefinite or definite period from payment of any annual fee determined or prescribed in terms of the Act if the Council is satisfied that such a dental technician or dental technologist-

(a) has submitted a written application by way of an affidavit accompanied by a certified copy of a valid identity document, before 28 February preceding the financial year for which exemption is sought or applied for, and

(b) has attained the age of 70 years; and

(c) has paid the prescribed fee of R 767-00.

(2) The annual fees payable by a person referred to in sub-regulation (1) whose application for a partial exemption has been approved is:

(a) R265-00 in respect of a dental technician or dental technologist; or

(b) R775-00 in respect of a dental technician contractor.

Value-added tax

6. The annual fees, restoration fees and exemption fees determined in terms of this notice are inclusive of VAT.

Withdrawal of notice

7. Board Notice No. 254 published in *GG* 44324 of 25 March 2021 is hereby repealed.

Short title

8. This Notice is called Notice Regarding Annual Fees Payable to The Council, 2022.

DEPARTMENT OF HEALTH

NO. 1930 **25 March 2022**

OCCUPATIONAL DISEASES IN MINES AND WORKS ACT, 1973 (ACT 78 of 1973):

AMENDMENT OF AMOUNTS TO INCREASE BENEFITS

I, Dr MJ Phaahla, Minister of Health, hereby, after consultation with the Advisory Committee, in terms of section 105A of the Occupational Diseases in Mines and Works Act, 1973 (Act No. 78 of 1973) ("the Act"), amend the following amounts appearing in sections 80(2) and 80(3) of the Act so as to increase benefits, with effect from 1 April 2022, as follows:

a) the amount representing the person's earnings, specified in section 80(2) of the Act increases from R4 405 (Four thousand four hundred and five rand) to R4 555 (Four thousand five hundred and fifty-five rand)

b) the amount specified in section 80(3) of the Act increases from to R49 122 (Forty-nine thousand one hundred and twenty two rand) to R50 793 (Fifty-thousand seven hundred and ninety three rand)

c) 1 April 2022, being the date on or after which:

(i) an examination to determine the presence, nature and degree of a compensable disease was conducted; or

(ii) the first of such examinations, in a series of examinations, commenced; or

(iii) a post-mortem examination was partially or wholly conducted on the person who allegedly died of a compensable disease.

DR MJ PHAAHLA, MP
MINISTER OF HEALTH
DATE: 18/02/2022

DEPARTEMENT VAN GESONDHEID

NO. 1930 **25 March 2022**

WET OP BEDRYFSIEKTES IN MYNE EN BEDRYWE, 1973 (WET 78 van 1973)

WYSIGING VAN BEDRAE OM VOORDELE TE VERHOOG

Ek, Dr MJ Phaahla, Minister van Gesondheid, na raadpleging met die Advieskomitee, verklaar hiermee, kragtens artikel 105A van die Wet op Bedryfsiektes in Myne en Bedrywe (Wet No. 78 van 1973) ("die Wet"), dat die bedrae per artikel 80(2) en 80(3) van die Wet, gewysig word, om voordele te verhoog, effektief 1 April 2022.

a) Die verdienste, soos verwys na per Artikel 80 (2) van die Wet, word verhoog van R4 405 (Vier duisend vier honderd en vyf rand) na R4 555 (Vier duisend vyf honderd vyf en vyftig rand)

b) Die bedrag, soos verwys na per Artikel 80 (3) van die Wet, word verhoog van R49 122 (Nege en veertig duisend een honderd twee en twintig rand) na R50 793 (Vyftig duisend sewe honderd drie en negentig rand)

c) 1 April 2022, synde die datum waarop of waarna:

   (i) 'n mediese ondersoek ondergaan is om die teenwoordigheid, aard en graad van 'n vergoedbare siekte te bevestig; of

   (ii) die eerste mediese ondersoek ondergaan is in 'n reeks mediese ondersoeke; of

   (iii) 'n nadoodse ondersoek in geheel of gedeeltelik uitgevoer is op 'n persoon wat vermoedelik gesterf het aan 'n vergoedbare siekte.

DR MJ PHAAHLA, MP
MINISTER VAN GESONDHEID
DATUM: 18/02/2022

DEPARTMENT OF HIGHER EDUCATION AND TRAINING

NO. 1931 **25 March 2022**

HIGHER EDUCATION ACT (ACT 101 OF 1997, AS AMENDED)

REPORT OF THE INDEPENDENT ASSESSOR INTO THE AFFAIRS OF THE MANGOSUTHU UNIVERSITY OF TECHNOLOGY, PROFESSOR ANTHONY STAAK TO THE MINISTER OF HIGHER EDUCATION, SCIENCE AND INNOVATION, DR BE NZIMANDE

I, Dr BE Nzimande, MP, Minister of Higher Education, Science and Innovation in accordance with Section 47 (2) of the Higher Education Act (Act 101 of 1997, as amended), publish the Report of the Independent Assessors, Professor Anthony Staak appointed under Sections 44 (1) of the same Act, on the investigation conducted into the affairs of the University of the Mangosuthu University of Technology, as set out in the Schedule.



Dr BE Nzimande, MP

Minister of Higher Education, Science and Innovation

Date: 11/03/2022

REPORT OF THE INDEPENDENT ASSESSOR ON THE MANGOSUTHU UNIVERSITY OF TECHNOLOGY

Focusing on Allegations and Counter Allegations leading to the Suspension of the Vice Chancellor

Independent Assessor: Prof AP Staak
Assisted by Financial Expert: Mr. B Mahlangu

15 November 2021

TABLE OF CONTENTS

SECTION 1 5
1.1 Acknowledgements 5
1.2 Executive Summary 6
1.3 Terms of reference 8
1.4 Methodology 9
SECTION 2 10
2.1 Historical Context and Background to the Investigation 10
2.2 The build-up of tensions between the Vice Chancellor and Council 14
2.2.1 Events up to January 2020 14
2.2.2. January 2020 to April 2020 15
2.3 The Suspension of the Vice Chancellor and Senior Officials 18
2.3.1 Relevant excerpts from the VC's report 18
2.3.2 Relevant excerpts from the Chairs Response 20
2.4 Developments after the Suspension of the VC 21
SECTION 3 23
3.1 Analysis of Allegations and Counter Allegations 23
3.1.1 Allegations made by the VC 24
3.1.2 Allegations made against the VC 25
3.2 Analysis of the suspensions 27
3.3 Analysis of the SNG Forensic Report 31
3.3.1 RFB: MUT 18/2018 completion of New Student Centre located at MUT 31
3.3.2 RFB: MUT 19/2018: Construction of New Engineering Laboratories & Offices including Quantity Surveying & Construction Management Offices 32
3.3.3. RFB: MUT 26/2019 - Appointment of service provider for the installation, maintenance and replacement of air conditioning 33
3.3.4 RFB: MUT 22/2019- Appointment of a service provider for the provision of Security Services 33
3.3.5 Allegations made by Mr I Mthimkhulu regarding the security tender 34
3.3.6 RFB: MUT 32/2019: Appointment of HR Consultant 35
3.3.7 RFB: MUT 14/2018 for the Refurbishment of Air-conditioning Systems 36
3.3.8 Appointment of the Acting Senior Director of HR and Development, Mr Mthimkhulu 37
3.3.9 Alleged irregular appointment of Executive Director of Human Resources and Development 37
3.3.10 Alleged appointment of the Dean of Students as Acting Director Protection Services, a position allegedly lower than her substantive position 38

This gazette is also available free online at **www.gpwonline.co.za**

3.3.11 Alleged appointment of the Senior Director: Operations, Mr Khumalo, without necessary qualifications and subsequent inflated salary 38
3.3.12 Alleged elevation of grades: Director: Risk and Compliance 39
3.3.13 Alleged irregular allowance paid to Mr Linda Nzama, the Shop Steward 39
3.3.14 Alleged irregular appointment of Ms Petro Butler 40
3.3.15 Allegations and Counter Allegations 40
3.5 Analysis of the Disciplinary Action 42
SECTION 4 43
4.1 Observations arising from Interviews and Submissions 43
4.2 Culture 43
4.3 Governance and Management 45
4.3.1 Relationship between Council Chair and Vice-Chancellor 45
4.3.2 The Quality of Reporting 46
4.3.3 Council Overreach 47
4.3.4 Management 48
4.3.5 Council 49
4.4 The Academic Project 50
4.5 The Office of the Registrar 51
4.6 Ombudsman 52
SECTION 5 52
5.1 Findings 52
5.2 Formulation of Recommendations 58
5.2.1 Preamble 58
5.2.2 Recommendations 59
5.3 Recommendations relating to the financial analysis into cash flow problems experienced by MUT 63
ANNEXURE A: Terms of Reference of the Independent Assessor 64
Terms of Reference of the Independent Assessor to Conduct an Investigation into theAffairs of the Mangosuthu University of Technology (MUT) 64
ANNEXURE B: List of Acronyms 65
ANNEXURE C: Programme of Interviews 66
MEETINGS AND INTERVIEWS CONDUCTED BY THE INDEPENDENT ASSESSOR 66
ANNEXURE: 4 MUT IA Financial Report 69
1. High Level Procedures Performed 70
2. MUT Cash Position 70
2.1 MUT's Cash Situation when the Bridging Finance was Requested 70
2.2 MUT's Current Cashflow Position 71
2.3 Principles of good cashflow management and considerations 72

This gazette is also available free online at **www.gpwonline.co.za**

2.4 Control Mechanism 72
2.5 Conclusions 72
3. Analyses of the Annual Financial Statements 73
3.1 Annual Financial Statements – Balance Sheet 73
3.2 High Level Analysis of the Income Statement 77
4. MUT's Financial Health – Going Concern Issue 80
4.1 Going concern 80
4.2 Pay as You Go Approach 81
4.3 Auditors' Assessment 81
4.4. Conclusion 81
5. Material Findings from Audits and Other Forms of Investigations/Enquiry 82
5.1 Material Internal Audit investigations 82
5.2 Material Findings by External Auditors 85
5.3 Irregular Expenditure 85
5.4 Security Tender 86
5.5 Conclusion 86
Submissions to the Governance Structures - FIC, ARCC and Council 87
6.1 Minutes and Submissions 87
6.2 CVs of the FIC and ARCC Chairpersons 90
6.3 Conclusion 90
7. Recommendations 90
7.1 Cash Management 90
7.2 Financial Sustainability and Other 91
7.3 Governance Related Matters 95
Annexure 1 96

This gazette is also available free online at **www.gpwonline.co.za**

SECTION 1

1.1 Acknowledgements

It would not have been possible to conclude this investigation in the limited time available without the support of the team from the Department of Higher Education and Training. A schedule of interviews, both physical and virtual played an important part in the investigation. Special thanks to Tintswalo Ngwenya and Sonnika Lundt for arranging these and to AB Heyns for his prompt and meticulous transcription of proceedings.

The investigation also involved a physical visit to the MUT campus. Thanks to Tintswalo and Sonnika for accompanying me on this visit and providing all the assistance that was needed. Thanks also to Sabelo Radebe for attending to the logistics relating to transport and accommodation. A sincere word of thanks to Phillia Vukea for providing very necessary background information, in the form of well collated documentation and for advising on the procedural aspects of the investigation. Thanks also to Thandi Lewin for her detailed briefing session. All this support was provided in a highly professional manner.

Thanks to all those who generously gave of their time to participate in interviews. These included not only staff and students of MUT, but also external members of council both past and present. Numerous electronic submissions were received from the MUT community. All these contributions are much appreciated.

We received a warm welcome at the University and staff went out of their way to make our visit as comfortable as possible. Thanks to the Acting Vice Chancellor, Prof Marcus Ramogale for his role in this regard. And then a special word of thanks to Mr Phumzile Masala, the Acting Registrar for his prompt response to all requests for institutional documentation, and for granting me electronic access to the “registrar’s files” which greatly facilitated the retrieval of documents. There were many other members of staff, who assisted behind the scenes, in particular staff in the areas of IT technical support and transport. To them I offer my gratitude.

A particular word of thanks is due to Mr Bulelani Mahlangu, the co-opted financial expert who assisted by providing the detailed analysis of the financial affairs of the University. It was a pleasure working with him throughout the investigation.

Finally, thanks to the Minister of Higher Education, Science and Innovation for entrusting me with this assignment.

This gazette is also available free online at **www.gpwonline.co.za**

1.2 Executive Summary

I was appointed to conduct an investigation with a narrow terms of reference. I was asked to focus my attention on a series of allegations and counter allegations relating to governance and management at the Mangosuthu University of Technology (MUT). More specifically, I was required to examine the allegations made by the Vice-Chancellor (VC), Dr Duma Malaza in his correspondence with the Minister, as well as the allegations of misconduct and mismanagement that were levelled against the VC. I was also required to investigate the circumstances surrounding the suspensions of the VC and two other senior managers in April 2020 and May 2020.

It is evident that MUT has a history of governance and management that has been plagued with challenges. The current crisis came to the head with a series of accusations and counter accusations often levelled in a highly acrimonious manner, which culminated in a decision to suspend the VC taken at an emergency meeting of council on 29 April 2020.

From the interviews that I conducted, and the electronic submissions received, it soon became clear that the campus was divided on the issue of the suspensions, on the role of Council and on the performance of management.

The views expressed while covering a broad spectrum of opinions, could be distilled into two diametrically opposed positions. On the one hand, it was alleged that certain elements in Council were making a concerted effort to get rid of a VC who is committed to good governance, so that procurement processes could be influenced.

On the other hand, the Council alleges that it is the VC who is trying to have council removed so that corruption at the University may continue. There are suspicions that inadequate reporting by management is deliberate so that corruption will avoid scrutiny and go undetected.

While I deal with the specific allegations in the body of the report, I could find no evidence to support either of these diametrically opposed positions. I could find no evidence of Council involvement in procurement processes or of Council overreach. On the contrary, the Council members I interviewed (past and present) demonstrated a clear understanding of their role in governance and oversight. With the support of Council, the Supply Chain Management (SCM) policy had been amended to remove any involvement of Council in procurement processes, and Council was not involved in any staff appointments except at the levels stipulated in the Statute. The MUT Statute is currently being revised to strengthen good governance at the University.

This gazette is also available free online at **www.gpwonline.co.za**

I could not find any evidence that linked the VC or any of the suspended staff to corruption at the institution. On the contrary, I gained the impression of a VC committed to rooting out corruption. During his relatively short period in office, the VC had commissioned a number of forensic audits and investigations into various processes and activities at the University including the procurement process, the payroll system, an investigation into ghost employees and the part-time class system which uncovered irregularities and incidences of corruption. Where required, disciplinary action was taken.

MUT has a chequered history of governance and management failure. Ministerial interventions have been imposed, councils and management have been removed but the problems have persisted. I am of the view that similar interventions will not solve these problems, as I believe that the problems at MUT are systemic and embedded in the culture of the institution. It is a culture that not only stifles the academic project but has also become an enabler for corrupt activities.

To effectively address this problem, we require council and management to cooperate closely with each other and to focus their undivided attention on bringing about the cultural transformation that is required. Instead, we had a Council Chair and a VC at loggerheads with each other and deeply suspicious of each other's intentions. This relationship was acrimonious and adversarial to say the least. The situation was no doubt fueled by anonymous allegations (mostly unsubstantiated), which should have been dealt with in a more appropriate manner. Both parties must share the blame for this, as not enough was done to nurture a relationship of trust and mutual respect between these two senior officers of the University.

In order for the systemic problems at MUT to be effectively addressed, the trust relationship between Chair of Council and the VC must be restored so that Council can support management in undertaking this complex, but necessary task.

In the report I examine the circumstances surrounding the suspension of the VC and the other members of senior management. I found that the decision to suspend the VC was driven by emotions and did not take into consideration the full implications that such a decision would have on the University. In other words, due diligence was not applied. I also found that the process of suspending the VC and the other senior managers was not conducted in a fair and transparent manner. To this end I recommend that the suspension of the VC and the other senior officials be lifted.

Under the circumstances I doubt whether the VC would consider returning to the institution. I would also caution against this, and I explain why in the report. From my observations I do not believe that the current Chair of Council is best positioned to steer Council in the direction that would help nurture and restore the relationship of trust with the VC and provide management with the necessary support

This gazette is also available free online at **www.gpwonline.co.za**

it requires. To this end I recommend that he should consider stepping down from the position as chair, in the best interest of the University. I provide more detail in this report.

In response to the adverse findings emanating from the previous Independent Assessors report, the Minister proposed the establishment of a Multidisciplinary Task Team (MDTT) to provide MUT with technical support in a range of areas and to assist with capacity building. There is a great need for this. Hence, I also recommend that the establishment of the MTTD be fast tracked. The instability at the institution is in no small measure a consequence of the large number of acting positions at senior level. The permanent appointment of staff into these positions must be prioritized.

In February this year the Minister received a request from MUT for bridging finance, which sparked a concern about cash flow problems at the University. The terms of reference also stipulated that I focus on this problem. This matter is dealt with in detail in a high-level report on the financial position of the University, which was drafted by the financial expert I coopted on the team for this purpose. The full report is included as an annexure. Our findings indicate that the cash flow situation at MUT is largely dependent on the timeous receipt of funding from NSFAS. If MUT robustly pursues the R105m owed to it by NSFAS flowing from the previous financial year, and receives the funds within this year, it is unlikely to experience a cash flow problem.

Our financial analysis also suggests that the control environment in certain areas are substantially weak and that there are serious challenges in supply chain management and contract management. In relation to this we recommend that independent and comprehensive investigations be conducted into the areas identified in the report.

1.3 Terms of reference

The terms of reference for this investigation, as published in the Government Gazette No. 45062 on 27 August 2021, are provided in Annexure A. The terms of reference are narrow in nature and require the Independent Assessor to conduct an investigation into the affairs of the MUT, following a series of allegations and counter-allegations relating to the governance and management of the University. The overall purpose of the investigation is to advise the Minister on the source and nature of problems, and measures required to restore good governance and management.

More specifically the allegations refer to those made by the VC, Dr Duma Malaza in his correspondence to the Department in March 2020 and April 2020, as well as the counter allegations of misconduct and mismanagement against the VC contained mainly in an email from the Chair of Council, as well as in a report tabled by the Chair of Council at an emergency meeting of Council on 29 April 2020. The investigation is required to establish the circumstances and reasons for the

This gazette is also available free online at **www.gpwonline.co.za**

suspension of the VC and other senior managers in April 2020 and May 2020 and to assess the functioning, efficacy and relationships between the governance and executive management structures and portfolios.

The Minister received a letter from the acting VC in February 2021 requesting bridging finance to overcome cash-flow challenges at the university. This sparked a concern about the cash flow circumstances at MUT. Hence this investigation is also required to probe the circumstances that led to the cash-flow problems of the University and make recommendations that can improve the cash flow position of the university.

1.4 Methodology

At the commencement of the investigation a briefing session was convened by the Department of Higher Education and Training (the Department or DHET). This session proved extremely helpful as it provided an historical context for the investigation and dealt with the events leading up the current challenges faced by the University. Copious documentation, all relevant to the investigation was made available online, and I was introduced to the team from the Department who would provide assistance and logistical support for the investigation.

I also requested the support of someone with specific financial expertise to assist with the investigation into the cash flow problems at the university. The appropriate terms of reference for this component of the investigation was agreed upon and Mr Bulelani Mahlangu was appointed.

After working through much of the preliminary documentation a programme for the investigation was drawn up. This involved in the main identifying lines of enquiry, requesting further supporting documentation, analyzing these documents and developing a programme of interviews. A notice was posted to the campus community at MUT informing them of the investigation and the associated terms of reference. The campus community was also invited to make electronic submissions to the Independent Assessor on any matter that might be of relevance to these terms of reference.

I am required to highlight instances where access to information was problematic. My experience has been quite the opposite. Without exception all documentation requested was promptly provided. For this the Office of the Registrar in particular must be commended. The Acting Registrar also provided online access to his files containing all governance related information at the University. However, it is noted that a suspended staff member indicated that his laptop had been confiscated and that he was denied access to the files he needed to make a complete submission to me.

This gazette is also available free online at **www.gpwonline.co.za**

A series of interviews was conducted at the University from the 12-15 October 2021. While some interviews were held with individuals, most of the interviews on campus involved various stakeholder groupings as the intention was also to gain an impression of the culture and group dynamics prevalent at the University. Due to COVID-19 lockdown restrictions many staff were working off campus, hence the interviews with groups were hybrid in nature, a combination of face-to-face and virtual.

The next round of interviews was much more targeted in terms of information required from specific individuals. These were conducted exclusively on-line. During the interviews it soon became apparent that there were divisions among staff between those who supported the suspension of the VC and those who opposed it and that the perspectives of individuals were influenced to a large extent by their lived experience and their specific affiliations. Hence the inherent biases and partiality of those interviewed had to be taken into consideration when evaluating what was presented. The same applied to the many submissions received.

Findings were made on the basis of the interviews conducted, submissions received and on the analysis of the documentation available. The full schedule of interviews is provided in Annexure C.

The question of independence was raised on many occasions during the investigation, mostly in relation to the independence of council members and whether it was possible for internal council members in particular to apply independence of mind in execution of their fiduciary responsibilities. But it was also raised in respect of my own independence relative to the Minister who had appointed me and the DHET officials who had a presence at all the interviews. I give the assurance that the opinions expressed in this report are mine alone, and that there was no consultation or engagement with the DHET on any of the findings and recommendations emerging from the investigation.

SECTION 2

2.1 Historical Context and Background to the Investigation

The origins of MUT date back to 1979 when it was founded as an institution under the auspices of the then Kwazulu Bantustan. As a Technikon at the time its primary focus was on skills, technical and vocational training. In terms of the National Plan on Higher Education the Mangosuthu Technikon became the Mangosuthu University of Technology in 2007. It however retained its focus on skills, technical and vocational training and its PQM comprised mainly undergraduate qualifications, notably the national diploma but later also the BTech degree. It remained primarily a teaching and learning institution. It is located in the sprawling township of Umlazi, south of Durban.

This gazette is also available free online at **www.gpwonline.co.za**

The demographics of the student population reflect that of its surrounding area, predominantly (Zulu speaking) African and largely from disadvantaged communities. It has also retained its strong community focus, and its vision speaks of an institution that is “anchored in our community”. It is by far the smallest of the six universities of technology in the country with approximately 14500 students.

Of significance to this investigation is the history of governance and management at the institution which has been plagued with challenges. As early as 1999 Prof Jaap Durand was appointed as an independent assessor at Mangosuthu Technikon. His report recommended that disciplinary action be taken against the VC, Prof Ndlovu but the Council decided to lift his suspension and he once again resumed duty.

In 2008 Dr Vincent Maphai was appointed as an independent assessor, again to investigate the breakdown in governance and management at the institution. The report recommended that the VC, Prof Aaron Ndlovu be suspended and disciplinary actions be taken against him. It recommended the dissolution of Council for failure to execute its governance functions, and it recommended the appointment of an administrator. Prof Ndlovu resigned.

Prof Jonathan Jansen was appointed as the Administrator but his tenure was cut short when he accepted the appointment as the VC of Free State University in July 2009. Dr Mashupye Kgaphola was appointed to continue as administrator. Dr Kgaphola subsequently applied for the vacant VC post and was appointed to that position by the new council in August 2010. The Chairperson of Council at the time was Mr Jerome Ngwenya, a former judge of the High Court.

However, tensions began to emerge in the relationship between VC and the Chair of Council. In a letter to the Minister in February 2016, the VC highlighted a number of issues relating to interference of council in the management and operation of the university, among these the procurement of services and failure to approve a Supply Chain Management policy.

This letter from the VC followed the suspension of a number of senior managers at the University, including the VC. The decision to suspend members of senior management was taken by the Executive Committee of Council (EXCO) and not by a resolution of Council, a clear case of EXCO overstepping its mandate.

The Department then examined the minutes of Council and EXCO meetings and uncovered instances where EXCO was taking decisions and not informing Council of these decisions, and where Council was indeed interfering in operational matters. After ratifying the EXCO decision to suspend members of senior management, Council commissioned Ubuntu Business Advisory

This gazette is also available free online at **www.gpwonline.co.za**

Services (UBAC) to conduct a forensic investigation into alleged irregularities committed by senior management.

The UBAC report highlighted shortcomings in the University's procurement, human resource and financial management policies and procedures. It also drew attention to instances where policies and procedures had not been adhered to by senior management.

The VC and other senior executives resigned even before the UBAC report was finalized, and Professor Marcus Ramogale, who was Deputy Vice-Chancellor (DVC): Teaching and Learning, was appointed the Acting VC.

In June 2017, Prof Ramogale informed the Department that the acting appointments of himself and his executive team had been terminated by the Chair of Council without giving any reasons. He also alleged that the termination was a result of a decision of EXCO and not a resolution of Council. The Chair of Council appointed Prof Zodwa Dlamini who was the DVC: Research, Innovation and Engagements as the Acting VC.

The term of Judge Ngwenya and a number of other council members expired soon thereafter, in August 2017 and a relatively new Council was constituted with Mr Morailane Morailane being elected as Chairperson of Council in September 2017. Mr Morailane had been a member of the Council since October 2014. In a letter to the Minister dated 18 October 2017, the Chair of Council requested the appointment of an Independent Assessor to MUT and indicated that the "principal purpose of the assessment should be to try and identify any governance failures and its own complicity leading to the management failures contained in the forensic report … so that there is no repeat of such failures".

On 22 May 2018 the Minister appointed Prof Barney Pityana and Ms Judy Favish as Independent Assessors with a mandate to investigate the state of governance and management, including policies and procedures pertaining to financial management, management and administrative matters, supply chain management, human resources, information technology and infrastructure development and procurement at MUT; and advise the Minister on the source and nature of the problems facing MUT, and on measures required to restore good governance and management at the University.

In the same month, May 2018 the Council appointed Dr Duma Malaza as the new VC. The report of the Independent Assessors was submitted to the Minister on 30 June 2018 and published in the Government Gazette of 23 November 2018. The report of the Independent Assessors made a number of recommendations that could assist in strengthening governance at the institution and also

This gazette is also available free online at **www.gpwonline.co.za**

support the management function. Some of these recommendations will be referenced later in this report.

The report of the Independent Assessors was also shared with the Council of MUT. The Council was asked to respond to the findings and recommendations of the report. The University provided a detailed response in a letter dated 18 November 2018, indicating its position on each of the findings and recommendations and outlining steps that had already been taken to address some of the problems identified in the report.

More specifically Finding 12 in the Independent Assessors' report asserts that "The relationship of trust between the Chair of Council and the Vice Chancellor, and between Council and the Executive Management of Council must be restored. That means that the roles between the two statutory structures must be better managed. The Chairperson of Council must assert his/her role as responsible for governance and oversight, and the Vice Chancellor as chief executive responsible for Management, and Administration, as well as the Academic Leader of the university."

Council in a letter to the Minister dated 18 November 2018 noted the following: "**Council notes that the breakdown in trust between Council and Management certainly existed during the tenure of the previous Council. Currently there is a good professional working relationship between the two parties. Both Council and Management are not aware of the breakdown in trust. There has not been any evidence presented to support this finding with respect to the current Council and management".**

Barely a year later the Department received a letter from the VC dated 19 March 2020, raising some disturbing issues relating among other things to council interference in procurement matters and what he perceived as threats from Council to him and other senior managers who opposed their interference in such matters. A similar letter followed on 25 March 2020, in which he alleged further unethical conduct of the Chairperson.

In a letter dated 30 April 2020, the Deputy Chairperson of Council, Dr NZ Qunta, informed the Department that an emergency meeting of Council the day before had resolved to place the VC on suspension.

One cannot but help feeling a strange sense of *de ja vu* as once again successive VCs are complaining to the Minister of excessive interference by council in operational matters, and successive councils are summarily suspending their VCs. In a relatively short space of time we are once again witnessing a deterioration of relationships between governance and management, and a breakdown in trust between the two senior officers of the university.

This gazette is also available free online at **www.gpwonline.co.za**

2.2 The build-up of tensions between the Vice Chancellor and Council

2.2.1 Events up to January 2020

From the interviews it emerged that tensions between the VC and Council started to develop during a workshop at which the VC was asked to produce his Strategic Plan for MUT. The VC was previously responsible for strategic planning at UKZN. The Chair of Council was a management consultant in strategy development. There were differences in their approach to this matter. To the Chair it was uncertain whether the VC was willing to take the strategic direction of the university to where Council wanted it to go. The VC indicated that the strategic plan was developed strictly according to DHET framework. It was eventually approved by council.

Tensions also arose on the issue of insourcing or outsourcing of services such as security, cleaning and transport, among others. Council wanted the VC to advise on the viability of these two options. While a report on this matter was tabled at the September 2019 meeting of Council, it was noted at the same meeting that MUT had already put out a call for tenders, in a sense pre-empting a Council decision on this matter.

There were differences of opinion between the VC and Chair of Council on the role and function of the EXCO of council. The Chair of Council felt that EXCO should have regular meetings to focus on oversight of the VC and the Registrar's office. The VC felt that this was a clear indication of overreach on the part of Council. He felt that EXCO should only meet on an ad hoc basis to deal with issues referred to it by Council.

Finally, there were differences on the revised organizational structure that the VC had proposed. The Chair and others argued that the span of control was too wide with the VC expanding his Executive Management Committee (EMC) to include executive deans and some senior directors. The VC argued that such a structure was needed to further empower his senior managers so that they could effectively support the implementation of the strategic plan. The proposed organizational structure was eventually approved at the September 2019 meeting of Council subject to the grading of the positions. The grading was outsourced and was tabled at the Council meeting in December 2019. Some queries were raised by council, and it was decided that the matter should be tabled again at the March meeting of Council. However, the VC immediately began implementing the new structure based on his understanding that grading of staff was a delegated function of the VC.
The VC felt that these tensions had their roots in the culture embedded in the institution and the style of behaviour often displayed. He was aware of deep divisions in Council and Senate over his appointment and claims that even while Council was deliberating on the appointment he received a request from a Council member for a secretive meeting (which he refused) which indicated that there

This gazette is also available free online at **www.gpwonline.co.za**

were hidden agendas that were being pushed and which he interpreted as an attempt to capture senior appointees. One of the other suspended officials attested to a similar experience soon after his appointment.

During his induction process he claims that he was also informed by a Councillor on the side that the company involved in the security tender had been around for a long time, and it would be a pity if their contract was terminated during his term. On taking office he discovered that there were serious findings against the security company in the MORAR forensic report that investigated alleged supply chain irregularities. He summarily terminated the contract of this company.

2.2.2. January 2020 to April 2020

The above incidences all contributed to the build-up of tensions between the VC and Council, and more specifically the Chair of Council in the months leading up to January 2020, when matters came to a head. The contestation was sparked by a series of incidents which coincided with the period during which the security tender was being scrutinized.

On 11 January 2020, the VC received an email from the Chair of Council which discusses possible amendments to the SCM Policy, intended to strengthen the oversight role of Council. This email was followed by another from the Chair of the Audit Risk and Compliance Committee (ARCC), Mr Sifiso Keswa basically supporting the Chairperson's views and providing input of his own. The VC interpreted this as interference in the security tender. I have checked the emails and can confirm that no mention was made of the security tender in either of the emails.

The VC also received a report from Dr Mabaso, the Acting DVC: Resources and Planning alleging that the Chair of ARCC, Mr Keswa had phoned him on 14 January 2020 indicating that he had received disturbing news that "you guys have received kick-backs of R700 000 from the security service provider". When Dr Mabaso denied this, Mr Keswa is alleged to have said "I will fire you". Mr Keswa confirmed that he had contacted Dr Mabaso but simply to inquire about the allegations of kick-backs. He claims that he did not make any accusations, nor did he threaten to fire Dr Mabaso.

The VC also claimed that the use of the Council WhatsApp chat group had become very toxic as it was used at times to attack or belittle management. As an example, he claims that in the beginning of March 2020 the Chair of Council communicated via WhatsApp to all Council members, questioning the decision of management to cooperate with the metro police and the security cluster in dealing with student unrest on campus. He felt that through this action, the Chair of Council was undermining management and portraying management as weak. The Chair also questioned the decision of the Senate to bring forward the 2020 autumn recess in the light the national state of

This gazette is also available free online at **www.gpwonline.co.za**

emergency response to the COVID-19 pandemic. It had to be pointed out to the Chair that the Statute empowered Senate to decide on academic matters such as these. He claims that on one occasion, the engagement on this WhatsApp forum questioned the authority of the VC to act as the Chief Accounting Officer of the University. He provided a screenshot of the conversation. However, the conversation simply discusses whether the VC is the accounting authority or the accounting officer and does not question the authority of the VC.

At the ARCC meeting on 28 February 2020 the performance of management came under attack and the meeting resolved that Council should initiate a disciplinary process against management for non-performance related to the performance information report for the 4th quarter of 2019. The VC felt that this attack on management was unwarranted as the Committee's previous meeting had agreed that an improved and efficient system of reporting would come on stream with effect from the second quarter of 2020 (reporting against performance in the first quarter of 2020). The VC also noted that the Chair of Council attended this meeting of ARCC, which he felt was irregular.

According to the VC the meeting of the Human Resources Committee (HRC) on 26 February 2020 proceeded in the same vein, with a focused attack on management. The Committee demanded from management reports on matters not captured in the minutes, resolutions, and action list of the previous meeting. It was the first time that the Committee requested management to produce reports on every aspect or viewpoint raised in a meeting. The tone at the Planning and Resources Committee (PRC) meeting was no different. According to the VC the PRC rejected some of the reports from management outright, with no rationale.

At a meeting of the Finance and Investment Committee (FIC) on 02 March 2020 management was severely criticized for poor performance, specifically for the failure to submit reports to the Committee, failure to produce reports that are of good quality and standard as prescribed by council, failure to produce certain policies and failure to effect input on policies. The meeting resolved that Council should initiate a disciplinary process against management for non-performance. The VC provided a detailed written response to these allegations, pointing out that reports generated by management and submitted to Council and its sub-Committees were guided by the approved Schedule of Mandated Reports, which management had complied with. He appealed to FIC to be specific on the required standard for reporting, and to point out which reports were problematic,

On the 11 March 2020, the VC received an email from the Chair of Council, with heading “Allegations of improper misconduct” indicating that he had received allegations from different sources (mostly anonymous) relating to improper conduct by the VC and his management. He requested a detailed response to these allegations as he intended to table whatever he deemed appropriate at the next meeting of Council. The detailed response provided by the VC is contained in a letter dated 19 March

This gazette is also available free online at **www.gpwonline.co.za**

2020. The allegations were wide-ranging and cover issues relating to irregular appointments, infrastructure concerns, the implementation of the new organizational structure and student concessions. The VC's response, which categorically denied these allegations, is detailed enough and considered adequate. Moreover, the VC indicated that these allegations should have been channeled via appropriate structures at the University, particularly the whistle-blowing facility which was set up to accommodate complaints of this nature. The whistle-blowing reports are tabled at ARCC. The Chair of Council was of the view that staff do not trust the whistle-blowing facility, hence their approach directly to him. Once he was made aware of these allegations he was duty bound to raise them with the VC.

The VC interpreted this sequence of events all happening within a short space of two months, as an orchestrated attempt to undermine management and set him up for disciplinary action, to be meted out at the next meeting of Council.

The VC wrote to the DHET alerting the Department of these concerning developments at MUT. He felt that under these circumstances it was becoming extremely difficult for him to carry out his duties. In a letter of 19 March 2020, he outlined what he termed worrisome developments relating to

- the practice of EXCO assuming the role of "overseeing" the office of the VC and the Registrar, that had led to the breakdown in the relationship between the previous Council and management
- the interference of the Council in procurement processes
- the "*deep state of corruption*" that had been uncovered by investigations commissioned by management, which could require external support, given the existing tensions between Council and management.
- what he perceived to be threats to himself and other senior managers who had apparently stood firm against the interference of Council in operational matters.

The VC followed this up with a letter to the DHET on 25 March 2020 in which he collated the information on the irregularities at the University and provided the evidence to back up his allegations. Much of the evidence related to the sequence of events mentioned above. The claim that the University is in a "state of deep corruption" is based mostly on the outcome of a MORAR forensic report (August 2019) which uncovered irregularities in tender processes, implicating certain University officials. There was no indication that any of the current Council members was implicated on these irregularities. There was also no evidence to support the claim that Council was interfering in procurement matters, more specifically the security tender.

On 21 April 2020 the VC wrote to the Registrar instructing him to convene an urgent meeting of council within the next 10 days. He was gravely concerned that Council had not met in the first

This gazette is also available free online at **www.gpwonline.co.za**

quarter, and in the light of the COVID-19 lockdown there was no indication when council would next meet. He warned that the situation was paralyzing the operations and the smooth running of the University. The letter was copied to the Minister. Attached to this letter was the VC's report to be tabled at this urgent meeting of Council.

The Registrar forwarded the letter and attachment to the Chair of Council. The Chair responded by email, copied to the Minister. He expressed dismay at the action of the VC for not following due process and sharing his report with the Minister before providing Council with the opportunity to engage with it. He also added that this was the first time that he was made aware of the problems detailed in the report. He confirmed that Council would meet within the next seven days.

2.3 The Suspension of the Vice Chancellor and Senior Officials

The emergency meeting of Council was convened as a virtual meeting on 29 April 2020. The agenda featured two items, the report of the VC and the response of the Chair of Council. Provision was also made for Council resolutions arising from these reports.

2.3.1 Relevant excerpts from the VC's report

In the preamble the VC indicates that the purpose of the report is to "highlight the current state of affairs at the University in an attempt to halt a developing conflict between some members of Council and Management from reaching irreconcilable proportions".

He mentions the significant progress that management has made since his appointment, among others

- The development of a new strategic plan
- A new executive structure approved by council
- An Annual Operating plan
- A Biannual reporting system on a university-wide scorecard

He also makes mention of the challenges that he faced, namely

- A dysfunctional finance department
- A procurement unit completely devoid of appropriate skills
- A HR Department characterized by lack of proper skills
- An Information Technology & Network Department dismally incompetent to provide strategic support to the university
- A dysfunctional office of the Registrar.

This gazette is also available free online at **www.gpwonline.co.za**

He mentions resistance in certain quarters of Council towards the proposed management structure and the proposal to restructure the procurement unit. He alludes to severe conflict that has developed over recent months citing the Council WhatsApp group, the postponement of the council meeting leading to failure to take resolutions on urgent matters and a strong resurgence of interest and involvement of members of Council in procurement matters, particularly the security tender.

He also mentions the convening of regular Council Exco meetings in the absence of a charter, the emails from the two chairpersons regarding the ongoing process of awarding the security tender and the ARCC committee's recommendation to discipline management for failure to report on performance information. Since the tone at the FIC and HRC meetings were the same, he concludes that it was evident that there was an orchestrated plan underway to discipline management coinciding with the award of the security tender.

He accuses the Chair of relying on gossip and hearsay stories to build a case for charges of misconduct against the VC. He infers that the allegations were concocted and put together in a meeting or from a private conversation that the Chair has had with some members of the University community.

He registers his concern at the readiness of the Chairperson to entertain allegations put before him by the Acting Senior Director: Human Resources, Mr Mthimkhulu instead of following prescribed University grievance procedures. He points out that the University was in the process of placing Mr Mthimkhulu under precautionary suspension following an audit trail revealing irregular financial transactions in the University payroll system that benefitted him financially. It was only then that Mr Mthimkhulu came up with his unsubstantiated claims of bribery and kickbacks relating to the security tender.

Management had also completed an investigation on the existence of ghost employees on the University payroll system, which uncovered irregular payments and would soon execute a thorough review of the payroll system.

He asserts that the negative culture (as noted in the previous Independent Assessors report) still prevails at the institution and claims that the University cannot perform some of its vital functions, since the DVC: Institutional Support, the Executive Director: Human Resources and the Executive Director: Institutional Advancement remain vacant. The weakness of the Registrar has also contributed to the governance failure, a matter that requires urgent attention.

Finally, he calls for the University to expedite the process of executive appointments.

This gazette is also available free online at **www.gpwonline.co.za**

2.3.2 Relevant excerpts from the Chairs Response

In his response, the Chair begins by providing his understanding of the respective roles of the important structures and officers of the University such as the Chair, the VC and the Registrar and reasserts Council's stance of non-interference in management issues. He then responds to the VCs letter by dealing in detail with each of the allegations and points out that there is little or no evidence to support these allegations and that the various assertions are devoid of truth, and that in some instances the concerns raised are in fact the responsibility of management and not of Council.

He alleges unethical and dishonorable conduct on the part of the VC for copying the Minister in his letter to the Registrar calling for this urgent meeting.

He then lists the following allegations which did not feature in the email to the VC on 11 March 2021 and which relate to the following:

- the appointment of the Senior Director: Operations, who he claims did not meet the minimum requirements for the position. He alleges that this is another instance where the VC has abused processes to *"produce a desired outcome concocted to come up with a solution outside the ambit of council's reach, scrutiny and involvement."*
- irregularities with regard to the filling of the Acting DVC: Resources and Planning post which he claims was tailored to suit a particular candidate;
- irregularities relating to the process to recruit the new Executive Director: Human Resources;

as well as the following new allegations of irregular actions:

- The appointment of someone to VC's office without due authorization;
- An instruction to the Bid Adjudication Committee to reverse its award; and
- The award of acting allowances to shop stewards in contravention of applicable rules

He asks Council to consider that *"some of the examples and allegations against the VC and his management team (where applicable) may be indicators of rampant and systematic corruption and fraud using powers bestowed on the VC to use as he wishes and dispensing largesse to a compliant and supportive management team to perpetuate this alleged corruption and fraud unabated with promises of future reward."*

He ends off by stating that *"we have entered the terrain of war. In my view this is a war for the soul of MUT, good governance and autonomy",* and calls for a forensic investigation into all these allegations, including the claim of bribery lodged by Mr Mthimkhulu.

This gazette is also available free online at **www.gpwonline.co.za**

Both the VC and the Chair were afforded the opportunity to respond to questions on their presentations, and thereafter were asked to recuse themselves together with the Registrar and Mr Keswa who were also implicated in the allegations.

A heated discussion ensued. It was agreed that a forensic investigation into all the allegations be undertaken and that Council arrange a meeting with the Minister to deal with the allegations that were made in the VC's letter. The Chair of Council had already agreed to step down while the investigation was underway. There was no consensus on whether the VC should be placed on precautionary suspension. Eventually the matter was put to the vote, and the majority voted in favour of suspension. Prof Ramogale was asked to act as VC.

2.4 Developments after the Suspension of the VC

On 28 May 2020, the Council appointed SNG to conduct a forensic investigation into the allegations and counter allegations made at the emergency meeting of council. The terms of reference of this investigation were extremely broad and included an investigation of all 29 tenders that were awarded in the past 18 months, the alleged corruption relating to the security tender, besides the allegations and counter allegations made in the letters and emails between the VC and Chair of Council.

The DHET received a letter from the Deputy Chairperson of Council, Dr NZ Qunta, dated 30 April 2020, apprising the Minister on developments at the emergency meeting of Council and requesting a meeting with the Minister.

This was followed by a letter to the Minister dated 8 May 2020, pointing out inaccuracies in the letter sent to him by the VC, and claiming that the actions of the VC were irregular as he should have first given Council an opportunity to resolve the issues in the letter before approaching the Minister.

Thereafter the Department received numerous correspondence from individuals and stakeholders either questioning the suspension of the VC or supporting it. A number of these stakeholders called for the dissolution of council.

In light of these developments at MUT the Minister gave the Council notice to issue a directive in a letter dated 8 May 2020, in terms of section 42 of the Act.

This gazette is also available free online at **www.gpwonline.co.za**

The notice requested the Council to:

a) demonstrate what it and the Management have done regarding the findings and recommendations of the Report of the Independent Assessor.
b) present a plan with clear timelines and deliverable of how the recommendations of the Report will be implemented.
c) demonstrate how the findings and recommendations have been incorporated into the strategic plan and other plans of the University.
d) report on the Council's resolution regarding the proposed MDTT and how it plans to implement that. (The MDTT refers to the Multi-Disciplinary Task Team that was proposed by the Minister in a meeting with Council in May 2018, primarily to provide technical support in a range of areas and to assist with capacity building at MUT. The MDTT was intended to enhance the capacity of the university to fulfil its mission and accomplish its goals).
e) report on actions taken on the MORAR report or August 2019 into alleged supply chain management irregularities.
f) furnish reasons for the suspension of the VC.

The Council furnished a detailed response to each of the points in the notice and provided documents supporting the claim that good progress had been made in the implementation of the previous Independent Assessor's recommendations.

While in general the response was deemed satisfactory, the Minister proceeded to issue a directive to the MUT Council, as follows:

- The MUT be subjected to a three-year period of increased and regular scrutiny. During this period, the Council will be expected to report bi-annually (through a mid-term and the Annual Report) on the implementation of the Report and other measures to address the findings of the Report, and to strengthen governance and management systems, processes and procedures at the University.
- The Council to address the findings related to the Registrar.
- The University to work with the Department in the establishment of the MDTT.

The latter two points relate to findings in the previous Independent Assessors' report that had not been addressed. In particular, the Report identified weaknesses in the Registrar's office and a lack of understanding of the important role that the office must play in governance and management delivery.

The Minister also met with the MUT Council on 15 July 2020 to explore ways in which the Department and the University could work together to address the challenges experienced by the University. The Minister raised the concerns that he harboured, which emanated from the many correspondence he

This gazette is also available free online at **www.gpwonline.co.za**

had received on the matter. In her response the Interim Chair of Council demonstrated that most of the allegations made were untrue and indicated that the Council was committed to addressing the challenges faced by the University. More than one council member intimated that the allegations were simply a ploy by the VC to remove Council so that the "looting at the institution may continue".

On the 20 October 2020, the SNG report on the "Forensic Investigation into Allegations of Corruption and Irregularities at the Mangosuthu University of Technology" was presented to the Interim Chair of Council, Dr Z Qunta.

The report uncovered some irregularities in the procurement processes and HR practices and recommended disciplinary action against the suspended officials. The report dismissed all allegations made by the VC, which it found could not be substantiated. As a result of this report, Council decided that the Chair had been exonerated and he was allowed to take up his position as Chair of Council once again.

The report recommended that Council consider taking disciplinary action against the suspended officials. Council proceeded to do so and commenced a disciplinary process. At the time of compiling this report, the disciplinary matter has not been resolved, and the officials remain suspended after a period of more than18 months.

SECTION 3

3.1 Analysis of Allegations and Counter Allegations

From opinions expressed during interviews and from the electronic submissions received, it became evident that deep divisions existed on the issue of the suspensions, on the role of Council and on the performance of management.

In summary, I was confronted with two diametrically opposed positions on alleged corruption at MUT.

On the one hand, there were those who alleged that certain elements in Council were making a concerted effort to get rid of a VC who is committed to good governance, so that they will be free to influence the procurement processes, in particular the security tender, to their benefit.

On the other hand, there are those who allege that it is the VC who is trying to have council removed so that corruption at the University may continue. Some raised suspicions that the inadequate reporting by management is deliberate so that corruption will avoid scrutiny and not be detected by council.

This gazette is also available free online at **www.gpwonline.co.za**

This narrative is apparent in the response of the Chair of Council to the VC's report, which I have quoted above, as well as in the discussions at the meeting with the Minister, as noted above, and is perpetuated in communiques such as the press release on 21 February 2021 which depicts Council's engagement in this matter as "a relentless exercise to deal with a legacy of rampant corruption and resisting a fightback by beneficiaries of corruption". More specifically, one of the interviewees referred to the suspended officials as the "UKZN Triumvirate" and alleged that the other suspended officials were appointed by the VC to help feather his own nest.

3.1.1 Allegations made by the VC

As mentioned in an earlier section there were a number of clashes between the VC and Council which the VC may have interpreted as an attempt to frustrate his efforts to bring about positive change and inculcate good governance. According to this scenario he believed that it was in the interest of Council to have a weak management so that certain individuals on Council could "capture" the institution.

But there is little evidence to back up this position. The emails that the VC refers to in his letter to the Minister and in his report to council, do not mention the security tender, and appear to refer to the SCM policy. There is nothing suspicious about the WhatsApp chats that I had an opportunity to inspect. The decisions by all three Committees of Council to adopt a similar position on management's performance, with two even recommending that management be disciplined for poor performance does suggest some lobbying beforehand but could simply have been sparked by a genuine concern about the poor quality and inadequacy of reports tabled at these committee meetings. It may well be true that reports were tabled at these meetings according to the mandated schedule for reporting, but as confirmed in many of the interviews with Councilors, in a number of instances reports had to be withdrawn due to the poor standard of reporting.

In his letter to the Minister, the VC also refers to the "Deep State of Corruption" at MUT. This stems from the findings of the MORAR Inc. forensic investigation (dealt with in further detail below), which uncovered irregularities in the procurement process, as well as the KPMG report that identified fraudulent payments and payroll irregularities. None of these reports implicate members of management or members of council in any of the irregular or fraudulent activities.

In the same letter the VC raises concerns about the role of the EXCO. The VC and the Chair of Council hold differing views on the role of EXCO and it is not clear whether the view of EXCO proposed by the Chair actually translates into Council overreach. The appropriate role of EXCO needs to be resolved and will probably need to be benchmarked against good practice elsewhere, taking due cognizance of the specific context prevailing at MUT.

This gazette is also available free online at **www.gpwonline.co.za**

The VC was also of the view that the Chair of Council was collecting grievances from staff and students and waiting for the appropriate moment to use these against him. While I do agree that these should have been channeled via the MUT whistle blower's facility, and do find it strange that the grievances were not dealt with immediately they were received, the Chair's letter was not accusatory, but simply requested a response to a list of concerns that were sent to him.

When one examines the list of allegations in the email that sparked the conflict, nine deals with concerns and alleged irregularities in HR matters mainly around appointments, three are basically complaints about the poor state of infrastructure on campus, and three relate to concerns of students, how demands of students are dealt with, and concessions granted to students. Nowhere is there anything to suggest corruption, malfeasance or rampant looting on the part of management, or the VC. I have noted the VCs response to each of these allegations and consider it adequate.

The SNG report deals in detail with each of the allegations made by the VC in his report to Council and concludes that in the absence of supporting evidence, these allegations are unsubstantiated. However, it is important to note the context in which these allegations were made. The VC was of the view that council was obstructing his attempts at developing a strategic plan and his attempts to put in place an organizational structure to support the implementation of the plan. He interpreted the oversight mandate of EXCO as an example of Council overreach, he believed that the messages on the Council WhatsApp's group directly questioned his authority and he viewed the telephone query about the security tender as an example of Council interference. This against the background of three Committees of Council threatening to discipline management, all coinciding with the award of the security tender, was interpreted by him as an orchestrated attempt by Council to remove him so that they could directly influence the procurement process.

There was the suggestion that these allegations in the absence of supporting evidence was a clear illustration that the VC had become paranoid. However, the VC's reaction must also be considered in a context where there have been many examples in recent years across the higher education landscape, of Council "capture" of institutions and Council directly interfering in operational matters in a quest to plunder institutional resources.

3.1.2 Allegations made against the VC

The Chair's response that was tabled at Council also contained a few new allegations that were not included in the email of 11 March 2020. Only one relates to an award of a tender. The remainder deal with HR matters. It should be noted that all these allegations were made in the absence of any evidence, and the VC was not afforded an opportunity to respond to the allegations that were tabled for the first time at the Council meeting where he was suspended.

This gazette is also available free online at **www.gpwonline.co.za**

The other matter the Chair asked Council to investigate was the allegation made by Mr Mthimkhulu "*which are now in the papers*". Mr Mthimkhulu alleged that Mr Khumalo, Senior Director of Operations was offered a bribe relating to the security tender. However, no evidence was produced to support this allegation. On the contrary, the VC in his report indicates that he was much disturbed by the readiness of the Chair to entertain this allegation by Mr Mthimkhulu instead of directing him to follow prescribed University grievance procedures. He also mentioned that he was in the process of placing Mr Mthimkhulu on suspension following an audit trail implicating him in irregular financial transactions relating to the payroll system. In the absence of any evidence supporting Mr Mthimkhulu's claim, this should have been considered as the possible rationale for him making a false claim. In fact, both the VC and Dr Mabaso indicated that these allegations by Mr Mthimkhulu are baseless and merely an attempt to deflect attention from his own irregular actions.

All these allegations were examined in detail by SNG and findings and recommendations are contained in the report. Since neither of those suspended had an opportunity to respond to any of these findings and recommendations, I raised these with the persons concerned and gave special attention to the adverse findings and recommendations that were made against those suspended, especially those where disciplinary action was recommended. I draw my own conclusions in the section dealing with the Forensic report.

At the time of these allegations and counter allegations there were reports from two forensic investigations relating to tender irregularities.

MORAR Inc. produced a report dated 15 August 2019 on "Investigation into Alleged Supply Chain Management Irregularities". The report uncovers irregularities relating to tenders awarded to five companies spanning a period from August 2016 to August 2018. The irregularities related to the purchase of furniture and appliances where the supplier was paid before any goods were delivered; three tenders awarded for separate infrastructure projects without proper procurement processes being followed; and a security company operating on campus without a valid contract, besides the company not being registered with PSiRA, a legislative requirement. Disciplinary action was recommended against a number of staff members for not complying with the relevant policies and procedures. The only member of the Executive that was implicated in any of these irregularities, was Prof Ndlazi who was Executive Director in the Office of the Vice Chancellor and previously Acting DVC: Resources and Operations. She chaired the Bid Adjudicating Committee which approved a bid above the threshold of R15m, whereas according to the SCM policy (at the time) bids exceeding this threshold needed to be tabled at Council for approval. Disciplinary proceedings were instituted against all implicated in these irregularities. Prof Ndlazi subsequently resigned from the institution. The VC also terminated the contract of the security company.

This gazette is also available free online at **www.gpwonline.co.za**

The point however is that none of the current executive management was implicated in any of these irregularities. A number of these tenders were initiated either before the VC assumed office or soon thereafter. There is also no evidence that any of the Council members were involved in these irregularities.

KPMG was commissioned to conduct an audit of the security tender as part of the Annual Audit Coverage Plan. They produced a report dated February 2020 on the "Security Tender Review". The audit noted inaccuracies and inconsistencies at the evaluation stage of the tender and recommended that management consider cancelling the tender should they believe that the observations noted within the report indicate that the process followed may have been flawed. However, it is important to note that MUT used the external service provider PURCOSA to conduct part of the procurement process. PURCOSA was subsequently involved with the advertisement, compulsory briefing, opening and announcement of closing bids prices and evaluations thereof. All the management responses to the various audit findings are provided by PURCOSA, some of which were noted, while others were contested. Management had considered the KPMG report and was in the process of referring the report back to the Bid Adjudication Committee (BAC) and Bid Evaluation Committee (BEC) when the suspensions were imposed.

While irregularities may have been uncovered by the audit there is no evidence of corruption, either on the part of Management or of Council.

3.2 Analysis of the suspensions

The suspension of the senior officials was contested during interviews and from documents received on the grounds that the meeting was not properly constituted at the time, since external members of Council made up less than 60% of those attending the meeting. It is true that due to resignations on council, the composition of council had dropped below 60%.

However, according to paragraph 16.2 of the MUT statute matters can be decided by the majority of members present at the meeting provided the number present at the meeting are at least 50% plus one of the total number holding office at the date of the meeting and provided that the majority are external members of council. These conditions were met.

There were also concerns raised that since this was an emergency meeting of council, only the matter for which the meeting was called, namely the consideration of the VC's report, could be entertained. However, the agenda of the meeting reflects both the VC's report and the Chairperson's response, and also makes provision for resolutions by Council. It is reasonable to consider a response to a report that is presented and to allow for resolutions on matters discussed.

This gazette is also available free online at **www.gpwonline.co.za**

While the suspension may well have been procedurally correct one needs also to consider whether it was substantively fair to those suspended, and whether it was sensible under the circumstances.

The possible reasons for the suspension, should only relate to the matters discussed at the meeting, which were the following:

1. The allegations made in the email of 11 March 2020 that the VC received from the Chair of Council.
2. The new allegations made by the Chair of Council in his response.
3. The allegations of bribery lodged by Mr Mthimkhulu.
4. The fact that the VC wrote directly to the Minister.

I shall consider each of these reasons on its merit.

As already mentioned previously there is nothing in the allegations made in the email to suggest corruption on the part of the VC. Those that refer to the poor state of the infrastructure and engagement with students are purely operational matters and cannot be categorized as “improper misconduct”. The VC responded to each of the emailed allegations in his letter to the Chair of Council. It was perhaps only the HR related allegations that required further interrogation. But then surely the approach should have been to meet with the VC to discuss his responses to each of these allegations and to test the veracity of each of the responses. Certainly, the nature of complaints in the email of the 11 March 2020 was not sufficient grounds for suspension, especially since these complaints were made without the support of any evidence.

It would also have been unfair to suspend the VC on the basis of the new allegations made for the first time by the Chair without giving the VC an opportunity to respond to these allegations, especially given the fact that these allegations were also not supported by a shred of evidence. All but one of the new allegations were related to irregular appointments of staff, and were no doubt fueled by rumours that the VC was attempting to surround himself with a team that would allow him to perpetuate corruption. The appointment of Mr Khumalo from UKZN was specifically mentioned. Yet had the VC been given an opportunity to respond he would have shown that the process to appoint Mr Khumalo was completed prior to his assumption of duties at MUT. I deal with this matter in greater detail later in the report. The other allegation relates to “an instruction by the VC to BAC to reverse its award”. I deal with this matter later in the report. But had the VC been approached these matters could have easily been clarified.

I have already mentioned the bribery allegation of Mr Mthimkhulu. No evidence was produced to support his claim. While an allegation of this nature must be taken seriously and should be reported

This gazette is also available free online at **www.gpwonline.co.za**

to the authorities, in the absence of any evidence this allegation cannot form the basis of suspending the VC, more specifically since the allegation did not even implicate the VC, but was directed at the Senior Director of Operations, Mr Khumalo.

The only other possible reason for the suspension is the fact that the VC wrote directly to the Minister, without providing Council with an opportunity to try to resolve the issues first. However, if the suspension was for this reason, it could not have been precautionary but punitive, since there is no way in which the VC could have interfered with the investigation into this matter. It was simply the case of requesting the VC to provide an explanation for his actions, for an independent person to consider this explanation, make a ruling on the matter and recommend an appropriate sanction if necessary.

The VC's letter to the Minister no doubt incensed the majority of Council members particularly since the letter also raised concerns about the behavior of certain members of Council. From all accounts the meeting involved heated discussions between those in favour of suspending the VC and those opposed. There was no consensus of opinion. Even the minutes of the meeting reflect that "Members were urged to be respectful, polite with each other and use words wisely." One wonders whether under such circumstances it was possible for all participants in the debate to exercise sound, independent judgement on the matter at hand, in the light of the fact that the VC's letter to the Minister implicates some external members of Council. It was also clear from the interviews that through some of his decisions the VC had already alienated certain of the internal Council members. In one instance in particular, an internal member of Council, also a prominent member of the union was being investigated for allegedly depositing funds meant for the hire of venues on campus, into her own private banking account. The VC had commissioned KPMG to conduct an investigation into the hire of venues. The KPMG report confirmed that funds had been diverted into the private banking account of the individual concerned and recommended that a criminal case be opened. It is debatable whether, under these circumstances this member of Council could have exercised an independent judgement.

The actions of the VC are related to tensions that had arisen between him and the Chair of Council that appear to have developed over a period of time but came to a head in the first three months of 2020. The previous Independent Assessors' report makes a strong recommendation for the establishment of an Ombudsman or an Alternative Dispute Resolution mechanism to deal with possible conflict situations such as this. Unfortunately, this was one of the recommendations that was not implemented. In the circumstances, it would have been more appropriate to consider a process of mediation between the Chair and the VC, and to mete out the necessary sanction if there was a need for such. I do not believe that a precautionary suspension of the VC was the correct decision.

This gazette is also available free online at **www.gpwonline.co.za**

This is especially the case if one considers the situation that the University found itself in at the time of the suspensions. The country had just entered hard lockdown presenting enormous challenges to the University. The VC's letter highlights the severe lack of capacity in senior positions, which was confirmed by many of the interviewees. Suspending a VC, Chief Audit Executive and Senior Director Operations would have had an adverse impact on an already precarious situation at the University. Then there is also the reputational damage that such suspensions would have caused. Once again MUT would be in the press for the wrong reasons. Any potential funder would have had second thoughts supporting an institution where the impression is created that corruption by top management is rampant. Already the University was struggling to recruit staff. The suspension of senior executives would surely have had a negative impact on the potential of the University to attract good caliber staff. For a university struggling to post a cash surplus on its balance sheet, cost must surely have been a consideration as well. The financial analysis estimates the cost of salaries of the three officials who were placed on precautionary suspension with full pay for almost 18 months to be in the region of R10m. Then there are also legal fees and the cost of three forensic investigations that must be factored in. As our financial analysis shows, MUT can ill afford these costs.

Thus far I have only focused on the suspension of the VC, which I believe was inappropriate under the circumstances. There were alternative approaches to dealing with the matter. I find the suspension of Dr Mabaso and Mr Khumalo even stranger. Neither of them were even mentioned in the meeting of council, except in relation to the irregular appointments attributed to the VC, and the bribery allegations of Mr Mthimkhulu. A decision was taken to suspend them without indicating to them precisely what the specific allegations against them refer to, without presenting any evidence to support the allegations, and without giving them an opportunity to respond to these allegations. Dr Mabaso's letter of suspension mentions specifically two items; the alleged irregularities in awarding the security tender and the allegation that possible corruption was reported to him. Standard practice would have been to present the allegations and to ask them to provide reasons why they should not be suspended. This was not done. One cannot help but get the sense that the "UKZN Triumvirate" was being targeted.

I have already referred to the terms of reference of the SNG Audit as being extremely broad, which some have even likened to a "fishing expedition". In the light of the above I am inclined to agree with that sentiment, as it appears that this was a case of first suspending individuals and then commissioning a broad investigation with the hope that it will come up with something to justify the suspension.

This gazette is also available free online at **www.gpwonline.co.za**

3.3 Analysis of the SNG Forensic Report

The SNG report on the "Forensic Investigation into Allegations of Corruption and Irregularities was made available to MUT on 20 October 2020.

As mentioned above the report uncovered some irregularities in the procurement processes and HR practices and recommended disciplinary action against the suspended officials. The report dismissed all allegations made by the VC, which it found could not be substantiated. On the basis of the report, Council decided to institute disciplinary action against the suspended officials.

From the report it is evident that the recommendations were made in the absence of a response from the suspended officials to the findings in the report, and in most instances with minimal input by the officials. The VC requested that questions be submitted to him in writing, which was done. The VC responded by indicating he needed to be given four weeks in order to respond effectively to some of the questions, but permission for this was not granted. A questionnaire was also sent to Dr Mabaso, who provide a detailed response. SNG indicated that they proceeded to prepare the report using limited information from the VC and Dr Mabaso.

As neither of the suspended officials were given an opportunity to respond to the initial allegations made against them, nor were they provided with an opportunity to discuss the findings of the SNG report, I decided to ask them to respond to each of the findings where disciplinary action is recommended against them.

3.3.1 RFB: MUT 18/2018 completion of New Student Centre located at MUT

SNG recommended taking disciplinary action against Dr Malaza and Dr Mabaso for approving the appointment of Makhathini Projects on the basis of incorrect deduction of points from Rodpaul Construction, which resulted in Makhathini being awarded the tender at a significantly higher price.

The VC indicated that he signed that document in support of the work that had been done and the processes followed by the relevant committees, as required by the SCM policy. He was also satisfied that the matter had been referred for legal opinion. He supported the legal opinion. He felt that it was unrealistic to expect the VC to engage with individual scores.

This matter warrants closer examination.

Rodpaul Construction scored the most points in the tender process and was issued with a letter of intention to award. When Makhathini Projects was informed that their bid was unsuccessful they

This gazette is also available free online at **www.gpwonline.co.za**

submitted an appeal. MUT then appointed Biyela Attorneys for a legal opinion on Makhathini Project's appeal. The attorneys advised that "the issues contained in the appeal letter carried a lot of weight" and recommended that the award to Rodpaul Construction not be confirmed. According to the legal opinion Rodpaul Construction ought to have had 22 points deducted which would have disqualified them from further evaluation. The attorney's report was discussed at the Bid Adjudication Committee (BAC), and the committee resolved to amend the report in line with the attorney's recommendation and submit the corrected report to the EMC for support and approval. The "Reviewed Adjudication Report" was supported by Dr Mabaso as Chair of BAC and approved by Dr Malaza as Chair of EMC on 31 October 2019.

As part of the forensic investigation SNG once again reviewed the scoring for Rodpaul Construction and Makhatini Projects and concluded that the findings of Biyela Attorneys were incorrect, and that points should not have been deducted from Rodpaul Construction. Hence, according to SNG Rodpaul Construction should not have been disqualified from the process and should have been awarded the bid (which was the original decision). It is very strange that SNG should recommend that the VC be disciplined under these circumstances. He supported a Reviewed Adjudication Report based on the Attorney's recommendation. Was he expected to revisit the process a third time, or check on the scoring himself? What guarantee is there that he would have arrived at the same conclusion as SNG? The same argument applies to the recommendation that Dr Mabaso be disciplined. Both the signatures of Dr Malaza and Dr Mabaso are simply informed by the business process flow. In this case it was the outcome of the BAC resolution on the matter.

3.3.2 RFB: MUT 19/2018: Construction of New Engineering Laboratories & Offices including Quantity Surveying & Construction Management Offices

SNG recommended that MUT should consider instituting disciplinary action against Dr Malaza for failing to ensure that Council was notified of the award of RFBMUT 19/2018 to Afriscan Construction, as required by paragraph 13.2 of the SCM policy.

According to Dr Malaza, Management provided quarterly updates on the progress with respect to procurement awards through the tabling of a Quarterly Procurement Report at Council and FIC meetings. I have checked the schedules and this award is number 7 on the schedules. The Procurement Report is a standing item on the FIC and Council agendas. Moreover, the item "Report on BID RFB MUT 19/2018 - Construction of New Engineering Laboratories" appears on the agenda of the Council meeting of 27 June 2019 and the FIC agenda of 22 May 2019. Therefore, Council and FIC should have been aware of this award.

This gazette is also available free online at **www.gpwonline.co.za**

CONTINUES ON PAGE 130 OF BOOK 2

Printed by and obtainable from the Government Printer, Bosman Street, Private Bag X85, Pretoria, 0001
Contact Centre Tel: 012-748 6200. eMail: info.egazette@gpw.gov.za
Publications: Tel: (012) 748 6053, 748 6061, 748 6065

This gazette is also available free online at **www.gpwonline.co.za**



Government Gazette
Staatskoerant

REPUBLIC OF SOUTH AFRICA
REPUBLIEK VAN SUID AFRIKA

Vol. 681 25 March Maart 2022 No. 46088

PART 2 OF 6

N.B. The Government Printing Works will not be held responsible for the quality of "Hard Copies" or "Electronic Files" submitted for publication purposes

ISSN 1682-5845





AIDS HELPLINE: 0800-0123-22 Prevention is the cure

3.3.3. RFB: MUT 26/2019 - Appointment of service provider for the installation, maintenance and replacement of air conditioning

SNG recommended that MUT should consider taking disciplinary action against Dr Malaza, in his capacity as the VC, for failing to ensure that Council was notified of the approved bidder, Cold Point Aircon Services, as required by paragraph 13.2 ("Formal Bidding Process") of the MUT SCM policy.

According to Dr Malaza Council approved the award of RFBMUT 26/2019 with the approval of the Annual Procurement Plan 2019. Management provided quarterly updates on the progress with respect to these awards which is reflected on the Quarterly Procurement Report schedule. I have checked these schedules and this award appears at number 42 on these schedules. The 2019 Procurement Plan was a standing item on the FIC and Council agendas. Therefore, Council and FIC should have been aware of this award.

3.3.4 RFB: MUT 22/2019- Appointment of a service provider for the provision of Security Services

SNG recommended that MUT should consider disciplinary action against Dr Malaza and Dr Mabaso for failing to disclose the adverse findings of the KPMG report during the PRC meeting held on 25 February 2020, during the ARCC meeting on 28 February 2020 and during the FIC meeting of 02 March 2020.

This matter must be viewed in its proper context.
Firstly, management commissioned the KPMG audit as part of the Annual Audit Coverage Plan. Secondly, an external service provider PURCOSA was used to conduct part of the procurement process. PURCOSA was subsequently involved with the advertisement, compulsory briefing, opening and announcement of closing bids prices and evaluations thereof. All the management responses to the various audit findings relating to inaccuracies and inconsistencies at the evaluation stage were provided by PURCOSA.

Based on an interview with PURCOSA, SNG established that the evaluation process was conducted by PURCOSA at their offices which are situated in Midrand, Gauteng. MUT staff did not have contact with the score sheets, nor was individual scoring conducted by MUT staff as the process was implemented by PURCOSA.

Thirdly the specific recommendation in the KPMG report is that Management should consider cancelling the tender should they believe that the observations noted within this report indicate that the process followed may have been flawed. This report was received during February 2020, the

This gazette is also available free online at **www.gpwonline.co.za**

same month as the meetings of the Council subcommittees. Management had decided to refer the KPMG report to the BAC and BEC for consideration and comment. Hence the process had not been concluded. When this matter was put to Dr Malaza he indicated that the Acting Director: Risk & Compliance had reported the KPMG audit report to ARCC at the meeting of 28 February 2020. I have checked the ARCC agenda. It appears in item 7 "Progress Report on the Implementation of the Internal Audit Plan". Item 10.1 of the attachment deals with the KPMG review of the security tender, and page 9 of this attachment provides the recommendations of the KPMG report. Dr Malaza believes that this was reported to the appropriate structure, ARCC and any reporting outside of this structure would have been irregular.

Given this context, the recommendation that the VC should be disciplined merely perpetuates the narrative that the VC is trying to conceal corrupt activities relating to the security tender. This is unfortunate, because the KPMG audit was a due diligence exercise undertaken by Management to identify any irregularities in the security tender process. While the matter was still work in progress, the findings of the KPMG report were reported to ARCC.

3.3.5 Allegations made by Mr I Mthimkhulu regarding the security tender

SNG recommended that MUT should consider disciplinary action against Dr Mabaso for failing to ensure that the allegation of bribery relating to the security tender was investigated and for failing to inform Council of the said allegation.

SNG also implied that they would have made similar recommendations against Mr Keswa (for failure to report the alleged corrupt activities) but he is no longer in the employ of MUT.

It is difficult to understand how SNG could have arrived at this recommendation in the absence of any evidence. SNG concludes that "Mr Mthimkhulu appears to have sent a WhatsApp message to Dr Mabaso relating to an allegation of fraud, albeit he did not transfer/ forward the message to us for fear of his security."

Dr Mabaso denies that he received a WhatsApp message informing him of the alleged bribery. Mr Keswa indicated that he had contacted Dr Mabaso to enquire about the allegation of a security tender kickback. Dr Mabaso claims that he was actually accused of taking a bribe by Mr Keswa. If Dr Mabaso is to be believed, why should he be expected to report the allegation if someone was incorrectly accusing him of taking a bribe (he reported the accusation to Dr Malaza).

Mr Keswa denies that he made any accusation relating to the bribe. He claims that it was the Chair of Council that had asked him to take the matter up with Dr Mabaso. If Mr Keswa is to be believed,

This gazette is also available free online at **www.gpwonline.co.za**

then it is the Chair of Council who should be disciplined and not him for not reporting the bribery allegation, as it is then the Chair of Council that was informed by Mr Mthimkhulu of the bribery allegation.

Nowhere did KPMG give any consideration to the narrative put forward by Dr Mabaso that Mr Mthimkhulu had concocted the allegation as a means of deflecting attention from the allegations that were made against him relating to payroll irregularities. For the sake of consistency in respect of conclusions drawn from the investigation, all these allegations should be dismissed, as none is backed up by any evidence whatsoever. There can be no justification for giving more credence to any one of these claims over the other. It is unfair to make adverse findings against both Dr Mabaso and Mr Keswa on the basis of these unsubstantiated allegations.

It should be noted however, that in his interview Mr Mthimkhulu indicated that he has copies of the WhatsApp messages to support his claim, but will not release these messages for fear of his safety. While his dilemma in this matter is certainly appreciated, in the absence of hard evidence it is difficult to arrive at any other conclusion than that which is stated above.

3.3.6 RFB: MUT 32/2019: Appointment of HR Consultant

SNG recommended that MUT consider taking disciplinary action against Dr Mabaso for the following reasons:

a) *Approving HR Touch invoices between 03 February 2020 to 03 March 2020 totaling R1 069 500 .00 before the contract dated 09 March 2020 was signed between MUT and HR Touch; and*
b) *Included in the aforementioned R1 069 500.00 was an invoice of R92 000.00 pertaining to services rendered by HR Touch in respect of which no competitive procurement process had occurred or a variation order approved by the VC.*

I have checked the SCM Policy. Section 25.8 states that “No service provider will commence work until a valid contract or service level agreement is signed by both parties”. A service level agreement between MUT and HR Touch was signed on 08 January 2020. Hence there is nothing irregular about the payments to HR Touch in March 2020 and February 2020.

Both Dr Malaza and Dr Mabaso claim that all work done by HR Touch was part of a project plan, which specified the deliverables of the project. According to the project plan the EMC Lekgotla was planned for March 2020, but took place earlier, in February 2020. The payment in question was part of the scope of the entire HR Consultancy project. The amount paid was to be adjusted accordingly

This gazette is also available free online at **www.gpwonline.co.za**

in the subsequent payment. They were paid earlier because the Lekgotla took place earlier. There was no variation in the scope of work, nor the total budget of the project.

SNG also recommended that MUT consider taking disciplinary action against Dr Malaza and Dr Mabaso for fruitless and wasteful expenditure of R221 286.12 pertaining to the acting allowance paid to Mr Mthimkhulu as Senior Director: HR&D during the time when HR Touch was contracted to, inter alia, "Assume all responsibilities normally assigned to the Senior Director of Human Resources and Development."

Section 24 of the SCM policy makes provision for the appointment of consultants in areas where there is a deficiency in capacity in the organization. There was a major capacity deficit in the HR department. According to Dr Malaza and Dr Mabaso during the period that HR Touch was appointed, the Acting Senior Director: HR was still required to sign-off on all HR documents, and present reports to Management and Council committees, since consultants are not employees of the University. HR Touch had specific deliverables in terms of their contract and the Acting Senior Director: HR had responsibilities that could not be covered by the consultants. They point out that consultants were used in many other areas in the University, yet all these functions retain their HoDs. Hence the practice does not necessarily translate to fruitless and wasteful expenditure.

3.3.7 RFB: MUT 14/2018 for the Refurbishment of Air-conditioning Systems

SNG recommended that MUT management should consider disciplinary action against Mr Khumalo and Mr Mzolo for failing to escalate to the BEC and / or BAC the matter raised by Peak Maninga that Amakhaza Moia's bid was non-responsive.

After the contractor Amakhaza Moia was appointed it was noted that certain key items were omitted from the Bill of Quantities (BoQ) which resulted in a substantial contract variation being sought by the contractor. The BoQ was drawn up by Peak Maninga, who was appointed as the Principal Agent for the project by MUT. The matter went to adjudication and the adjudicator ruled in favour of the contractor. It was clear that the contractor had grounds for claiming a variation since the BoQ was incomplete.

However, Peak Maninga, who was not involved in the award of the tender later claimed that the contractor's bid should have been declared non-responsive at the tender stage, as their tender did not include the particular model of equipment specified in the BoQ.

Mr Khumalo first of all pointed out that he joined MUT three months after the tender was awarded. He also indicated that there are conditions of tender regarding submission of alternative offers,

This gazette is also available free online at **www.gpwonline.co.za**

according to which the contract should be deemed invalid unless the contractor supplies the equipment specified in the BoQ at no additional cost. A meeting which included Peak Maninga adopted a resolution that the contractor should conform with the specifications as enshrined in the tender document without any additional cost implications to the contract. This as an alternative to cancelling the contract.

The contractor complied and supplied the equipment specified in the BoQ and this was eventually approved by Peak Maninga on 04 March 2019. According to Mr Khumalo this closed all contractual concerns regarding the equipment specification as he had enforced the conditions of contract. He felt that he had no reason to advise BEC and BAC of a rectified contractual agreement which was purely an administrative issue. He claims that Peak Maninga was merely shifting blame for inevitable consequences of their failure to prepare a complete the BoQ.

3.3.8 Appointment of the Acting Senior Director of HR and Development, Mr Mthimkhulu

MUT should consider taking disciplinary action against Dr Mabaso for motivating for Mr Mthimkhulu's appointment to the position of Acting Senior Director: HR&D despite Mr Mthimkhulu not possessing the minimum 5 years' experience stated in the Expression of Interest document. MUT should consider taking disciplinary action against Dr Malaza for appointing Mr Mthimkhulu to the position of Acting Senior Director: HR&D prior to approval/ finalization of the appointment by EMC.

Dr Mabaso points out that the recommendation to appoint Mr Mthimkulu was a decision of the selection panel, and he supported the decision of the panel.

The VC pointed out that there is a framework for acting appointments, to avoid issues such as favouritism. There is a preamble to the framework which states that EMC acts in an advisory function to the VC. The second point details the delegations given to the VC. For transparency sake, for positions at this level, he established a committee to engage with interested parties, which made recommendations which he then finalised with input from EMC before he approved the recommendation.

3.3.9 Alleged irregular appointment of Executive Director of Human Resources and Development

SNG recommended that MUT consider instituting disciplinary action against Dr Malaza for initiating a process to appoint an Executive Director: HR (a position that is in the new top-management structure, stated as level/grade 3) without following the "Guidelines for the Appointment of Members of Executive Management in Grades 2 – 3".

This gazette is also available free online at **www.gpwonline.co.za**

The VC indicated that the owner of the appointment process is HR, according to the delegations of authority. HR initiated this process, but he chaired the meeting. It was only after he had chaired the meeting that he was alerted that HR had faulted by not including Council representation on the committee. He was new to the institution and did not identify the oversight. The Registrar admitted that the framework document had not been communicated widely. Once he learnt of the problem, he recommended that the process be stopped. He gave Council the option of either condoning the process or abandoning the process. Council decided on the latter.

3.3.10 Alleged appointment of the Dean of Students as Acting Director Protection Services, a position allegedly lower than her substantive position

SNG recommends that MUT should consider disciplinary action against Dr Malaza for approving Ms Kweyama's appointment as an Acting Director: Protection Services without the EMC's finalization to appoint Ms Kweyama as well as without an expression of interest being circulated as required by the Framework for the Endorsement of Acting Positions approved by MUT Council.

The VC claims that this was a secondment and not an appointment to an acting position. Ms Kweyama's appointment letter confirms that this was a secondment. Hence the expression of interest that is required to be circulated by the Framework for the Endorsement of Acting Positions was not applicable in this case.

3.3.11 Alleged appointment of the Senior Director: Operations, Mr Khumalo, without necessary qualifications and subsequent inflated salary

We recommend that MUT should consider instituting disciplinary action against Dr Malaza for failing to ensure that Mr Khumalo's appointment was ratified by Council as required by paragraph 11.4.3 of the Recruitment and Selection Policy

The VC pointed out that Mr Khumalo was appointed before he joined the University. The interview panel for Mr Khumalo's appointment was chaired by the Acting VC. This was confirmed as follows: the closing date for applications was 17 November 2017, shortlisting took place in January 2018 and February 2018. The interview report is dated 27 February 2018. The appointment served at council on 28 March 2018 and was referred to the Institutional Forum (IF) for consideration. Council resolved that if the IF supported the appointment, a recommendation would be made to Council for approval by round robin. IF supported the appointment. The VC took office in May 2018.

This gazette is also available free online at **www.gpwonline.co.za**

3.3.12 Alleged elevation of grades: Director: Risk and Compliance

While SNG found that the allegation that Dr Mabaso was promoted from level/grade 5 to 3 within one year was unsubstantiated, SNG recommended that MUT consider disciplinary action against Dr Malaza for not ensuring that Dr Mabaso's appointment as CAE was ratified by Council as required by paragraph 11 of the Recruitment and Selection Policy and sections 8(4)(b) and 46(1)(h) of MUT's Statute.

According to the VC, Council approved the structure on condition that the positions must be graded by an external company, and the VC must make the appointment. The VC had submitted formally the previous and the desired structure, as well as transitional arrangements. The transitional arrangements indicated how staff would transition. The first was internal placement of people who meet the requirements of the positions, who would be assessed by HR and placed accordingly. Those positions that were not filled through the placement process would be advertised through the University Recruitment Policy, which was a competitive process. People who met the first criteria when the positions were graded did not only include Dr Mabaso, but also the DVC: Teaching and Learning who moved laterally, and the CFO was elevated because he met the requirements. There are supporting documents that demonstrate the transitional arrangements as well as the assessments of the candidates. These were reported to the HR committee of Council.

3.3.13 Alleged irregular allowance paid to Mr Linda Nzama, the Shop Steward

MUT should consider taking disciplinary action against the VC, Dr Malaza, for proceeding to sign the recognition agreement with NEHAWU:

a) *Despite a concern raised by the attorneys pertaining to the fairness of a clause regarding discussions to place the Shop Steward "in a relevant department in line with accumulated experience to a senior position" on relinquishing of the position; and*
b) *Despite the Registrar's advice to wait for an EMC process.*

According to the VC, the shop steward position dated back long before he joined MUT. The position was created and KPAs were developed in 2016. Mr Nzama was the shop steward. There was a need to revise the recognition agreement with the unions. The revised agreement was submitted to the EMC, accompanied by a legal opinion. The legal opinion was requested by the VC, to assess whether the legal agreement met all the requirements. EMC considered the revised agreement and legal opinion and identified labour issues that needed to be addressed. The VC then recommended that a task team of EMC and union members be established to form a bargaining forum chaired by the Legal Officer. EMC resolved that this task team finalise the agreement. He signed the agreement on the basis of the task team recommendation. Subsequently HR wrote to the Registrar indicating

This gazette is also available free online at **www.gpwonline.co.za**

that this issue of outstanding payment for the shop steward was poisoning the relationship between Management and the union. The VC then approved the payment.

3.3.14 Alleged irregular appointment of Ms Petro Butler

SNG found that the appointment was irregular and recommended that MUT should determine (in consultation with MUT's legal advisors) whether to recover the said costs from Dr Malaza or to condone them, as guided by National Treasury's Framework for Irregular Expenditure.

The VC confirmed that Ms Butler assisted in his office with the drafting of the strategic plan, but she has since retired. He claims that he did not sign any form for her appointment as it was purely an HR process.

We have seen from the above that in each of the instances where adverse findings were made against the suspended officials, either documents could be provided to contradict the findings, or the suspended officials were able provide explanations which could have been considered credible.

3.3.15 Allegations and Counter Allegations

The SNG report also considers the allegations made by the VC in his report to Council or in comments made at the Council meeting. The report deals with each individually and finds that these are unsubstantiated and recommends that Council considering disciplinary action against the VC for the raising of multiple allegations that could not be substantiated.

I also raised these matters with the VC, and even although he could not provide the evidence to back up his claims, he did provide a context for these claims, which in the interest of fairness should have been recorded.

However, I find it strange that the investigation does not devote the same rigour in considering the allegations made by the Chair of Council in his report.

For instance, the Chair points out in his report that the position of Senior Director: Operations has been a position requiring a Master's degree for candidates and incumbents. The new incumbent did not possess this qualification at the time of appointment. The question is how did he get to be appointed. He then alleges that *"this is another innovative instance tailored to produce a desired outcome concocted to come up with a solution outside the ambit of Council's reach, scrutiny and involvement."*

This gazette is also available free online at **www.gpwonline.co.za**

As I have already shown, the processes around the appointment of Mr Khumalo happened before the VC was appointed at the University. The closing date for applications was 17 November 2017, shortlisting took place in January 2018 and February 2018. The interview report is dated 27 February 2018. The appointment served at council on 28 March 2018 and was referred to the IF for consideration. IF supported the appointment. The VC took office in May 2018. There is no way that this could have been "another innovative instance tailored to produce a desired outcome concocted to come up with a solution outside the ambit of Council's reach, scrutiny and involvement" as the VC was not involved in the process. This is not even mentioned in the report. The inconsistency in this respect is glaring.

Likewise, in his report the Chair alleges that the VC appointed a lady to his office without any authorization and into a non-existent position. If one examines the SNG investigation on this matter, it is clear that HR was involved in this process. Nowhere is it shown that the VC approved the appointment.

The Chair also alleges that the VC instructed the BAC to reverse its award to a specific service provider and to award it to another service provider with respect to the infrastructure project to finish the student centre. As explained previously, attorneys were appointed to provide a legal opinion when one of the service providers lodged an appeal against an award. On the basis of the attorney's opinion the BAC amended its report and produced a Reviewed Adjudication Report which was approved by the VC as chair of EMC. There is no evidence that the VC instructed the BAC to reverse its award.

According to the Chairperson of Council's report dated 29 April 2020, he alleged that there was refusal to implement resolutions of Council regarding MUT Management not ensuring instances of Irregular, Fruitless, Wasteful and Unauthorized Expenditure (IFAWUE) were reduced.

The SNG report concludes that the allegation that MUT Management did not implement Council resolution (regarding IFAWUE) could not be substantiated because at the time of reporting, there were ongoing discussions of the IFAWUE register and its intended use in so far as consequence management thereof is concern.

Clearly there are also instances where the allegations of the Chair of Council are unsubstantiated, yet there is no suggestion that disciplinary action be taken against the Chair. Both the VC and Chair made allegations that were unsubstantiated by evidence. The VC based his allegations on the interpretation of events, which I believe was an overreaction to those events. I believe that the Chair based his allegations on a series of rumours that supported a particular narrative, which were also unsubstantiated at the time.

This gazette is also available free online at **www.gpwonline.co.za**

3.5 Analysis of the Disciplinary Action

A closer reading of the SNG report reveals that the report does not recommend that Council take disciplinary action, but rather recommends that council *consider* taking disciplinary action against the suspended individuals. I believe that the recommendation is worded as such in acknowledgement of the fact that the suspended persons did not have an opportunity to respond to the findings nor the recommendations, and that in the interest of fairness the principle of *audi alteram partem* should have been applied.

Moreover, the report records the following limitation: *"Any documents or information brought to our attention subsequent to the date of our fieldwork, which could affect our findings, may require our findings to be adjusted and qualified accordingly."*

Given the expressed limitations of the SNG report, I believe that at the very least Council should have engaged the suspended individuals on the findings and recommendations contained in the report, before instituting disciplinary action. I attempted to do this and, in many instances, found that documents could be produced that contradicted the findings, or that the responses provided an alternative perspective which sounded credible and should have been considered. Council should have created an environment where the suspended persons would have felt comfortable to give their side of the story.

It would appear that certain members of Council had already adopted the position that irrespective of the outcome of the report, the suspended officials should not be allowed to return to the institution. Hence additional charges were levied relating to allegations not considered in the SNG report, which no doubt further stretched out the period of suspension, which is already in its nineteenth month. Most recently there was even a decision by Council that the VC must retire as he had reached the retirement age of 65. This is a strange decision, considering that Council must have been aware of his age at the time that he was granted a five-year contract.

A decision was also taken by Council to pay the legal fees of Mr Mthimkhulu who is currently being sued for defamation. According to Council minutes, the decision to pay his legal fees was based on a motivation that, were it not for him, the irregularities in the security tender would not have been uncovered. I have already shown that it was the KPMG investigation, commissioned by Management that uncovered inaccuracies and inconsistencies in the evaluation stage of the tender, which was outsourced to PURCOSA. The bribery allegations of Mr Mthimkhulu, which were investigated by SNG were unsubstantiated and did not uncover anything. Whoever provided this motivation has clearly misled Council.

This gazette is also available free online at **www.gpwonline.co.za**

SECTION 4

4.1 Observations arising from Interviews and Submissions

During the course of the investigation a number of persons were interviewed, including different stakeholder groupings at the University, as well as present and past Council members. Electronic submissions were received from students and staff. It was apparent from these interviews and various submissions that major divisions existed on campus and the perspectives of individuals were influenced to a large extent by their lived experience and their specific affiliations. Hence the particular bias and partiality of submissions needed to be acknowledged and factored into any analysis of the situation. Nevertheless, collectively the points of view expressed by interviewees and contained in numerous submissions have assisted greatly in shaping my findings.

I found it useful to consider the observations made in the previous Independent Assessor's report as a framework for evaluating these submissions, as it provides the necessary context and background, it allows one to cluster the inputs in a meaningful way and it also provides a sense of whether progress has been made in critical areas since the previous assessment.

4.2 Culture

The previous report noted that *"the newly appointed Vice Chancellor Dr Duma Malaza has inherited a deeply divided institution, and with systems of management not functioning optimally, and with a staff component that is demoralized and uninspired"* and concluded that none of the recommendations would be effective *"unless the institutional ethos and culture was open, creative, innovative, critical and affirming. Approaches to management may need to change, and the university must become a forum for the free expression of ideas, and critical debate."*

Sadly, the interviews and submissions revealed that these deep divisions still remain and the University is far from becoming a forum for free expression of ideas and critical debate. When staff were interviewed in a group situation, there was a reluctance for people to speak openly about their concerns. MUT was described as a highly political space comprising of people with different agendas. Circumspection was the order of the day, as those who spoke feared they might be identified with one or other grouping or faction on campus.

Worse still, I was given the impression that a culture of victimization persists. Many of the submissions were made on the condition of anonymity as there was clearly a fear of reprisal. I was alerted to irregular activities in certain areas where staff who pointed this out and refused to turn a blind eye were removed. The Operations division was used as an example, where a member of staff

This gazette is also available free online at **www.gpwonline.co.za**

is currently suspended and one has not had his contract renewed. They both claim that they were targeted after raising concerns about procurement processes, irregular appointments and irregular contracts that were signed. The impression created is that the Operations division has been captured by the unions and any attempt to regularize processes is met with strong resistance.

While I have no evidence to support these allegations, I had access to the KPMG report on an "Investigation into Allegations of Irregular Payments made to Officials in respect of Venue Hire". The report found that payments were made into the private banking accounts of two staff members and recommended that disciplinary action be taken and criminal charges be opened. Both staff members are union officials, and one is currently an internal member on Council. While I was informed that the disciplinary process has commenced, I am concerned at the protracted time that it has taken to resolve this matter. It is just on one year since this KMG report was submitted to Management.

Mr Mthimkhulu also pointed out inconsistencies in approach. He was placed under precautionary suspension while allegations of his involvement in payroll irregularities was being investigated, despite limited evidence linking him to these irregularities. In this instance there was clear evidence that payments had been diverted into private banking accounts, yet none of the staff implicated were suspended. The independent investigation by Biyela Attorneys subsequently cleared Mr Mthimkhulu of any wrongdoing in the payroll irregularities.

I am also concerned at the protracted time that is typically taken to conclude disciplinary related matters. I was informed that the staff member in operations was suspended for dereliction of duty and poor performance. The staff member claims that he was never given an opportunity to make a submission on any matter relating to his suspension. This is now his 11th month of suspension. It would appear that this is a deliberate attempt to keep this staff member out of the division. It was mentioned in one of the interviews that this person was part of the VC's network. Precautionary suspensions of this nature come at a cost, and at an even bigger cost if it is used to allow irregular activities to continue undetected.

The high-level financial analysis highlighted areas that required further investigation, areas where it is likely that the institution may be bleeding funds. One of these areas is the part-time hour system where over R30m was already spent this year up to September 2021. When Management tried to investigate and tighten controls, there were threats of a strike. The Acting DVC: T&L investigated one department, and found that claims were inflated by as much as 600%. Staff admitted wrongdoing and I am informed that disciplinary action will be taken. Management has taken a decision to phase out part-time classes, beginning next year. But this will no doubt meet with resistance. I raise this not only to highlight the need to have effective controls, policies, procedures and systems of

This gazette is also available free online at **www.gpwonline.co.za**

accountability in place, but also to demonstrate evidence of a culture of self-enrichment that seems to have taken hold at the institution.

4.3 Governance and Management

The previous Independent Assessors report noted that *"The relationship between the Council Chairperson and the Vice Chancellor needed to be managed carefully but with mutual respect. That is the collective leadership without which the university cannot succeed. In other words, Council must abide by the Code of Conduct, and Council must hold Management to account in a fair and transparent manner. Management must produce reports that guide Council in its decision-making responsibilities*".

I shall comment on observations I made from the interviews on areas that I believe are relevant to this investigation.

4.3.1 Relationship between Council Chair and Vice-Chancellor (VC)

Clearly the relationship between the Council Chairperson and the VC was not managed carefully. Within two years of the VC's appointment there was a total breakdown in trust between the two. The VC believes that this is a result of Council overstepping its mandate and interfering in operational matters. He cites contestation around the strategic plan and organizational structure, and queries by Council members relating to the SCM process. The Chairperson believes that in doing so Council was merely exercising its oversight role. The VC feels that the numerous reports that Management is required to submit is an indication of overreach on the part of council and a desire to become involved in the detail. The Council Chair is of the view that Council has empowered Management to make the decisions to run the University, and the reports are necessary for it to exercise its oversight role effectively.

Some of those interviewed characterised the relationship between Chair and VC as hierarchical and lacking mutual respect with the Chair talking down to the VC and belittling his reports. The Chair claims that he was merely responding to reports that were substandard, and that he tends to be direct in his responses. However, one gains the impression that these criticisms were not always made in a collegial and constructive manner, and the approach was not supportive. The previous Independent Assessor's report also indicates that "personal relations ought to be humanizing, affirming and positive to bring out the best in everyone". While this was stated in the context of the culture at the institution, I believe that it should also apply to the relationship between the VC and the Chair.

This gazette is also available free online at **www.gpwonline.co.za**

From the email exchanges and letters between the two it is clear that the relationship was highly adversarial and acrimonious. Good cooperation between the two and support from the Chair would have been critical elements in addressing the systemic problems at MUT. Instead they were constantly at loggerheads with each other. The required levels of collegiality, professionalism and decorum were not displayed. Both parties must bear responsibility for the deterioration in this relationship.

The Chair deliberately distanced himself from the operations of the University. It appeared that he insisted on keeping this distance to protect his fiduciary independence. He indicated that he did not even have tea with the VC for fear that this might be misconstrued as interference in Management issues. Perhaps this might have been the appropriate approach for a University that is running smoothly. However, given the enormous challenges that MUT is facing, contact outside the quarterly Council meetings may have been required, if only to work through the agenda for Council meetings, to clarify misconceptions and to resolve any misunderstandings before council meetings take place.

I believe that if communication protocols had been agreed upon at the outset, and conflict resolution mechanisms put in place much of the subsequent contestation could have been avoided.

4.3.2 The Quality of Reporting

There was general consensus that the quality of reports submitted to Council left a lot to be desired. The financial expert, Mr Mahlangu had an opportunity to examine the financial reports and identified a number of gaps. The VC indicated that there was an agreed upon Schedule of Mandated Reports and a framework and template for monitoring institutional performance as well as a policy development schedule in order to help streamline the reporting process, but frequently more reports were requested, reports that were unscheduled and not even reflected as action items in previous minutes. As the VC indicated in one of his letters, to meet expectations he would have to “bring a truckload of reports to these meetings”.

Both the VC and Acting VC claimed that there was over reporting at the level of Council which placed unnecessary pressure on an overstretched management team. While it is true that ultimately the VC must be held accountable for the poor quality of reporting, in practice these reports must be produced in the line, and the VC inherited a situation where a number of key positions in line management were vacant.

There is a severe lack of capacity in line management as well as a lack of a performance culture, which made it difficult to produce reports of the required standard. I was given the impression that work ethic is a problem. Staff engage with their work with the minimum level of enthusiasm. Clearly

This gazette is also available free online at **www.gpwonline.co.za**

there is an urgent need to fill vacancies in critical areas and embark on a staff development process to address the capacity deficit. There is also a need to infuse a culture of service and to put accountability mechanisms in place. I was informed that a performance management system is in the process of being finalized, and is scheduled for rollout in 2022. This needs to be fast tracked for not only will it assist with monitoring performance, it will also serve to identify development needs of staff in order to improve performance.

There was the view held by some that the VC was simply incompetent, especially in the light of the poor quality of reports that were tabled at council, for which he was ultimately responsible. However, it is difficult to arrive at this conclusion in the absence of a performance management system based on a performance contract with the VC.

4.3.3 Council Overreach

The Council members interviewed (past and present) demonstrated a clear understanding of their role in governance and oversight. With the support of Council, the SCM policy had been amended to remove any involvement of Council in procurement processes, and Council was not involved in any staff recruitment except at the levels stipulated in the Statute. The University statute was being revised to strengthen the governance role of council.

However, there were differences of opinion between the VC and Chair of Council over what constitutes Council overreach. I have already mentioned their opposing views on the role and function of the EXCO of Council, where the Chair of Council felt that EXCO should have regular meetings to focus on the oversight of the VC and the Registrar's office. The VC felt that this was a clear indication of overreach on the part of Council. He felt that EXCO should only meet on an ad hoc basis to deal with issues referred to it by council.

It was also noted that a number of reports to Council were of an operational nature, and the problem of over reporting was interpreted as a desire on the part of Council to engage in operational matters. It also appeared that the VC interpreted any query by Council members as an interference in operational matters.

From the above there appears to have been a lack of understanding and certainly a lack of agreement on what constitutes council overreach and council interference in operational matters. It would have been essential, at the outset to have clarified these matters through workshops and benchmarking against the practices of other universities.

This gazette is also available free online at **www.gpwonline.co.za**

4.3.4 Management

The large number of vacancies and lack of permanent appointments at senior level have contributed to the severe lack of capacity at this level. Staff and students complained about under performance in key portfolios, and singled out poor maintenance and the deteriorating infrastructure on campus as a prime example. Management also concurred that there were major challenges in the area of operations, but highlighted the difficulties experienced in recruiting staff, largely due to the location of the campus in the heart of the largest township in KZN, but also due to the poor image that the institution projects. The problem with acting appointments is that the incumbents are seldom willing to initiate change where needed, think strategically or plan ahead, as they are usually given short term contracts in these acting positions. Some have described the institution as being in a severe state of paralysis as a result of all the acting appointments.

Before the suspension of the VC, the following positions were vacant at executive level:

- DVC: Institutional Support
- Three (3) Executive Faculty Deans
- Executive Director Human Resources & Development
- Executive Director Institutional Advancement
- Senior Director Strategy Coordination

Currently there are a number of acting positions at executive level, some as a result of the suspensions. These are listed as follows:

- Acting Vice Chancellor
- Acting DVC Teaching and Learning
- Acting DVC Resources and Planning
- Acting Registrar
- Acting Senior Director Human Resources
- Acting Senior Director Vice Chancellors Office
- Acting Senior Director Operations

Clearly the large number of senior officials serving in an acting capacity has contributed to the instability of the institution. The suspension of senior executives for alleged corruption also sends out a negative message, which has further impacted on the stability.

The township location has not only created challenges for staff recruitment. From various interviews it is clear that interference from the local community, business forums in particular is a major concern. Extortion rackets are evident, projects are held to ransom, threats relating to procurement processes

This gazette is also available free online at **www.gpwonline.co.za**

are commonplace and even death threats have been reported. This all contributes to an environment where corruption can flourish.

There has also been criticism levelled at the VC for his failure to unite the campus. He inherited a deeply divided institution and my observation is that the problem still persists. His approach to management may have actually exacerbated divisions. With the revised organisational structure, it appears that he had centralized more power into his own office and alienated members of his executive management team. The impression was created that his executive management team was not always involved in decision making, and that he would often not consult with them, but rather with his colleagues from UKZN, thereby creating further friction. There were also reports that he aligned himself with members of a particular union on campus, whom he perceived to be more influential, thus alienating members of the other union.

4.3.5 Council

While examining the minutes of Council meetings one cannot help but be struck by the fact that these meetings tend to last 10-13 hrs and are sometimes even adjourned. Lengthy meetings adversely affect attention span, lead to frustration and fatigue, and tend to compromise the quality of discussion and decision making around strategic issues. From the interviews various reasons were put forward for this, ranging from over emphasis on operational issues, overreporting, poor quality of reports submitted, poor management of the Council agenda and the structure of the agenda itself. Criticism was levelled at the Chair who was described as overly pedantic demanding details on just about everything and tolerating lengthy discussions on numerous items that were included purely for noting.

I am of the view that the agenda of council meetings need to be restructured to foreground strategic matters. Council needs to monitor the progress made with achieving strategic objectives and progress with closing out risks identified in the risk register. Council needs to approve policies and exercise its oversight role to ensure that the institution is well managed. Reports to council should be of a strategic nature, meet a required standard and provide sufficient information to enable Council to effectively execute its responsibilities. It would be advisable to undertake a benchmark exercise to determine how the agenda of council can be optimized.

On the composition of Council, it should be noted that there have been seven resignations of external council members in the period March 2020 and September 2021. In addition, one councillor did not renew his term of office. From the interviews I am left with no doubt that this spate of resignations has robbed Council of members of high calibre with a skill set that would have made any council proud.

This gazette is also available free online at **www.gpwonline.co.za**

There were concerns expressed about the ability of internal members of council to exercise their independence of mind and take decisions in the interest of the institution and not in the interest of the constituency that nominated them. Some even went so far as to suggest that the governance model is flawed as there will always be pressure from these constituencies and these members of council have difficulty understanding their fiduciary responsibilities under these circumstances. I interviewed members on the executive of both unions at MUT and noted that some of these executive members were also serving on Council and held influential positions on the Institutional Forum. A view was expressed that the unions wield a disproportional influence on governance structures at the University.

It was indicated that Council has introduced probity tests for external council members which are undertaken before they join the Council. University appointed external council members are also interviewed before they are appointed, to gauge whether they understand their fiduciary responsibilities. Induction workshops are organized which focus on the role of council and governance. The probity tests and interviews do not apply to internal members of council.

4.4 The Academic Project

The previous Independent Assessor's report notes the following: *"At Council we could find no evidence that Council deliberated on academic matters beyond making appointments. As such, the relationship between Senate and Council is at best confusing. We gather that not even the strategic policies of the institution were debated by Senate, but they were approved. We had the sense that Senate was not performing credible oversight on academic matters."*

The University appears to have put in place steps to address this adverse finding in the previous Independent Assessor's report. There was a review of Senate sub committees which led to a restructuring of these committees in order to improve the functioning of Senate. Several workshops and seminars were convened to stimulate academic debate on campus. These occur outside of the Senate meetings.

However, a view was also expressed that Senate tended to be purely "tick-box" in its approach rather than engage in strategic academic discussion. I have noted from the minutes that Senate meetings could last as much as 5-7 hrs, and the agenda is filled with matters related to academic administration. One wonders whether there is sufficient time to debate strategic and substantive issues central to the academic project. The Acting DVC T&L was scheduled to lead a discussion on the important matter of academic culture at the institution at a recent Senate meeting, but could not do so due to lack of time.

This gazette is also available free online at **www.gpwonline.co.za**

It would appear that SENEX meets on an ad hoc basis to deal with urgent issues referred to it by Senate. Senate may consider delegating the purely administrative matters such as marks amendments, appointment of examiners and moderators, approval of graduation lists, recognition of prior learning, exemptions and recognitions, among others academic administrative matters, to SENEX for consideration and approval. SENEX could then meet on a regular basis to consider these matters and submit a report to Senate for ratification. This will shorten Senate meetings and free up time for discussion and debate on strategic issues central to the academic project.

Concerns were also expressed that Council did not give sufficient attention to the academic project. In a discussion on the matter it was pointed out that the minutes of senate meetings are included in Council documents for noting. It was also pointed out that the VC was expected to cover academic matters in his report to Council. While it is true that the VC's report does cover some academic matters, it may be worthwhile to include a Senate Report as a standing item on the Council agenda which should be a high-level report on the strategic matters and conceptual issues that were discussed at the Senate meeting. The Council representative on Senate could present such a report, which would serve to give prominence to academic matters at Council.

4.5 The Office of the Registrar

The previous Independent Assessor's report notes that *"the Office of the Registrar is a critical key to Governance and Management in the institution. From our observations, the person of the Registrar currently is very weak and does not understand his role even though he has been in office for 20 years. He does not understand, in our view, that he is the custodian of the laws, policies and rules of the university. He should be empowered to function like a Company Secretary, to act at all times with professional authority, and with the knowledge of the laws and policies of the institution binding on Council and Management alike".*

The weakness in the Registrar's office also emerged from the interviews, though recent improvements were noted. I believe that many of the problems experienced between Council and Management could have been avoided if the Registrar's office was able to take a position and advise in areas whenever instances of council interference in operational matters become apparent, or when Management appeared to operate outside the delegation of authority framework.

The University indicated that the weakness identified is currently being addressed with the filling of two Deputy Registrar's positions. The Registrar has recently retired, and an Acting Registrar has been appointed in his place.

This gazette is also available free online at **www.gpwonline.co.za**

4.6 Ombudsman

The previous independent assessor's report notes that *"The university must establish the Office of the Ombudsman. This should allow complaints to be raised internally and adjudicated and resolved without recourse to the law. This alternative dispute legal resolution mechanism must be undertaken by an independent person, outside of the structures of the university, and both Council and Executive Management must undertake to honour the rulings of such an ADR system".*

The University has not addressed this matter. Besides playing an important role in proactively resolving internal disputes and saving the institution enormous legal costs, I believe this mechanism could also have played a critical role in resolving the tensions that arose between the VC and the Chair of Council over their differences between what constitutes council overreach. The moment these differences emerged the matter should have been referred to the alternative dispute resolution (ADR) system where it could have been adjudicated by an independent person.

SECTION 5

5.1 Findings

In this investigation I interviewed a wide range of persons. I also considered the viewpoints presented in a large number of electronic submissions. I was particularly interested in the various perspectives of what gave rise to the tensions between Management and Council in such a relatively short period of time. I was also interested in determining the circumstances that gave rise to the conflict between the VC and Council in the first quarter of 2020, which eventually led to the suspension of the VC. I had to acknowledge the deep divisions that existed on this matter, and the likelihood that almost all whom I interviewed or who made submissions would have an inherent bias based on their lived experience, their context and background.

The old Latin adage "*Quot homines tot sententiae: suus cuique mos*" (there are as many men as opinions: each has his own correct way) most certainly rang true.

It was left to me to examine the documents that I had access to, which included a number of audit reports and reports on forensic investigations, to corroborate the various assertions made. These findings are made on the basis of evidence contained in these documents, or on the balance of probabilities in instances where evidence is lacking.

From the interviews and electronic submissions two diametric opposing narratives emerged. On the one hand, there is the VC who alleges that there are certain elements in council who are making a

This gazette is also available free online at **www.gpwonline.co.za**

concerted effort to get rid of a VC who is committed to good governance, so that they can influence the procurement processes.

On the other hand, the Council alleges that it is the VC who is trying to get Council removed so that corruption at the University may continue. There are suspicions that the inadequate reporting is deliberate so that corruption will avoid scrutiny and not be detected by Council.

Finding 1: *There is no evidence to suggest that either the VC or any of the suspended members of management or any members of Council are involved in any corrupt activity.*

The MORAR audit report identifies instances of tender irregularities. The associated tender processes mostly occurred before the VC was appointed or soon thereafter. No member of the current management team or Council was implicated. Those involved have been disciplined and some staff members have been fired.

The SNG report does not implicate any of the suspended members of staff in corrupt activities. Where they have recommended disciplinary action against these members of staff, it has been in response to allegations of irregular appointments or omitting to table reports. In almost all instances, when presented with the findings and recommendations, those suspended were either able to produce evidence which I believe effectively countered these findings and recommendations, or provided an explanation which could be considered credible.

The KPMG audit focused specifically on the security tender and uncovered inaccuracies and inconsistencies at the evaluation stage of the tender process. However, it is clear from the report that the evaluation stage of the tender process was outsourced to PURCOSA. MUT staff were not involved in this part of the process.

Finding 2: *There is little or no evidence to support the allegations made by the VC in the report he presented to Council at the meeting on 29 April 2020. Likewise, there is little or no evidence to support the allegations contained in the response from the chair presented at the same meeting.*

I provide a detailed analysis of these allegations earlier in this report, but both sets of allegations must be viewed in the context in which they were made.

The VC was clearly frustrated at the difficulty he experienced in getting Council approval for his strategic plan as well as the organizational structure he required to support the implementation of the plan. He perceived this as obstructionist. He considered the Chair's interpretation of the mandate

This gazette is also available free online at **www.gpwonline.co.za**

of EXCO as an example of council overreach, and viewed the WhatsApp message which he claims questions his authority and the telephone query about the tender security as an example of council interference. He observed this against the background of all three Committees of Council resolving that Management should be disciplined by Council, all coinciding with the award of the security tender. He viewed this as an orchestrated attempt by Council to remove him so that certain members of Council could directly influence the procurement process. He communicated with the DHET and the Minister to alert them of the pending threat of his removal. I believe that this was an overreaction on the part of the VC.

The Chair of Council viewed the allegations in the VCs report as a direct attempt to undermine Council and viewed his report to the Minister as a request for Ministerial intervention. It was then that he started "joining the dots" and began to give credence to the many concerns that were placed at his door. In this scenario, the inadequate reporting was seen as a deliberate attempt to conceal corrupt activities and the irregular appointments were attempts by the VC to surround him with persons that would support these corrupt activities. This view was mostly fueled by unsubstantiated rumours that the VC had recruited colleagues from UKZN to support his corrupt activities. I have shown that the recruitment in question was finalized before the VC joined MUT.

Finding 3: *The process of suspending the VC and the other senior managers was not conducted in a fair and transparent manner.*

I have dealt with this matter in detail in the section dealing with the suspension of senior managers. But in a nutshell, new allegations were made for the first time by the Chair without giving the VC an opportunity to respond to these allegations, especially given the fact that these allegations were not supported by a shred of evidence.

Dr Mabaso and Mr Khumalo names only cropped up in the context of the allegation of bribery. Again, no evidence was presented to support this allegation. The context in which those allegations were made were either not considered or presented. They were suspended without any indication of what the specific allegations against them refer to, without any evidence being presented, and without giving them an opportunity to respond to these allegations.

I believe that these decisions were taken in the heat of the moment without due consideration of the broader implications of suspending senior officials. The impartiality of certain members of Council are also called into question. Alternative dispute resolution mechanisms should have been considered in dealing with the conflict.

This gazette is also available free online at **www.gpwonline.co.za**

The similar argument prevails over the decision to extend the suspension once the findings and recommendations of the SNG report were presented to Council. These findings and recommendations were not discussed with the persons suspended and they were not given an opportunity to respond. I did just that and found that in almost all instances either evidence was produced to counter these findings or the explanations they provided could be considered as credible.

Finding 4: *The trust relationship between the VC and the Council chair should have been managed in a much better manner and if sufficient attention had been given to this matter, I believe much of the conflict that arose subsequently could have been avoided.*

Both parties must bear the blame for this. The centrality of this matter was emphasized in the previous Independent Assessor's report. There are numerous examples of universities where a breakdown in this relationship has been one of the main factors in governance failure.

There must be a clear distinction between council's role in governing the institution, and the VC's role in managing the institution. Management must ensure that reports and documentation of a required standard are presented to council to enable it to execute its role of governance and oversight effectively. Proper communication channels between council chair and VC need to be put in place. As I have indicated above, many instances arose where there was contestation on what constitutes council overreach, and on the level and quality of reporting from management. The conflict could have been based on a misunderstanding between the two parties, but there does not appear to have been any effort to find common ground. Communication between the two parties remained poor. The tensions were no doubt fueled by rumours and misperceptions of each other's motives which were largely unsubstantiated.

Finding 5: *The problems at MUT are systemic and has its roots in the prevailing culture at the institution.*

It was evident from the interviews and submissions made that deep divisions among staff still remain. Staff do not feel free to express their ideas openly for fear of being identified with one or other grouping or faction on campus. The impression was created that a culture of victimization persists. Many of the submissions were made on the condition of anonymity as there was clearly a fear of reprisal.

Work ethic also comes into question. It is difficult to understand how the quality of reports submitted to council can remain an issue for such an extended period of time. While the VC is accountable, he

This gazette is also available free online at **www.gpwonline.co.za**

cannot be expected to draft these reports himself. They are produced in the line. Is it a case of incapacity, incompetence, or “a don’t care attitude” and lack of a performance culture? Clearly there is a need for accountability mechanisms to be put in place. The implementation of a performance management system is long overdue.

There also appears to be evidence that a culture of self-enrichment has taken hold. This became apparent from the outcome of the investigation into part-time classes. On the balance of probabilities there are a number of irregular activities taking place in other areas as well, which are flagged as areas of concern in the report of the financial expert. I base this conclusion on the various audit reports that have uncovered irregularities in the procurement process, the payroll process, and payments and the identification of ghost employees. If proper policies, procedures and controls have not been put in place, there is a strong likelihood that these irregular activities are still continuing. This assertion is supported by interviews and submissions of suspended staff who allege that that there are irregular activities, particularly in the area of operations.

Finding 6: *While concrete steps have been taken to improve the academic culture of the institution, more can still be done to ensure that the academic project receives the prominence that it warrants.*

I believe that this can be achieved by setting aside more time for discussion and debate at meetings of Senate around strategic and substantive issues central to the academic project. The Senate agenda appears to be overcrowded with academic administration matters. I believe that there are a number of matters that can be delegated to SENEX for decision and approval, and which only need to be ratified at a full meeting of Senate.

Likewise, I believe that the academic project will benefit if the Council agenda made provision for a standing report from Senate, which could foreground academic issues. This should be a high-level report on the strategic issues and conceptual issues that were discussed at the Senate meeting. Council meetings are also unbelievably long and perhaps through proper management of the agenda and through the delegation of some of these matters to council committees, adequate time can be set aside for the presentation of a senate report.

Finding 7: *While good progress has been made in implementing the recommendations of the previous Independent Assessor’s report, two areas namely the creation of an Alternative Dispute Recognition mechanism (or Ombudsman), and the strengthening of the Registrar’s office were neglected which could have provided important interventions to help avert the current crisis.*

This gazette is also available free online at **www.gpwonline.co.za**

As was noted previously areas of the conflict arose from differences in opinions of what constitutes council overreach and council interference in operational matters. Had there been an ADR mechanism in place at the time it could have gone a long way towards proactively resolving these disputes. The moment accusations and counter accusations emerged that matter should have been referred to the ADR system for resolution.

Likewise, the Registrar's office, besides providing administrative support to council is also required to provide advice on legal, regulatory and governance matters. A strong Registrar's office would have been able to intervene and bring both the chair of council and the VC to order and advise on the way forward. The previous Independent Assessor's report noted the absence of an ADR system, and identified weaknesses in the office of the Registrar and indicated that the incumbent was not sufficiently knowledgeable about his role. Had these matters been addressed timeously, they could have made a difference.

Findings relating to the financial analysis into cash flow problems experienced by MUT.

Part of the terms of reference for the Independent Investigation involved an examination of the cash flow problems being experienced at MUT. To assist with this task, I used the services of Mr Bulelani Mahlangu who has the requisite expertise in financial matters. Through his investigation he was also able to provide an opinion on the overall financial health of the University and on the adequacy of submissions by management to the Finance and Investment Committee of council. I have included the full report of Mr Mahlangu in Annexure 4. I have lifted out the main findings of the report which relate to the cash flow position of MUT. These are presented below:

- *From an analysis of the cash-flow projection that was in place at the beginning of the year it was determined that the amount requested by MUT in the letter to the DHET in February 2021 was reasonable.*
- *Had the R212m received between January 2021 and August 2021 as part of the R314m owed by NSFAS to MUT been received by end of 2020, there would have been no need for MUT to request financial assistance.*
- *The cash flow situation at MUT is largely dependent on the timeous receipt of funding from NSFAS. If MUT robustly pursues the R105m owed to it by NSFAS and which flows from the previous financial year and receives it within this year, it is unlikely to experience a cash flow problem.*
- *The retained income (R260m at 31 December 2020) was not underpinned by cash, but by assets that were not liquid, and therefore could not be used.*

This gazette is also available free online at **www.gpwonline.co.za**

- *Approximately 73% of students at MUT are funded by NSFAS and the shift in the start of the academic year which resulted in NSFAS making the first payments in April 2021 has had a huge impact on MUT*
- *MUT has not taken advantage of what can be referred to as low hanging fruit in the sense that the excess funds have been invested in instruments that pay much less than the current going market rates, in some cases the differential is as much as 2-3%.*
- *Our assessment reveals that MUT does not have a going concern problem for now, partly because what is referred to as Current Liabilities are in reality payable over a number of years.*
- *In terms of long-term planning, the University does not yet have a financial sustainability plan to help it reduce overreliance on NSFAS and government.*
- *According to Management, the process of developing a turnaround plan has already started and this will be presented at the Council meeting of December 2021.*
- *Based on the findings of the auditors and various forensic investigations, there are serious challenges with Supply Chain Management and Contract Management. While there has been a focus on dealing with irregular expenditure much more still needs to be done. The overall impression is that the control environment in certain areas is substantially weak.*

5.2 Formulation of Recommendations

5.2.1 Preamble

There are a number of possible recommendations that can flow from the above findings. Ultimately these recommendations should focus on measures that need to be put in place to help the University recover from its current governance and management crisis. Such a crisis is no stranger to MUT. As I have noted earlier in this report, MUT has been plagued with management and governance challenges over the past two decades. Three previous Independent Assessments have been conducted and on one occasion the University has been placed under administration. Yet despite these interventions, the problems persisted. What should be recommended on this occasion, that could make a difference? This is also a question I posed to many of the interviewees. And as can be expected, the responses varied dramatically. I will mention two, since they are different from what has been proposed before.

More than one person recommended that MUT be merged with another university in the region. In support of this it was mentioned that MUT is by far the smallest university of technology in the country, comparable in size with the satellite campuses of some larger universities. It tends to be isolated with relatively few partnerships. Very little research is conducted relative to other universities. I was provided with a sheet listing the “UoT World Rankings for 2020” where the other

This gazette is also available free online at **www.gpwonline.co.za**

five UoTs had a ranking nestled in the band 1000 – 3300, while MUT was an outlier ranked 7390. While it is acknowledged that the basis of any ranking system for universities will be contested, the gap between MUT and the other UoTs in the country appears to be significant and may be difficult to breach without support from a merger partner. However, I did not consider a merger to be a viable option. The huge cost associated with merger, both from a financial and human capital perspective, is vastly underestimated. So too are the challenges associated with the harmonization of back-office operations, policies and procedures and most important of all the harmonization of a culture across campuses. Invariably, the net result is that both institutions in the merger suffer as a consequence. In the case of MUT, there would also be political considerations to take cognizance of, as well as its stated mission of providing service to the surrounding community in Umlazi.

The other recommendation that was put forward and that appeared to be popular among stakeholders was that the Council of MUT be dissolved. The reasons provided related to Council overreach, and council meddling in the affairs of the University. In all the documents I worked through or interviews I conducted, I could not find any clear evidence to support this. On the contrary, Council appears to have put in place measures to limit interference in operational matters at the University. The SCM policy no longer requires Council approval for tenders above a certain threshold. All procurement is conducted by Management, without the involvement of Council. Likewise, Council is not involved in any appointments, except those stipulated by the statute (peromnes grades 1 to 3). Councillors interviewed are very aware of their governance and oversight role and there did not appear to be any role confusion from their perspective. The Chair even indicated that he avoids any contact with the VC outside of quarterly council meetings (or the ad hoc EXCO meetings) as this might be misconstrued as council interference in operational matters.

I have raised major concerns with the manner in which the suspension of the VC and other senior officials were dealt with. I deal with this matter in greater detail elsewhere in this report. My general feeling is that a different approach to resolving the conflict should have been adopted. However, I did not consider this to be sufficient reason to recommend the dissolution of council.

5.2.2 Recommendations

In the light of the findings and giving due consideration to the terms of reference and the need to act in the best interest of MUT, I have distilled what has emerged from this independent investigation into the following four recommendations, each with corresponding recommendations flowing from them:

This gazette is also available free online at **www.gpwonline.co.za**

Recommendation 1: *A concerted effort should be made to transform the culture of the University.*

Elsewhere in the report I have made the point that the problems at MUT are systemic and are embedded in the culture of the institution. There is a dire need to create a culture where the free expression of ideas and critical debate are encouraged and where concerns can be raised and criticism levelled without fear of reprisal, a culture which is enabling and aligns with the values of the institution. Staff need to engage in discussion around the vision, mission and strategic plan and Academic Identity document of the University to ensure that there is sufficient buy-in. Staff need to understand what it is to act in the best interest of the university and need to commit to moving in that direction.

- The previous IA report recommended that a culture survey be conducted among staff to serve as a barometer on institutional culture. This has not yet been done, and needs to be given priority. Appropriate measures then need to be put in place to address the issues that emerge from the survey.
- The instability at the institution is in no small measure a consequence of the large number of senior officials serving in an acting capacity. Some have described the institution as being in a severe state of paralysis as a result of all the acting appointments. This has no doubt had an adverse effect on the morale of staff and the culture at the institution. To this end it is recommended that the permanent appointment of staff into these positions must be prioritized
- There is a need for accountability mechanisms to be put in place. It is recommended that the implementation of a performance management system be prioritized. Not only will this help infuse a performance culture, but it will serve to identify the development needs of staff in order to improve performance.
- Appropriate interventions to improve the academic culture at MUT also need to be considered. Elsewhere in the report I recommend the delegation of functions and the restructuring of the agenda of Senate meetings to free up space for discussion and debate on strategic and conceptual issues central to the academic project.
- I also recommend that a report from Senate feature on the agenda of Council meetings to give more prominence to academic matters.
- The problem with the current culture is that it can serve as an enabler for corrupt and irregular activities, and arising from our financial analysis of the institution, we have flagged some areas where controls are weak, and where there is every likelihood that the systems are being abused. We recommend that further audits and investigations be undertaken in these areas.

This gazette is also available free online at **www.gpwonline.co.za**

Recommendation 2: *Measures need to be put in place to ensure that the trust relationship between the VC and the Chair of council is properly managed and nurtured.*

The previous IA report emphasized the need for this matter to be given special attention. There is no evidence to suggest that it has. Whereas the VC and the Chair should have been cooperating with each other to deal with the systemic and cultural problems inherent in the institution, they were instead involved in contestation with each other over an understanding of their respective roles. It is evident from the tone of the letters and emails that they exchanged, that the relationship was adversarial and acrimonious.

- Clarity needs to be sought and agreement reached on the role of EXCO, and on what activities constitutes council overreach.
- It is recommended that protocols governing communication between the VC and Chair be agreed upon. There may well be the need for contact with each other outside of the quarterly meetings of council (and possibly at the meetings of EXCO) to prepare among other things the agenda for council, and resolve any misconceptions and misunderstandings before meetings of council. Such meetings should not be misconstrued as interference in the operational matters of the university.
- It is recommended that the office of an ombudsman or some alternative dispute resolution mechanism be established to deal, among other things with any conflict that may arise between the VC and chair of council. This mechanism must involve an independent person external to the University, and both the VC and Chair should agree to abide by whichever rulings are made.
- Special attention should be given to strengthening the office of the registrar, which has an essential role to play in advising on governance and compliance.

Recommendation 3: *The suspension of the Vice-Chancellor and the other two senior officials be lifted.*

Not only do I believe that the process to suspend these officials was unfair and lacked transparency, but it comes at a huge cost to the institution not only in terms of financial loss but also in terms of reputational damage, which has a major impact on the ability to attract students, staff and funding. It further weakened capacity at senior management level where a number of critical positions were already vacant. It perpetuates the narrative that senior management are involved in “rampant corruption” and “looting” at the institution. I could find no evidence to support this claim. I also have the sense that once the decision to suspend was taken, a sentiment was shared among some that these officials must be prevented from ever returning to the institution. Hence the decision to immediately proceed to disciplinary hearings once the SNG findings were presented (without providing those suspended an opportunity to respond to the findings), the decision to levy additional

This gazette is also available free online at **www.gpwonline.co.za**

charges which has further drawn out the process (the suspensions are now in their 19th month) and most recently the decision to force the VC to retire.

- I am aware that there are investigations currently taking place, including those in response to serious allegations of death threats to staff at MUT. These must continue. However, they are not of a nature that a precautionary suspension is warranted. The potential for interference with these investigations is independent of the suspension status of the individuals concerned.
- Under the circumstances I doubt whether the VC will wish to return to the University. I would caution that he does not. Whereas he inherited a deeply divided institution, from his standpoint the situation has retrogressed. In a sense he has isolated himself. He has alienated his executive team, and possibly certain members of Council. Without the full support of council and his executive management team the pressing challenge of transforming the culture of the institution may be insurmountable.
- From my observations I do not believe that the current Chair of Council is best positioned to steer council in the direction that would help nurture and restore a relationship of trust with the VC and provide management with the necessary support it requires. There is no evidence to suggest that the relationship has been supportive in the past and involved mutual respect. Instead it has been hierarchical and adversarial. To this end I recommend that he should consider stepping down from the position of chair of council, in the best interest of the University.

Recommendation 4: *The Multidisciplinary Task Team (MDTT) as proposed by the Ministry be implemented without delay*

In response to the adverse findings emanating from the previous IA report, the Minister proposed the establishment of an MDTT to assist MUT in improving its governance and management systems in a range of areas. The proposal was made by the Minister in a meeting with Council in May 2018. The proposal envisaged the appointment of experts in specified areas, to advise line managers in those areas on how best to address the weaknesses that have been identified, to provide technical expertise and to assist with capacity building. While I believe that this matter is being given attention, progress in implementation has been slow.

- It is recommended that the establishment of the MDTT be fast tracked. The MDTT terms of reference is being finalized, and seven areas have been identified where assistance will be rendered. One of these is governance. I believe that such assistance will be invaluable in helping to strengthen the office of the Registrar, and in helping to develop the protocols needed to maintain the relationship of trust and cooperation between council and management.

This gazette is also available free online at **www.gpwonline.co.za**

- It recommended that the MDTT assist management in setting targets for improvement for the next 5 years and that measures be put in place to hold management accountable for delivery.
- One of these targets should relate to the establishment of partnerships with other Universities of Technology (UoTs). While MUT is a member of Technological Higher Education Network South Africa (THENSA) to which the other five UoTs are also affiliated, it should engage with these UoTs through the various projects of THENSA, which include capacity building projects. It should actively pursue partnerships with the other UoTs through THENSA, which will enable staff to benefit from the exchange of ideas with colleagues at the other UoTs, and will also allow MUT to benchmark good practice elsewhere.

5.3 Recommendations relating to the financial analysis into cash flow problems experienced by MUT

As I mentioned previously, Mr Bulelani Mahlangu conducted a high-level financial analysis of the institution in order to understand the cash flow problems being experienced by the University. The full report is contained in Annexure 4. Below I present the main recommendations that emerge from that report:

- MUT management needs to change its approach to dealing with NSFAS. Management needs to be pro-active and timeously engage NSFAS regarding any outstanding balances. Any amounts outstanding should be recovered within the financial period to which they apply.
- MUT needs to change its investment approach and make use of external expertise where necessary.
- Management must prepare regular and reliable cash-flow projections. This does not appear possible without augmenting the finance system.
- A financial sustainability plan is critical and should be comprehensive. Our recommendations in this regard underpin the philosophy that it should address not only all aspects of its income statement and balance sheet, but also the support system in the form of human resources, infrastructure, governance and leadership.
- There are control weaknesses that were identified in different investigations or audits, which seem to indicate far larger problems. In our view further investigations will be necessary to determine the full nature and extent of these weaknesses.
- Given the complexities and the nature of the allegations at MUT and our high-level control environment assessment, we recommend that independent and comprehensive investigations be conducted into the following areas: secondary contracts and part-time lecturing (evening classes); Student residence leases and related expenditure, such as transport costs; Payroll integrity; the HR database (with the focus on possible ghost employees) and Capital Projects (with emphasis on tenders issued from May 2020).

This gazette is also available free online at **www.gpwonline.co.za**

ANNEXURE A: Terms of Reference of the Independent Assessor

Terms of Reference of the Independent Assessor to Conduct an Investigation into theAffairs of the Mangosuthu University of Technology (MUT)

(As published in the Government Gazette No. 45062, Notice No. 674 on 27 August 2021)

INTRODUCTION

1. In terms of Section 44 of the Higher Education Act, 101 of 1997, as amended (the Act), the Minister of Higher Education, Science and Innovation appoints **Professor Anthony Staak** as an Independent Assessor to conduct an investigation into the affairs of the Mangosuthu University of Technology, following a series of allegations and counter-allegations relating to the governance and management of the University. The overall purpose of the investigation is to advise the Minister on the source and nature of problems; and measures required to restore good governance and management.

SCOPE OF THE INVESTIGATION

2. The Independent Assessor shall conduct an investigation into
   a) various allegations made by the Vice-Chancellor (VC), Dr Duma Malaza in his correspondence to the Department in March and April 2020;
   b) allegations of misconduct and mismanagement against the VC;
   c) circumstances and reasons for the suspension of the VC and other senior managers in April 2020;
   d) the functioning, efficacy and relationships between the governance and executive management structures and portfolios;
   e) the circumstances that led to the cash-flow problems of the University; and
   f) any matters that, in the opinion of the Assessor, may impact on the effective functioning of the University, from the analysis of problems relating to governance and management.
3. The Independent Assessor shall report to the Minister in writing of the findings of the investigation together with the reasons upon which the findings are based; and suggest in the report appropriate measures and provide the reasons why the measures are needed.
4. The Independent Assessor must be mindful of the provisions of section 45A of the Act in conducting the investigation.

DURATION

5. The Independent Assessor must in terms of section 47 of the Act, complete his work and submit a written report to the Minister within 45 days from 1 October 2021. The delayed period of assessment is as a result of the independent assessor not being immediately available to commence the investigation.

This gazette is also available free online at **www.gpwonline.co.za**

ANNEXURE B: List of Acronyms

Acronym	Meaning
ADR	Alternative Dispute Resolution
ARCC	Audit, Risk and Compliance Committee
BAC	Bid Adjudication Committee
BEC	Bid Evaluation Committee
BoQ	Bill of Quantities
CFO	Chief Financial Officer
DHET	Department of Higher Education and Training
DVC	Deputy Vice-Chancellor
EMC	Executive Management Committee
EXCO	Executive Committee of Council
FIC	Finance and Investment Committee
IFAWUE	Irregular, Fruitless, Wasteful and Unauthorized Expenditure
KPA	Key Performance Area
KPMG	KPMG international auditing firm
MDTT	Multi-disciplinary Task Team
MORAR	MORAR Incorporated Charted Accountants
MUT	Mangosuthu University of Technology
NEHAWU	National Education Health and Allied Workers Union
NSFAS	National Student Financial Aid Scheme
PQM	Programme and Qualifications Mix
PRC	Planning and Resources Committee
PSiRA	Private Security Industry Regulation Act 56 of 2001
PURCOSA	Purchasing Consortium of Southern Africa
SCM	Supply Chain Management
SENEX	Executive Committee of Senate
SNG	SNG Grant Thornton Auditing Firm
THENSA	Technological Higher Education Network South Africa
UBAC	Ubuntu Business Advisory and Consulting
UKZN	University of KwaZulu-Natal
UoT	University of Technology
VC	Vice-Chancellor

This gazette is also available free online at **www.gpwonline.co.za**

ANNEXURE C: Programme of Interviews

MEETINGS AND INTERVIEWS CONDUCTED BY THE INDEPENDENT ASSESSOR

INTRODUCTORY MEETINGS WITH INSTITUTIONAL STRUCTURES		
Date	**Engagement**	**Participant(s)**
12/10/21	Meeting with the Acting VC and Acting Registrar	Prof M Ramogale (Acting VC) Mr P Masala (Acting Registrar) [a]
	Meeting with the SRC	Mr M Gumede (SRC President)
	Meeting with NEHAWU	1. Mr MC Cele 2. Mr SG Magagula 3. Mr SS Mncube 4. Mr BS Shamase 5. Ms PJ Hlophe 6. Mr LZ Mthimkhulu 7. Mr LP Nzama (Chairperson)[a] 8. Mr JN Ellenson 9. Mr HS Khawula
	Meeting with TENUSA	1. Prof L Naidoo 2. Mr BK Zwane (Chaiperson) 3. Mr N Fuyane (SG) 4. Mr TF Zwane
	Meeting members of the Convocation Exco (Including Convocation representatives on Council)	1. Mr S Dlamini (President & Council Member) [a] 2. Ms SZ Mnyandu (Council Member) 3. Mr T Hadebe (IF Member) 4. Mr S Mbonambi[a] (IF Member) 5. Mr S Ndlovu;[a] (Treasurer)
13/10/21	Meeting with the Executive Management	1. Mr B Mahlangu (Financial Expert appointed by the IA) 2. Prof Ramogale (Acting VC) [a] 3. Dr J Van Koller (Acting DVC: 4. Resources & Planning) 5. Dr JM Makua (Acting DVC: Teaching & Learning) [a] 6. Mr P Masala (Acting Registrar) a 7. Ms M Mkhize (Senior Director: Marketing& Communication) [a] 8. Mr R Delomoney (CFO) [a] 9. Ms N Mabona (Interim Senior Director: HR) [a] 10. Prof M Coopoosamy (Dean of Faculty of Natural Sciences) [a] 11. Dr B Ntshangase (Dean of Faculty of Management Sciences) [a] 12. Prof BF Bakare (Dean of Faculty of Engineering) [a]

This gazette is also available free online at www.gpwonline.co.za

		13. Mr G Govender (Acting Senior Director: VC's Office) [a] 14. Dr T Kweyama (Dean of Students) [a] 15. Mr M Kau (Interim Senior Director: Operations) [a]
	Meeting with the Council Executive Committee (Excluding EMC members)	1. Mr M Morailane (Chairperson of Council) [a] 2. Mr OM Galane (Deputy Chairperson) [a] 3. Mr T Toni (Chairperson of the Planning and Resources Committee) [a] 4. Mrs N Mlaba (Chairperson of the Audit, Risk & Compliance Committee) [a] 5. Ms TH Zwane (Chairperson of Human Resources Committee) [a] 6. Ms S Mnyandu (Chairperson of Student Affairs Committee) [a] 7. Mr S Dlamini (Chairperson of Finance and Investment Committee) [a]
	Meeting with the Executive Committee of Senate (Excluding EMC members)	1. Mr RF Chidzonga ((Faculty of Engineering)) 2. Mrs JI Baah (Faculty of Engineering) 3. Dr TT Poswa (Faculty of Natural Sciences) 4. Prof M Coopoosamy (Faculty of Natural Sciences) [a] 5. N Magiya (Matshiya) (Faculty of Management Sciences) [a] 6. Dr Mvuyana (Faculty of Management Sciences) [a] 7. Prof BF Bakare (Faculty of Engineering) [a] 8. Dr Mthembu (Faculty of Natural Sciences) [a] 9. Dr B Ntshangase (Faculty Management Sciences) [a]
15/10/21	Meeting with Members of the Institutional Forum (IF)	1. Mr L Mthimkhulu (Chairperson) 2. Mr T Hadebe 3. Dr BYC Mvuyana 4. Mr S Mthethwa 5. Dr JM Makua 6. Prof AM Msomi 7. Mr S Mbonambi 8. Mrs J Baah 9. Mr AZM Kubone 10. Dr TT Poswa 11. Mr LP Nzama
	Meeting with Internal Members of Council	Mr G Govender (Senate) Prof L Naidoo (Academic Employees) Mr BK Zwane (Academic Employees) Ms SI Hlongwane (Non-academic Employees) Mr BSD Ntuli (Non-academic Employees)
[a] Attended remotely		

This gazette is also available free online at **www.gpwonline.co.za**

INDIVIDUAL INTERVIEWS		
Date	**Name**	**Position**
14/10/21	Dr V Reddy	Former Ministerial appointed member of Council *(Dec 2018 - Nov 2022; Resigned February 2021)*
	Dr D Malaza	Suspended VC
	Dr J Mabaso	Suspended Chief Audit Executive
15/10/21	Prof M Ramogale	Acting VC
25/10/21	Prof NJ Grove [a]	Former Ministerial appointed member of Council (*Dec 2018 - Nov 2022; Resigned June 2021*)
26/10/21	Dr F Randera [a]	Former Ministerial appointed member of Council (*June 2012 - May 2016; June 2016 - May 2020*)
	Mr MJ Sikhosana [a]	Former Council appointed Member of Council (*Apr 2017 - Mar 21; Resigned March 2020*)
	Mr M Monde [a]	Former Council appointed Member of Council (*Jun 2017 - May 2021*)
27/10/21	Dr NZ Qunta [a]	Former Council appointed Member of Council (*Jun 2018 - May 2022; Resigned in May 2021*)
	Mr S Keswa [a]	Former Council appointed Member of Council (*Aug 17 - Jun 21; Resigned in May 2020*)
	Ms LP Thabethe [a]	Former Council appointed Member of Council (*Dec 2020 - Nov 2024; Resigned in September 2021*)
02/11/21	Mr M Khumalo [a]	Suspended Senior Director: Operation
03/11/21	Dr D Malaza [a]	Suspended VC
04/11/21	Mr M Morailane [a]	Chairperson of Council
09/11/21	Prof M Ramogale [a]	Acting VC
23/11/21	Mr L Mthimkhulu [a]	Former Acting Senior Director: HRD
[a] Attended remotely		

This gazette is also available free online at **www.gpwonline.co.za**

ANNEXURE: 4 MUT IA Financial Report

Report to the Independent Assessor – Report of the Financial Expert
Mr Bulelani Mahlangu
31 October 2021

Terms of Reference

The Independent Assessor decided to co-opt additional expertise specifically to pursue all matters relating to the investigation into the circumstances that led to the cash-flow problems of the University. The terms of reference of the Financial Expert were as follows:

1. Conduct a detailed analysis of the financial statements of MUT since 2018 and of other relevant documentation, i.e. to determine the circumstances that led to the cash-flow problems of the University;
2. Provide an opinion on the current state of MUT's financial health and whether MUT is a going concern in financial terms;
3. To provide an opinion on the quality and adequacy of reports submitted by management to the Finance and Investment Committee and the Audit, Risk and Compliance Committee of Council;
4. In consultation with the Independent Assessor make recommendations to address the cash flow problems experienced by MUT; and
5. Make any other recommendations that could help improve the financial position of the University.

This gazette is also available free online at **www.gpwonline.co.za**

1. High Level Procedures Performed

a) Reviewed the Annual Financial Statements for the periods 2018 to 2020;
b) Reviewed the minutes of the Council, Finance & Investment Committee (FIC) and Audit, Risk and Compliance Committee (ARCC) meetings, together with management's submissions;
c) Reviewed the reports from independent parties – Management Reports prepared by the Auditors, and Actuarial Report IRO Post-Retirement Medical Aid;
d) Reviewed the Management's submissions for the period ended 30 June 2021 presented at the FIC meeting of 23 August 2021;
e) Discussed with NSFAS officials regarding MUT balances and outstanding amounts;
f) Interviewed people charged with governance - Chairpersons of FIC and ARCC
g) Interviewed the following MUT personnel, the VC, Acting VC, Acting DVC T&L, CFO, Director: Risk & Compliance and the Acting Director: Risk & Compliance; Supervisor: Student Housing, and Senior Director: Operations.

2. MUT Cash Position

2.1 MUT's Cash Situation when the Bridging Finance was Requested

In a letter dated 15 February 2021 the Acting VC wrote to DHET requesting it to permit MUT to use the infrastructure funding as bridging finance or to arrange an overdraft facility, in order to fund an anticipated cash deficit. The amount requested was R75m. A number of reasons were advanced for the deficit, the primary one being that contrary to the practice in the past, NSFAS had not paid University claims during January and February 2021. According to the CFO, as at end of December 2021 NSFAS owed MUT just over R314m.

I performed a high-level review of the University's 30 June 2021 Cash-Flow Projection (CFP) in order to assess how the R75m requested was arrived at, and whether it was reasonable given the financial affairs of the University at that time. I took management's word that the projection was similar to that at the beginning of 2021. I was able to determine that by allowing for no NSFAS receipts during the February and March in the projections, the deficit as at end of March 2021 worked out to be R49m. There have been reported instances where institutions experiencing financial distress used grants to fund their operating working capital requirements without first engaging the DHET. In this regard, the University should be commended for first seeking DHET's approval.

It is clear that there was some uncertainty towards end of last year regarding when the 2021 academic year would start. Having said that, it does appear that the institutions were warned timeously regarding the delays that could be expected on the NSFAS side.

This gazette is also available free online at **www.gpwonline.co.za**

From a governance point of view the matter was tabled by the CFO at the Executive Management Committee (EMC) meeting in January 2021 with the initial cash deficit forecast. The Acting VC subsequently raised this matter at the FIC meeting of 22 February 2021. Based on what is articulated in the minutes, there is no indication that that FIC or any governance structure took a formal decision to recommend for approval or approve the proposal to approach DHET. The Acting VC has indicated that the matter was discussed by EXCO, and the minutes of the meeting of 11 March 2021 reflect that. The matter was tabled at the Council meeting of 24 March 2021 for noting. It is worth noting that a request to the funder for financial assistance can never be a minor detail. It is a matter that requires to be dealt with formally in terms of the governance processes and be captured clearly in the minutes regarding which structure approved and when.

2.2 MUT's Current Cashflow Position

Like with all other universities MUT receives six tranches (because of COVID they were fewer) of cash from NSFAS, and this is paid two months in advance. DHET's tranches generally comes almost every month between April and November, a substantial portion of which gets paid between April and May. The last payment from NSFAS is processed in October. Ordinarily the timing of the cash inflows does not pose a problem. However, with the pushing out of the academic year, the institutions' CFP essentially would have to extend by the number of months added to the academic year, or alternatively institutions would have to prepare a 12- month rolling cashflow projections.

Current indications are that the 2021 academic year is only planned to be completed in January/February 2022, and it is expected that DHET will soon provide direction in terms of the start of the 2022 academic year. For the better part of this investigation, I had to work with the 30 June 2021 CFP because this was the latest available. On 2 November I was furnished with one for the period ended 30 September 2021. I understand from the CFO that he introduced the CFP mechanism early this year, and he anticipates that it will get better over time. It is regrettable that the finance system does not permit for an efficient manner of generating up to date CFP.

Based on the 30 June 2021 CFP, MUT was to have about R137m in its bank account as at end of December 2021, and per the one for the period ended 30 September 2021 the balance is estimated at R213m. The material difference in the projected balances, i.e. R137m versus R213m, is one good reason why regular CFP are critical for decision making. The expenditure in respect of the three months from January to March 2020 was in the region of R267m.

This gazette is also available free online at **www.gpwonline.co.za**

2.3 Principles of good cashflow management and considerations

a) Take in as much cash as quickly as possible – generally delays can be expected with some of the privately funded students. There is no reason why the NSFAS process should not work well for MUT.
b) Delaying the payment period – MUT's practice of paying 30 days from invoice is quite common, but it also possible to apply a supplier discrimination practice to stretch the payment terms.
c) Investing idle cash – given the nature of the tender processes and infrastructure projects, substantial amounts of cash are likely to lie idle for long periods.
d) Making cashflows visible – regular cash flow reporting is required to truly foster a cash management culture.
e) Matching funding to cash flow obligation – the asset instrument should be used to appropriately cater for the liability.

2.4 Control Mechanism

According to the CFO the earmarked grant funds are held in separate investment accounts with various financial institutions. The University uses ABSA as its primary bankers and its own call account with ABSA is named accordingly to identify it as MUT Own Funds while the funds on call in the ABSA account is named appropriately to identify it as MUT – Restricted Fund Call account. There are several call accounts, and the process works the same with other banks. When monies are received in respect of grants, they are transferred to the MUT- Restricted Funds call account. These funds are then reimbursed back to MUT from the MUT- Restricted Fund Call account upon written approval by the Vice Chancellor.
The Senior Director: Operations has indicated that he has raised serious concerns about lack of application of the Purchase Order (PO) process in respect of capital project. In his view the lack of this system has substantially compromised the budgeting process and his assessment is that funds have been lost as a consequence thereof. The Finance Director has responded to say that MUT does have a PO system, however the challenge is that POs for contracts are not created upfront for the full value. She indicates that SMC is currently looking at a system that can do proper do contract management.

2.5 Conclusions

Based on the above the following are my views:

a) That the University genuinely thought that a cash injection would be necessary, and the amount requested seems reasonable;

This gazette is also available free online at **www.gpwonline.co.za**

b) Based on the date on the letter to DHET, there is no indication that the request for funding was formally approved by Council or a delegated structure before DHET was approached. It would appear that the matter was presented at the governance structures meeting subsequent to the request having been sent to DHET.
c) MUT has a reasonable control mechanism in the form of having call accounts that are used for isolating grant funding, however lack of a PO system for contracts presents a very big risk;
d) That given the amount of R314m outstanding in December 2020, Management should have pro-actively engaged NSFAS towards end of 2020 or even beginning of 2021 in order to resolve the outstanding queries. It is very clear that even if MUT had received half of this amount due, it would have made a difference.
e) MUT currently does not have a robust mechanism to help it manage its cashflow regularly, even if the data is not real-time. If I had access to a September month end CFP (instead of the June one) this would have allowed me to have a better sense of the likely cash balances at end of December 2021.
f) If MUT robustly pursues the R105m owed to it by NSFAS and which flows from the 2020 year (see 3.1.2 under NSFAS balances below) and get it within this year, it unlikely to seek short term financial help from DHET.

3. Analyses of the Annual Financial Statements

3.1 Annual Financial Statements – Balance Sheet

Adjusted Net Balance Sheet – I have focused on the elements of the balance sheet that will result in cash inflows or outflows.

This gazette is also available free online at **www.gpwonline.co.za**

ELEMENT	NOTE	2020	2019	2018
		R000	R000	R000
Property Plant & Equipment (PPE)	**1**	**956 636**	**848 248**	**504 552**
Current Assets				
Inventories		926	1 586	1 760
Student Debt	**2**	350 634	219 674	264 625
Investments		2 880	3 456	3 589
Cash	**3**	977 266	822 671	611 649
		1 331 706	**1 047 387**	**881 623**
Non-Current Liabilities				
Post Retirement Medical Aid		32 438	33 679	32 684
Loans and Grants	**4**	786 682	807 087	669 683
		819 120	**840 766**	**702 367**
Current Liabilities				
Loans, Grants and Trade	**5**	353 849	202 083	198 060
Credit Balances in Student Accounts	**6**	83 115	84 347	70 508
Provisions		41 445	36 688	26 182
		478 409	**323 118**	**294 750**
Net Position		34 177	- 116 497	- 115 494
Net Position after allowing for the possibility of MUT recovering less from NSFAS		**- 15 863**	**- 166 497**	**- 165 494**

Below is an analysis of the balance sheet items, with focus on material balances.

The Net Position shows a significant change between 2019 and 2020, moving from a potential cash deficit of R116m to a cash surplus of R34m, an improvement of R150m.

Only R212m of the R314m student debt due from NSFAS had been received by the time we wrote this report. There are still significant uncertainties regarding other outstanding balances and in order to cater for that we have made an assumption that as much as R50m (2020) and R50m (2019) will not be recovered from debtors in general. The net effect of this adjustment is to worsen the position of the University from solvent position of R34m to a technical insolvency of R16m as at end of 30 December 2020.

3.1.1 – **PPE -**The analysis above has limitations in the sense that I have disregarded Property Plant and Equipment (PPE) from my calculations. It is a unique and specialised asset the value of which is very difficult to determine using market principles.

3.1.2 – Student Debt - the balance at December 2020 has increased significantly because of increase in the amounts owed by NSFAS. According to the CFO, the 31 December 2020 balance included an amount of R314m reflected as due from NSFAS.

This gazette is also available free online at **www.gpwonline.co.za**

3.1.2.1 NSFAS balance

Given the fact that 73% of the students at MUT are funded by NSFAS it became very clear that the process of submitting and monitoring payments from NSFAS is crucial.

As soon the Independent Assessor was appointed, I made contact with NSFAS in order to find out how far they were with the process referred to as Close Out Project (COP). The project was set up in order to establish the correct balances owed to NSFAS or by it to various institutions in respect of the 2017 to 2019 financial years. One of the triggers for this project is that the remittance process by NSFAS only commenced recently (late 2018 or in 2019), and before that there were no such monthly remittances from NSFAS. A remittance advice helps the receiving party to determine the specific details of who and how much is being paid in respect of each student.

On the 22nd of October 2021 I attended the first meeting of MUT and NSFAS, which was aimed at discussing the COP findings. A balance of R105,8m from 2020 is what NSFAS reflects as owing to MUT. The next phase is for MUT to present its own position.

I have not yet been able to establish the exact amount MUT reflects as outstanding on its side. What may complicate the matter is the fact that MUT was paid an amount of about R30m early last year towards Historic Debt. That process was paused, as the Historical Debt resolution was considered to be an integral part of the COP. A lot of progress has been made to get to a point that NSFAS can sit down with the institutions, but it does appear that much more work still needs to be done.

The following represents the various amounts paid by NSFAS towards the outstanding balance of R314m as at 31 December 2020 mentioned above.

EP NUMBER	DATE PAID	DESCRIPTION	BATCH-ENTRY	AMOUNT PAID
EP15665	12-Jan-21	MUT 20 DHET	12556-23	R27 079 826
EP15791	05-Feb-21	MUT 20 DHET	12911-19	R27 088 071
EP16051	18-Mar-21	MUT 20 DHET	14679-71	R18 884 089
EP16817	09-Jun-21	MUT 20 DHET	17017-8	R136 165 438
EP17154	16-Aug-21	MUT 20 DHET	18040-12	R1 582 735
				R210 800 159

If the system was efficient, this amount would have been paid to MUT by 30 December 2020 or so. This would have eliminated the need for financial distress at MUT. At the time of writing this report, we had not yet been presented by NSFAS with written reasons for the delays. A verbal comment I was provided with is that MUTs capacity to submit correct data all the time is in question and that in

This gazette is also available free online at www.gpwonline.co.za

certain cases it was incorrect interpretation of the rules. In response to my question regarding why NSFAS payments in respect of 2020 were spread out as show above, NSFAS officials explained that there were some complications due to the extended academic year and confirmation of additional budget on their side was received late. The result was that top ups for 2020 were processed late.

Failure to recover this balance on time not only made MUT doubt its ability to meets its short-term obligation, but it has effectively deprived MUT interest income.

The following was submitted to us by NSFAS to indicate some of the challenges they have in the current year with respect to MUTs submission.

ROW LABELS	COUNT OF ID NUMBERS
Course Code Mismatch	489
Duplicate Registration	36
Funding Condition	1
Grand Total	526

It has to be noted though that with respect to 2021 claims and based on what has been received up to so far, there is unlikely to be a repeat of end of 2020, where there was substantial amount of money owed by NSFAS.

3.1.3 – Cash - Refer to **note 3.2.1** below under 'investment income'.

3.1.4 – Loans and Grants - The interest rate on the two unsecured loans is 11.06% and 13.04% respectively, and it is fixed. There may well have been genuine reasons for fixing interest at that time, but on the face of it, it does not seem like it was prudent to fix when the rates are so high. Fixing the rate may provide certainty but deprives an entity the flexibility. A reduction in interest rate of up to 3% for instance would result in reduction in annual instalments by R2.5m, and the **Net Present Value** over the next nine years would be approximately R18m.

3.1.5 – (**Loans, Grants and Trade)**: **Accounts Payable** increased significantly at 31 December 2020 compared to the previous year. The balance also includes an amount of R124m, referred to as Deferred Revenue. This will be the portion of the 2020 revenue (tuition fees and accommodation fees) that were deferred and recognised only in 2021 as a result of the 2020 academic year only being completed in the first quarter of 2021. It is an accounting adjustment to recognise the revenue over the period during which the services were rendered but has no cashflow effect.

This gazette is also available free online at **www.gpwonline.co.za**

3.1.6 – Credit Balances in Students Accounts

The account arises from the fact that students sometimes deposit the student fees, but the details are not correct, or sometimes it is over-payment. It is often difficult to deal with the cases where students input wrong information. Where students have over-paid, it should be easier to process, even though institutions seldom do that.

3.2 High Level Analysis of the Income Statement

ELEMENT	Note	2020	2019	2018
		R000	R000	R000
Total income	1	1 067 113	999 148	945 329
Total expenditure		1 036 482	915 787	862 524
Salaries - Academic	2	231 779	235 586	210 579
Salaries - Non-academic	2	231 725	201 982	174 769
Depreciation	1	109 020	104 949	12 427
Other expenses	3	463 958	373 270	464 749
Surplus		**30 631**	**83 361**	**82 805**
Add back: depreciation and amortisation		109 020	104 949	12 427
Working capital changes adjustments		61 213	- 29 201	49 921
Other adjustments		14 694	56 009	- 106 201
Cash Generated by Operations		**215 558**	**215 118**	**38 952**

Income Statement

3.2.1 Total income

Other income - The total income of R1.067 billion at 31 December 2020 includes an amount of R11.54m which relates to other activities. The CFO has explained that currently there is little to no income from research as it has not been commercialised as yet at MUT, and that the Research Unit is under-capacitated. This aspect is to be addressed as part of the MUT's turnaround plan.

Depreciation - due to the application of the International Financial Reporting Standard (IFRS) 16 the amount reflected as payment in the income statement will differ from that actual paid, as some of the payments are treated as payment for right of use of the student accommodation. The result is that only R179m of the R259m is processed through the student lease account, and the rest is sits in depreciation and finance costs.

Investment income – At 30 June 2020 the investments stood at R1.28bn. Except for R66m which earned interest rate at 5.46%, the rest of the funds were invested at between 2.2% and 4.45%. Based on the schedule provided, R646m (of the R1,28bn) earned average interest of 2,625%.

This gazette is also available free online at www.gpwonline.co.za

Perusal of the market reveals that a few banks are offering very competitive rates which can range from 4.35% to 5.6%, without changing the risk profile. An additional 3% on R646m would yield R19m. Given the fact that MUT has had substantial grant funding balances for some time, it is regrettable to see just how much interest income may have been lost as result of not taking key investment decisions much earlier.

The University has approved a Cash and Investment Policy with risk management principles to direct the extent of diversification and according to the CFO they will be reviewing their investments strategy.

Tuition fees - The tuition fee increase for 2021 was 4.7%.

3.2.2 Salaries – Non-academic salaries seem to have increased dramatically over the past 2 years. The ratio between academic and non-academic has shifted from 1.2:1 to 1:1 in 2 years. According to the CFO this was partly due to the increase in the number of non-academic staff. He also indicated that the salary increases for 2021 was 0% for employees in the P1- P4 category, and 5.08% + R100 increase in the housing allowance, for employees in the P5 – P16 category.

Also included in salaries is the salary cost of suspended senior employees as at 30 September 2021

Job Title	Department	Date Suspended	Paid Whilst Suspended	# Of Months in suspension
Director #	Protection Services	Sep-19	R2 125 755	23
VC:R&P (Acting)	VC Office	May-20	R1 471 153	17
VC	VC Office	May-20	R4 857 399	17
Senior Director	Operations	May-20	R2 809 233	17

Dismissed on 19 August 2021

3.2.3 Other expenses – Council Member Stipends – the financial statement show that the 2020 doubled that of 2019. The Acting VC has explained that many more meetings of the EXCO took place during 2020.

Other expenses also included student residence related expenditure

Included in the total income is student accommodation of R331m and R309m for 2020 and 2019, respectively. The corresponding costs per the above schedule are R287m and R217m for 2020 and 2019. It is difficult to work out the surplus or deficit for the reasons that the employee costs and bad debt write off associated with the management of the residences have not been isolated.

This gazette is also available free online at **www.gpwonline.co.za**

Number of students	NOTE	2020	2019
Internal residences		1 888	1 888
External residences		8 654	7 654
		10 542	**9 542**
Expenditure in accounting terms			
		R000	**R000**
Student lease expense	**1**	179 808	107 148
Depreciation		77 350	79 000
Student Transport		30 394	30 920
		287 552	**217 068**
Expenditure in cash terms			
Student lease expense	**1**	259 471	189 267
Student Transport		30 394	30 920
		289 865	**220 187**

R259m represents the actual cash-outflow. The monthly payment of R289m gives us a sense of the quantum of loans that the University would be able to raise in order to build their own residences. At a discount rate of 8%, a R289m annual payments would allow the University to raise a loan of R2.8bn. Given an average cost per bed of R250 000, it would cost MUT R2.163bn to build residences to house 8 654 students. It may not be feasible at this stage for the University to provide all accommodation, but the net gain of R657m (R2.8bn – R2.163bn) demonstrates that it would be worth the University's while to consider owning more of its own residence, if it can get the land.

3.3 Analysis of Cash Generated By Operations (CGBO)

Cash Generated by Operations represents the amount of **cash a company generates (or consumes) from carrying out its operating activities** over a period of time
If we focus on December 2020, CGBO is more than seven times the size of surplus and generally this would imply a healthy cash situation. The challenge lies in the working capital part, in either the student debt subsequently having to be written down or the expected cash from NSFAS not being access on time.

Conclusion: Based on the information above, the following is what I can conclude:

a) The cash generated by operations is one strong indicator that generally MUT should generally not have challenges in its ability to pay for services as they fall due;
b) Given the NET POSITION, the R260m reflected as Retained Income in the AFS of 31 December 2020 is not represented by liquid assets;
c) Investment allocation is not efficient;

This gazette is also available free online at **www.gpwonline.co.za**

d) By sweating its assets and tightly managing costs, MUT can easily generate healthy surplus, and as consequence build its reserves;
e) NSFAS process has not been managed effectively and efficiently;
f) There is a strong likelihood that in general terms MUT charges much less for its offerings that its competitors; etc.

4. MUT's Financial Health – Going Concern Issue

4.1 Going concern

For the purposes of our report, we have adopted an accounting understanding of the term as a starting point. Going concern sometimes refer to entity's current financial condition, including its liquidity sources at the date that the financial statements are issued (for example, available liquid funds and available access to credit). The funds are necessary to maintain the entity's operations considering its current financial condition, obligations, and other expected cash flows ***within one year*** after the date that the financial statements are issued.

When evaluating an entity's ability to meet its obligations, management shall consider ***quantitative and qualitative*** information about the following conditions and events, among other relevant conditions and events known and reasonably knowable at the date that the financial statements are issued.

One factor that is often not given sufficient consideration when commenting on or assessing whether a higher education institution is a going concern is the fact that the government, as the primary funder, may consider factors other than those that are finance related in determining whether or not to continue funding an institution. It may not always be practical to do so but it does seem like a negative going concern opinion should not be expressed without first discussing the matter with DHET. This is not to say that the assessment has no value, it can certainly serve a useful function as an *early warning system*.

A quasi-actuarial balance sheet approach seems much more robust than the accounting- based balance sheet. The actuarial approach allows for applying probability theory to a set of facts and uses econometric modelling as a basis for constructing cash-based balance sheet.

The limitation of the accounting-based approach to constructing a balance sheet is best illustrated by in 4.2 below.

This gazette is also available free online at **www.gpwonline.co.za**

4.2 Pay as You Go Approach

The pay as you go approach makes recognition of the fact that only a fraction of an obligation is likely to require cash outflows in the short term.
It can be illustrated as follows:

ELEMENT	2020	2021	2022
	R000	R000	R000
Provision for leave and bonus	31 271	32 835	34 476
Post Retirement Obligation	32 438	32 061	31 516
Credit Balances in Student Debtors	83 115	80 000	77 000
Payments processed	6 436	6 550	7 143
	153 260	**151 446**	**150 135**
Leave pay and bonus paid/projected	3 464	3 637	3 819
Post Retirement Medical Aid	2 972	2 913	3 324
	6 436	**6 550**	**7 143**

Post Retirement balances were taken from the actuarial report of 31 December 2020.
As can be seen from the above even though the liability under consideration in 2020 is R153m, only R6.43m thereof will translate into cash outflow.

4.3 Auditors' Assessment

The external auditors included a high-level overview of the University 's financial viability as at 31 December 2019 and 2020. The auditors assessed the financial viability status of NSFAS as 'concerning'.

4.4. Conclusion

- Based on the above analysis, I conclude that MUT does not have a going concern problem for now.

This gazette is also available free online at **www.gpwonline.co.za**

5. Material Findings from Audits and Other Forms of Investigations/Enquiry

5.1 Material Internal Audit investigations

I interviewed the suspended Director: Risk & Compliance and he highlighted a number of investigations that would require a follow up because in his opinion they had a serious impact on the cashflows. We have picked only five of those he had brought to our attention.

ELEMENT	Note	INVESTIGATION	AMOUNT	Finding/Observation	MUT's response
Ghost Employees	1	Internal/SNG	2 400 000	SNG recommended clean up of HR data	KPMG will be re-engaged
Secondary Contracts and Evening Classes	2	Internal	Still to be determined	Executive and Internal Audit have done work	Ready to move to a full scale forensic
Residences Overcharging	3	Internal		Report is still a draft was never presented	MUT will respond when the investigation is complete
Supply Chain	4	Morar	Over R60m	SCM shortcomings have been highligthed by many parties	Some of those implicated by Morar have been dismissed
Payroll Manipulation	5	Internal		Employees were able to increase even their own salaries	

5.1.1 Ghost Employees – **Modus Operandi** –. A duplicate employee profile is created, the banking details will be manipulated, and the profile is deleted after the payroll has been processed. This matter was presented for further investigation and the recommendation was for MUT to first clean up the HR data. The R2.4m relates to only four instances/employee investigated, and as a result there is a strong view that this is just tip of the iceberg.

5.1.2 Secondary Contracts and Evening Classes – **Modus Operandi** –. Some staff members were likely paid for no work done. In certain instance the number of attendance details were deliberately distorted.

Evening classes cost	2021	2020	2019
Balances	27m*	20m	29m
* For nine months			

The VC flagged this as a big problem and indicated that at the time of his suspension it had already been discussed at the EMC and the responsibility for investigating had been determined. According to the Acting VC a fixed remuneration model was adopted at the insistence of theunion/s. The Acing

This gazette is also available free online at www.gpwonline.co.za

DVC Teaching & Learning indicates that often the schemes used were so sophisticated that they benefited from having a whistle-blower who fully understood how this was done.

I also interviewed the Acting Director: Risk & Compliance (DRC) about activities she thinks can contribute to better cashflow management, and she provided comments in respect of the evening classes and SCM. She has informed me an internal audit exercise was done on the secondary contracts and evening class arrangement, and she was working with the Acting DVC:Teaching & Learning. According to her the investigations started in July 2021. She also indicated that the findings had not yet been presented to the ARCC but her initial recommendation is a forensic investigation will be required to have a better understanding of the system. According to the CFO the cost linked to this project increased from R20m in 2020 to R27m by September 2021.

At our meeting, Acting DVC: T&L and Acting VC explained that the programme was instituted some years back as a response to the call for massification of education in order to promote access. They indicated that this issue remains a sensitive one and attempts to deal with it in the past met with fierce resistance. The DVC: T&L led the process of investigating and worked with Internal Audit. Given the limited capacity internally, he has also recommended a thorough investigation as a follow up to the work done by Internal Audit. The CFO has confirmed that there was no cost benefit analysis done to determine whether running this programme was run at a profit or loss. He furthers adds that at the moment the University does not have the capability of detailed costing of all programmes which it runs.

They have also indicated that an Executive decision was taken at the meeting of 21 October to discontinue the evening classes.

Regarding SCM, the Acting DRC feels that lack of capacity in this area is a big contributor to the current challenges at SCM. The Chair of ARCC also indicated that what remains a concern is the capacity in the SCM unit itself, as this results in challenges in terms of contract management. She thinks that it be addressed with the approval of the new organizational structure.

5.1.3 Residences and overcharging – the audit picked up a number of weaknesses, namely:

- Duplicate payments;
- Incorrect billing;
- Invoice incorrectly calculated; an
- Contract terms not followed.

The audit report was never tabled at the EMC or ARCC because the Director: Risk & Compliance was suspended before tabling it. I asked for clarity and some figures after noting the fact that the student operating lease account as noted in 3.2.1 under ‘expenditure’ had increase significantly,

This gazette is also available free online at **www.gpwonline.co.za**

from R107m in 2019 to R179m in 2020. Based on the discussion with the Student Housing Supervisor, I was able to establish that a significant part of this can be explained by the fact that there was increased number of students who qualified for NSFAS last year, and as a consequence the number of students staying at the residents also increased significantly.

In response to my question regarding ~~how~~ the process of identifying the service providers, the Supervisor explained to me that the Student Housing Unit often gets enquiries from people who would like to provide student accommodation. I asked if there was an established channel for anyone outside the University to perhaps send an e-mail to in order to have records of people who have submitted their profiles. From the response I got, I did not get a sense that there is a standalone database of these unsolicited proposals. He indicated that there is a panel (himself, 2 SRC Presidents, an SCM official, and a Safety and Health representative) who go out to inspect the accommodation offered. If the service provider meets the requirements, then information is relayed to the VC, who then makes an offer to the service provider. I asked if there was a system in place to ensure that no member of panel or staff benefits by providing student housing without declaring, he indicated that he would not know if SCM runs other processes in this regard.

He says that there was an attempt to run a proper tender process in 2019 but this was abandoned after SCM highlighted certain flaws in the process. His recollection is that the last time a proper process was run was in 2016 or 2017. Many current suppliers are on one-year contract as the intention is to enter into longer term contracts with landlords as from the beginning of 2022.

The CFO has indicated that Student Housing has been mandated to conduct full assessment on all building currently being leased by MUT in order to determine which landlords were complying or partially complying with the minimum norms and standards for student accommodation. He says that the report will be used to determine which landlords MUT would be willing to enter into new longer-term lease agreements with. The report is still to be presented to the EMC.
He also indicates that SCM issued an Expression of Interest (EOI) which is open advertisement for all potential providers of student accommodation to respond. This process was run by an external service provider and is currently at evaluation stage. He says that the purpose of this exercise is to expand the pool of service providers for this commodity. The evaluation will be finalised by the end of November 2021.

5.1.4 Payroll – **Modus Operandi** - based on the reports, payroll was breached several times. Unauthorised employees were able to create own contracts, change amounts, and even change the duration of contracts.

This gazette is also available free online at **www.gpwonline.co.za**

5.1.5 Supply Chain – a significant part of SCM issues were dealt with in the Morar Report, and this is one element where MUT applied consequence management with great effect.

5.2 Material Findings by External Auditors

The un-qualified audit opinion in respect of the 2020 financial year end represents a significant improvement compared to a qualification in 2018. In 2018 the auditors cited unquantified irregular expenditure and incorrect Net Book Value figures as the primary reasons for the negative audit opinion. It takes a lot to recover from a qualified opinion, and Management should be commended.

With respect to the 2020 financial year end, the auditors noted that there has been a significant improvement in the preparation of financial statements and performance reporting compared to the prior years. They further stated that "Management needs to further strengthen the oversight and monitoring on financial and performance reporting to eliminate material misstatements identified through the audit, which were subsequently corrected".

The auditors had the following comment to make in terms of internal control deficiencies:

"The university does not have procedures to ensure compliance with the supply chain management system. Furthermore, errors were identified during the year on procurement processes and on contract registers, such as:

- Contracts registers are not complete and accurate.
- The register submitted did not include amounts for all expenditure that was incurred in the current year for quotations.
- Preferential points were incorrectly calculated for one supplier"

Similar concerns were raised in the 2019 audit. With respect to SCM, the auditors commented that the documentation was either poor or non-existent.

5.3 Irregular Expenditure

At the end of the 2020 financial year the balance of irregular expenditure was R141m. Part of this balance is R110m that was carried forward from the 2019 year-end. We noted in the minutes that this matter was discussed many times, and at various forums.

According to the CFO and the Acting VC, the irregular expenditure emanated from a whole range of circumstances, some deliberate and others not, in the context of SCM and Contracts Management. The CFO points to complexities associated with the application of PFMA concepts in a university environment. The CFO says that as a response to this problem a number of initiatives were

This gazette is also available free online at **www.gpwonline.co.za**

undertaken to address the problem, including developing the IFAWUE (irregular, fruitless & wasteful and unauthorised expenditure) Framework. Consequence management has taking place following the findings of the Morar investigation.

The Chairperson of ARCC indicated that Council monitors very closely on irregular expenditure and would interrogate reasons provided by Management for any non-compliance. She has added that most irregular expenditure results from contracts that are under investigation.

Having read the minutes of FIC and Council, I am also of the view that this matter has been discussed a number of times by the different governance structures. I noted that some of the transactions were taken to Council for condonation, and others required more work. The FIC minutes were silent on the identity of those transactions that have been referred to Council for condonation.

The Acting Director: Risk & Compliance has indicated that some internal audit work has been done on the Irregular Expenditure process. Some of their findings indicate that the compiling of the irregular expenditure is suspect, with some of the transactions seemingly left out deliberately.

5.4 Security Tender

We are informed that the security tender was put on hold by Council, and the rational provided was that the disciplinary process should be first dealt with before the tender process can resume. Without more details regarding the rationale, it would seem that there may have been excessive caution, especially by a structure that is ultimately charged with ensuring that irregular expenditure does not take place. The tender expired on 31 July 2020. In our view a new tender process should have been started immediately after the expiry, and where Council was unsure, they could get legal guidance from the inhouse legal expertise.

5.5 Conclusion

Based on the findings of the auditors, there are serious challenges with SCM and Contract Management. Seemingly a lot of work has been done in order to deal with irregular expenditure but more still needs to be done. Based on the preliminary findings of some the investigations done, I am left with the impression that the control environment in certain areas is substantially weak.

This gazette is also available free online at **www.gpwonline.co.za**

6. Submissions to the Governance Structures - FIC, ARCC and Council

6.1 Minutes and Submissions

I reviewed the minutes of meetings which took place on the following dates:

FIC – (2 March 2020, 31 July 2020, 22 Feb 2021, 17 May 2021, 31 May 2021, 30 July 2021)
Council – (24 June 2020, 27 August 2020, 2 Dec 2020, and 24 March 2021)
ARCC – (31 March 2021, 30 July 2021, 23 August 2021)

My observation is that the meetings dealt with standard but necessary matters such as Management Accounts, Irregular Expenditure, Procurement Plans, Consequence Management, Supply Chain and Contract Management and Finance related policies, and student debt, etc.

My biggest focus was on FIC activity because this is where the finance/cashflow matters get interrogated in depth.

Based on the minutes I reviewed, I noted that the issue of quality of submissions by Management often came up at the FIC meetings. I got the impression that Members often needed to assist the Executive in order to ensure that quality submissions are made to Council.

FIC has also been vocal about SCM or irregular expenditure (and condonation) and contract management, etc. Council and ARCC also raised concerns about some of the SCM processes.

The issue of quality of the submissions was raised very sharply at the FIC meeting of 25 March 2020, and the Chair of FIC wrote to Council to raise concerns about Management's failure to, 1) produce reports and policies, 2) produce 3) to effect recommended changes to policies, etc.

Management differed and indicated that the submission to Council failed to outline in what ways the submissions do not meet the standard. Council considered this matter and referred to the Acting VC. It also noted that other Committees were having similar challenge.

Submissions - It was confirmed by the CFO that all finance related reports that serve at FIC, also serve at Council, unless FIC does not recommend a report/s to serve at Council. It is fair to say that the engagement at both the FIC and ARCC is very robust. Below are some submissions (6.1.1 and 6.1.2) that drew my attention, they were presented at the FIC meeting of August 2021:

This gazette is also available free online at **www.gpwonline.co.za**

6.1.1 Report on use of restricted funds & financial sustainability on30 June 2021

This report included the following:
"It may occur that at a point in time the cash available will be less than restricted grants. This is more especially during the first quarter of the year. The reasons for this could vary and include the following:

- cash collections from students over the period are very low,
- NSFAS making late payments,
- Block and Fee Gap grant from DHET not received".

6.1.2 Cash & Cash Equivalents

The table below summarises the comparison of the **Cash & cash equivalents** against the Deferred Income (Restricted Funds) and Student debt as at 30 June 2021 against previous periods.

Cash & cash equivalent vs Earmarked Grants & Student Debt

ELEMENT	30-Jun-21	31-May-21	31-Dec-20	30-Sep-20	30-Jun-20
Cash & cash equivalent	1 263 639	948 971	980 136	1 110 041	1 109 794
Earmarked Grants	905 316	941 662	837 150	807 765	830 306
MUT unrestricted cash	**358 323**	**7 309**	**142 986**	**302 276**	**279 488**
Total Student Debt Before Impairment	**727 321**	**593 181**	**579 858**	**534 378**	**939 007**

The submission went on to further state "The above indicates that MUT has a positive balance of R358m of owned funds at the end of the second quarter".
Two new programmes, Analytical Chemistry and Advanced Diploma in Agriculture, were referred to Council for approval without any accompanying cost benefit analysis. To its credit, Management did a benchmark in terms of the fee to be charged.
The following are some of my observations regarding the FIC submissions:

a) The Management Accounts were not accompanied by cashflow projections. Alternatively, the Management Accounts were not reconciled to the cash position.
b) The Student Balances and NSFAS Funding submission had improved but it still does not systematically present the overall position in a manner that would give the FIC Member a sense of the balance sheet account.
c) I do not see any presentation of full set of financial statements, i.e. Balance Sheet, Income Statement and Cashflow Statement. This should be standard, at least for 3rd and 4th quarters (notes would be optional);

This gazette is also available free online at **www.gpwonline.co.za**

d) The comment regarding “cash balances sometimes being below the balance per grant funding” suggests that there have been instances where capital grants were used to finance working capital. The policy on irregular expenditure may already cater for this, failing which the cash and investment policy or even grants policy would have to state succinctly that grant funding cannot be used for any other purpose without the authorisation of the Council.
e) For too long the University has left money in assets that generate low interest.
f) The presentation in respect of cash and cash equivalents is misleading in the sense that it portrays R358m as being enough to cater for other expenses. It does not indicate what the commitments are against the R358m.

The Chairperson of ARCC has indicated that the issue of financial sustainability was flagged as a concern when Management presented their budget for approval. The meeting also urged Management to also focus on the opportunities available for generating third stream of income.

The Chairperson of FIC has indicated that the Committee has raised concerns regarding the risk of possible delays in receiving government funding. He said that the Committee also highlighted the need for MUT to generate third stream income and one initiative that is currently being discussed by the Convocation, concerns how they can raise funds for the University. He also made the point that when Council was asked to approve the two programmes, namely Analytical Chemistry and Advanced Diploma in Agriculture, there was a robust discussion about this presentation and one point that was raised very strongly was: why some of the MUT programmes were much cheaper than those of their competitors.

I also asked the CFO regarding what he considers to be major issues from a cashflow improvement point of view. He cited several interventions that are required, some of them are structural. For the purposes of my report the two that I thought are quite key are 1) a more robust debt collection process, and 2) a review of the fee structure. This is line with own our finding regarding fees and we drew comparison with two other universities.

Based on the minutes, in my view none of Council, FIC or ARCC seemed to deal with the matter of financial sustainability or in a comprehensive and integrated manner. I could not see anywhere in FICs minutes or submissions where finance strategy was discussed. In terms of the Risk Appetite Statement of 2019 under financial and commercial activities financial sustainability is listed amongst those activities for which the institution has low appetite. By implication the ARCC would be expected to deal with this matter extensively and elevate its concerns to the Council. If these structures dealt with the matters of finance strategy or finance risk strategies, then it is not so obvious from the minutes.

This gazette is also available free online at **www.gpwonline.co.za**

There are varying factors that can be considered when talking about financial suitability and the ones I considered were: growth and capacity to do so, evaluating the cost structure, assessing the efficiency of the allocation of resources, managing assets and debt in integrated manner, adopting a value chain analysis approach, assessing the possibilities of sharing the resources (e.g. IT infrastructure), on-line capabilities and possibilities, green energy, etc)

Having said that it is important to recognise that the Executive is now looking at the issue of a financial sustainability plan and have to report to Council during December 2021. I would expect to see this being part of the agenda of all three structures, namely Council, FIC and ARCC, and for the plan to be comprehensive.

6.2 CVs of the FIC and ARCC Chairpersons

I asked for the CVs of the FIC and ARCC Chairpersons, and I noted that the Chairperson of FIC had completed his studies in 2018. There was not much mentioned in the CV I was provided with by way of work experience. At our meeting with the Acting VC, he explained that there was an open process followed, and the fact that he was the Deputy Chairperson of FIC at the time when the election of the Chairperson took place, did play a role.

6.3 Conclusion

Based on the above, my views are the following:

a) ARCC and FIC generally ask very pertinent questions, and they probe;
b) Some of the finance reports lack the structure and content to help FIC to make add more value or make meaningful decisions (to help with decision making); and
c) Compliance related matters have been strongly pursued, however the issue of financial sustainability was not comprehensively dealt with by any of the governance structures, either as a standalone or as part of a strategic conversation about the University as a whole.

7. Recommendations

7.1 Cash Management

The following are recommendations we would like to make in respect of cash management strategies:

7.1.1 MUT should consider engaging the services of as **asset consultant** in order to explore the possibilities of using investment instruments that are safe and offer competitive rates. Linked

This gazette is also available free online at **www.gpwonline.co.za**

to this, the University needs to develop **a capital projects specific cash-flow projection** in order to determine the average cash idle time and therefore identify the appropriate investment instrument. Being able to approach a bank with a considerable amount to invest, e.g. R200m or R300m (this has to be within the risk appetite), can give the institution increased power to negotiate better interest rates. We implore the University to ask DHET for permission to keep the returns above a certain level, e.g. keep returns above the current upper 4.5% mark, provided MUT can demonstrate that they are not just hoarding the cash;

7.1.2 MUT must pro-actively engage NSFAS about the possibility of getting paid earlier, even if this was a fraction of the monies that would be paid in January or February. The senior people at MUT ought to be visible and engage NSFAS. Based on my discussion with NSFAS they are willing to listen to institutions who come up with genuine reasons for cashflow distress;

7.1.3 Prepare a rolling cashflow projection. In other words, instead of doing a cashflow that ties to the year end of the University, present a 12- month cashflow at FIC meeting. These monthly cashflow projections should be presented at the Executive meetings until the cash position stabilises. Linked to this is the recommendation listed under 7.2 below regarding the finance system infrastructure;

7.1.4 Our view is that the Cash-Flow Projection should be presented together with the Management Accounts at FIC. Alternatively, they should also include a reconciliation between the accounting and cash figures. Structuring the reports in a meaningful way is key and please refer to Annexure 1 as one way of presenting Student Debt;

7.1.5 MUT should pressurise NSFAS to finalise the Close Out Report as it relates to MUT as soon as possible. Whatever the minimum on which both parties agree on, MUT should insist that it gets paid to MUT as soon as possible, whiles the other queries are still be resolved;

7.1.6 With respect of the R105m outstanding, MUT should push NSFAS to have this paid within 2021.

7.2 Financial Sustainability and Other

In response to our question regarding where the process of developing a turnaround strategy is, the CFO informed us that a strategy session took place late September 2021, and the following are some of the interventions the Executive is going to consider, 1) Cost reduction, 2) Leverage funding, 3) Not a research-led university and have to change course, 4) Seek funding from local and

This gazette is also available free online at **www.gpwonline.co.za**

international funding agencies, 5) Generate 3rd stream income, 6) Review secondary and part time contracts.

According to the CFO the turnaround plan will be divided into medium term (2022 to 2025) and long-term plan, i.e. 2026 onwards and this will be incorporated into MUT's 5 year strategy 2026 – 2030. It was also resolved that all departments should come up with five activities that will contribute to the University's financial sustainability.

Based on the discussion with the Acting VC, the requirement to put a turnaround plan together came from Council, and this is now forming part of his KPIs.

We have noted the University's initiative in terms of its finances, and we support the focus. In order to supplement its efforts, we would also like to recommend the following:

7.2.1 **Regarding third stream income and commercialisation**, we commend the idea of creating an Institutional Advancement Directorate and of the possibility of reviewing the internal debt collection capacity. We strongly suggest that MUT should **partner** with some of the higher education institutions, some of them have mastered the issue of business development units within the Higher Education Sector. A formal MOU in this regard can be structured.

7.2.2 **SCM interventions –** MUT should consider having a co-sourcing SCM arrangement until the unit stabilizes. Co-sourcing is used extensively in Internal Auditing. There are also service providers who specialise in running tender processes, and this is one option MUT should consider for complex tenders, including security and construction ones.

7.2.3 **Security tender and student accommodation** – we strongly recommend that an open procurement process should be take place sooner than later, and the process can be outsourced if there is limited internal capacity. In my understanding an Expression of Interest (EOI) process should be followed by an RFP or tender process, as it is risky to award a contract on the basis of an EOI.

7.2.4 **Debt restructuring** – MUT should consider going to the market to get debt management expertise to propose how to restructure ABSA loan.

This gazette is also available free online at **www.gpwonline.co.za**

7.2.5 **Set targets for generating surplus** – For instance they could have a target of having R100m as cash reserves in 5 years, and this should form part of the VC's KPIs. This would push the University to look for savings on a yearly basis.

7.2.6 **Revenue**

7.2.6.1 **Fees – normal courses**

ELEMENT	MUT		CUT		DUT		CPUT	
	2019		2017		2018		2019	
Subsidy	425	62%	483	52%	1001	56%	1530	66%
Tuition	252	37%	363	39%	710	40%	712	31%
Other Imc	11	2%	80	9%	71	4%	61	3%
	688		**926**		**1782**		**2303**	

Comparison based on figures alone can be simplistic. One positive to take out of this comparison though is that even though an entity is small (example of CUT) it can still excel when it comes to research and generating own income. MUT has a chance and scope to improve in the area of "other income". By reviewing and increasing its fees, it would reduce its dependence on government funding, and DUT in this case is a good example.

A benchmark on many more courses should be done, and scenario planning be used to answer questions such as: what would happen to overall revenue if the overall Diploma in HR cost was increased by 5% to 10% over a 2-year period, first 5% then 5%, as an example. Increasing student fees is a delicate matter and as a result a special discount dispensation may have to be created for students who are already in the system.

Fee Structure 2021			
	MUT	CPUT	DUT
Diploma in Human Resources (3 Year)	59 510	73 675	84 990
Diploma in Accounting/Accountancy (3 Year)	72 430	71 035	98 700
B Tech Chem Eng/Adv Diploma in Chem Eng	33 090	38 361	37 725

7.2.6.2 **Short-term courses and programmes -** Higher Education Institutions generate substantial amounts of revenue by offering short courses. But for this to be sustainable, it should be done subject to the proviso that a business plan (incorporating a product/profitability analysis, fees charged by competitors, relevance, size of market, etc) of the proposed course or programme is done and the governance structures are presented with comprehensive proposals that enable an intelligent analysis. MUT has to do the necessary benchmarking and come up with a list of short-term courses that can be offered.

This gazette is also available free online at **www.gpwonline.co.za**

7.2.6.3 **Fundraising -** Any entity that requires a B-BBEE certificate can get points by giving grants or donations to other entities. MUT can targets banks, insurance companies and telecommunication companies and write proposals to each. They would have to identify projects that require funding, as many funders may prefer funding a project rather than giving cash.

7.2.7 **Cost reduction –** University VAT can be complex, and lack of understanding of **vat law** may lead to serious cash leakage. MUT must engage service of tax consultant on a contingency basis. **Municipality rates** is one area that requires attention. It is reported that many government institutions and even entities like universities are not properly demarcated, or properly registered at the deeds office or appropriately categorized for rates purposes. There are people who specialise in this type of work who can be engaged.

7.2.8 **The finance system infrastructure –** ITS has serious limitations and getting a meaningful finance report can be a huge challenge. If MUT wants an alternative ERP solution, it can leverage what other higher education institutions are using. UCT has successfully implemented SAP as their ERP. Attempting to implement SAP from standard whether industry solution or vanilla is expensive. As an option MUT could approach UCT to leverage their configured/customized solution. MUT would need to buy SAP licences but their implementation cost would be minimized. UCT may want to recover some of their costs from MUT, but this would be far cheaper than attempting a green field implementation. It does not have to be UCT, it can be any other university.

7.2.9 **Post-Retirement Medical Aid** – medical aid inflation per the actuarial reports was 6.8% in December 2020 however the discount rate is 9%. We recommend that MUT approaches at least three insurance companies to establish if there are better ways of managing this liability. Some of the retirees may even prefer cash. Alternatively use asset consultant (an actuary) to make proposals regarding finding investment that can match the profile of the liability.

7.2.10 **FIC capabilities –** co-opting people may be a cheaper way-of accessing expertise, without have to pay them as consultants. A structure like FIC may benefit greatly from such an arrangement because it deals with interrelated yet specialised areas of finance. A strong finance background in terms of training and/or of implementing effective finance interventions, rather than generic leadership capability, should be a strong consideration in deciding who the Chairperson of FIC should be.

7.2.11 **Lease versus own** – as indicated under **Student Residences Income and Expenditure** above, there may be instances where it is more cost effective for the

This gazette is also available free online at **www.gpwonline.co.za**

University to own its own residences. We recommend that this point be considered as part of the MUT's long term planning.

7.3 Governance Related Matters

Given the complexities and the nature of the allegations at MUT, our high-level control environment assessment, we recommend that DHET institutes an independent and comprehensive investigation into the following areas:

- Secondary contracts and part-time lecturing (evening classes), i.e. expand on the work done by Internal Audit so far;
- Student residence leases and related expenditure, such as transport costs, etc. The investigation should include their entire process, from sourcing, contract preparation, supplier invoice review, POs, payment, etc.
- Irregular expenditure, with focus on reasonableness of reasons advanced for condonations.

We further recommend that Council should be urged to do investigations in the following areas:

- Payroll integrity (are employees paid in line with their positions, and is the pay reasonable given the level and what is paid to peers)
- Tenders issued (excluding capital projects) from May 2020;
- HR database - with focus on whether there are ghost employees, and
- Capital Projects – with emphasis on tenders issued from May 2020, and all payment made with effect from 1 January 2018.

This gazette is also available free online at **www.gpwonline.co.za**

Annexure 1

STUDENT DEBT AND NSFAS FUNDING				
Nsfas	**MUT**	**Paid by NSFAS**	**Outstanding**	**Explanation for discrapancy**
Opening balances	14 000 000			
Historic Debt	1 000 000	500 000	500 000	NSFAS has put this process on hold
Standard claims from previous year	13 000 000	7 500 000	5 500 000	NSFAS says this is unfunded mandate
Claims Submitted during the year			-	
Claim 1 - January	50 000 000	50 000 000	-	
Claim 2 - March	50 000 000	48 000 000	2 000 000	Dispute over data
Claim 6 - October	50 000 000	38 000 000	12 000 000	**Note 1**
			20 000 000	
Other student debtors				
Opening balance	560 000 000			
Repaid by students				
Quarter 1	6 000 000			
Quarter 4	3 000 000			
	9 000 000		560 000 000	
Cost of collection				
Quarter 1	2 000 000			
Quarter 4	1 000 000			
	3 000 000			
Net inflow	6 000 000			
Net closing			551 000 000	
Less: Written Off or Provided For			- 400 000 000	
Balance Sheet			**151 000 000**	
Note 1 - the payment of R38m includes R1m that was disputed in March				
MUT is still investigating the other R1m and will submit in August 2021				

This gazette is also available free online at **www.gpwonline.co.za**

DEPARTMENT OF TRADE, INDUSTRY AND COMPETITION

NO. 1932 **25 March 2022**

SOUTH AFRICAN SUGAR ASSOCIATION
Kwa-Shukela, 170 Flanders Drive, Mount Edgecombe
P.O. Box 700, Mount Edgecombe, KwaZulu-Natal, 4300
Telephone: +27 31 508 7000
Website: www.sasa.org.za

THE SUGAR INDUSTRY AGREEMENT, 2000, AS AMENDED

NOTICE UNDER CLAUSE 82 OF THE SUGAR INDUSTRY AGREEMENT, 2000 AS AMENDED

The South African Sugar Association hereby publishes under clause 82 of the Sugar Industry Agreement, 2000 as amended, the varieties of sugarcane, which varieties have been duly approved by the South African Sugar Association for planting during the year commencing 1 April 2022 exclusively in the control areas or part of a control area specified.

PEST, DISEASE AND VARIETY CONTROL: 2022/2023 SUGARCANE VARIETIES

CONTROL AREAS	VARIETIES OF SUGARCANE FOR PLANTING EXCLUSIVELY WITHIN EACH CONTROL AREA
Lowveld	N14, N17, N19, N22, N23, N24, CP66/1043, N25, N26, N28, N30, N36, N40, N41, N43, N46, N49, N53, N57, N70, N71 and N73
Pongola	N14, N17, N19, N22, N23, N24, CP66/1043, N25, N26, N28, N30, N36, N40, N41, N43, N46, N49, N53, N57, N70, N71 and N73
Mkuze / Makhatini	N17, N19, N23, N25, N36, N40, N41, N43, N46, N49, N53, N57, N67, N70, N71, N72, N73, N76 and N77
Umfolozi	N12, N14, N17, N19, N21, N22, N23, N24, N25, N26, N27, N28, N30, N33, N35, N36, N40, N41, N42, N43, N45, N46, N47, N49, N51, N53, N55, N57, N58, N59, N60, N64, N67, N70, N72, N76 and N77
Felixton	NCo376, N12, N14, N17, N19, N21, N23, N25, N27, N35, N36, N39, N40, N41, N42, N45, N47, N49, N51, N53, N55, N57, N58, N59, N60, N63, N64, N67, N68, N70, N72, N76 and N77
Entumeni	NCo376, N12, N12 ZAPYR, N16, N17, N21, N25, N27, N31, N35, N36, N37, N39, N40, N41, N42, N45, N47, N48, N50, N51, N52, N54, N55, N56, N58, N59, N61, N62, N63, N66, N68, N69, N74, N75 and N78
Amatikulu	NCo376, N12, N12 ZAPYR, N17, N19, N21, N25, N27, N31, N35, N36, N39, N40, N41, N42, N45, N47, N51, N52, N53, N55, N56, N57, N58, N59, N60, N63, N64, N67, N68, N70, N72, N76 and N77
North Coast	N12, N12 ZAPYR, N14, N16, N17, N19, N21, N22, N25, N26, N27, N31, N35, N36, N37, N39, N40, N41, N42, N45, N47, N48, N49, N50, N51, N52, N53, N54, N55, N56, N57, N58, N59, N60, N61, N62, N63, N64, N66, N67, N68, N69, N70, N72, N74, N75, N76, N77 and N78

CONTROL AREAS	VARIETIES OF SUGARCANE FOR PLANTING EXCLUSIVELY WITHIN EACH CONTROL AREA
Midlands North	N12, N12 ZAPYR, N16, N21, N23, N25, N26, N27, N31, N35, N36, N37, N39, N40, N41, N42, N43, N45, N47, N48, N49, N50, N51, N52, N53, N54, N55, N59, N60, N61, N62, N66, N69, N70, N74, N75 and N78
Midlands South	N12, N12 ZAPYR, N16, N21, N23, N25, N26, N27, N28, N30, N31, N35, N36, N37, N39, N40, N41, N42, N43, N45, N47, N48, N49, N50, N51, N52, N53, N54 N55, N58, N59, N60, N61, N62, N66, N69, N74, N75 and N78
Sezela	NCo376, N12, N12 ZAPYR, N16, N21, N27, N31, N36, N37, N39, N40, N41, N42, N45, N47, N48, N50, N51, N52, N53, N54, N55, N56, N58, N59, N60, N61, N62, N63, N66, N67, N68, N69, N72, N74, N75, N76, N77 and N78
Umzimkulu	NCo376, N12, N12 ZAPYR, N14, N16, N17, N21, N27, N31, N36, N37, N39, N40, N41, N42, N45, N47, N48, N50, N51, N52, N54, N55, N56, N58, N59, N61, N62, N63, N66, N67, N68, N69, N72, N74, N75, N76, N77 and N78
Du Roi Agritech (Pty) Ltd	N14, N19, N23, N25, N36, N40, N41, N46, N49, N50, N52, N53, N57, N60, N67, N72

THE SUGAR INDUSTRY AGREEMENT, 2000, AS AMENDED

CONTROL AREAS

AREAS OF JURISDICTION BY LOCAL MUNICIPALITIES

Lowveld	City of Mbombela (MP 326) Nkomazi (MP 324).
Pongola	uPhongolo (KZN 262), Umhlabuyalingana (KZN 271); Nongoma (KZN 265) and Jozini (KZN 272), north of the Mduna River.
Mkuze/Makhatini	Umhlabuyalingana (KZN 271), Jozini (KZN 272), uPhongolo (KZN 262), Nongoma (KZN 265) and the Big Five Hlabisa (KZN 276) the northern boundary being the Mozambique and Swaziland borders, the Jozini dam and south of a line along 31º28'19.8"S up to 27º28'19.8"E. The western boundary being the eastern and southern shores of Jozini dam and the western shore of Jozini dam up to Candover (at the crossing of the R69 - 31°28'19.8"S) then in line with Candover south along 27°28'19.8"E up to the Mduna River. The southern boundary being the Mduna River and along the Mzunduzi River up to 27°47'52.3"S and from there eastwards to the Indian Ocean.
Umfolozi	Big Five Hlabisa (KZN 276), Mtubatuba (KZN 275), uMfolozi (KZN 281), the northern boundary being the Mduna River and along the Mzunduzi River up to 27°47'52.3"S and from there eastwards to the Indian Ocean. The southern boundary is Teza Lake.
Felixton	uMlalazi (KZN 284) north of the Bhadi River and east of the road linking the R102 with the town of Mtunzini, uMhlatuze (KZN 282), uMfolozi (KZN 281) south of Kwambonambi, Mthonjaneni (KZN 285), uMfolozi (KZN 281) and City of uMhlathuze (KZN 282).
Amatikulu	uMlalazi (KZN 284), south of the uMlalazi river and Mandeni (KZN 291) north of the Tugela and Nyoni Rivers and west of the R102.
Entumeni	uMlalazi (KZN 284), Nkandla (KZN 286) and Mthonjaneni (KZN 285), including the Eshowe, Entumeni and Melmoth cane supply areas.
North Coast	Mandeni (KZN 291), south of the Tugela and Nyoni Rivers and east of the R102; KwaDukuza (KZN 292), Maphumulo (KZN 294), Umvoti (KZN 245), Ndwedwe (KZN 293) and eThekwini (ETH), east of the N3.
Midlands North	East of the N3 and within the boundaries of Umvoti (KZN 245), Msinga (KZN 244), uMshwathi (KZN 221), Maphumulo (KZN 294), Mkhambathini (KZN 226), the Msunduzi (KZN 225) and uMngeni (KZN 222).
Midlands South	West of the N3 and within the boundaries of Richmond (KZN 227), Mkhambathini (KZN 226), the Msunduzi (KZN 225) and eThekwini (ETH).

Sezela	Ubuhlebezwe (KZN 434), Dr Nkosazana Dlamini-Zumu(KZN 436), Umdoni (KZN 212), eThekwini (ETH) south of the R603, Umdoni (KZN 212), Umzumbe (KZN 213) and Ray Nkonyeni (KZN 216) north of the Mzumbe River.
Umzimkulu	Winnie Madikizela-Mandela (EC 443), uMuziwabantu (KZN 214), uMzimkhulu (KZN 435) Ubuhlebezwe (KZN 434) and Ray Nkonyeni (KZN 216), south of the Mzumbe River.
Du Roi Agritech (Pty) Ltd	Greater Tzaneen (LIM 333). Sugarcane used for the purposes of propagating NovaCane® tissue culture plant material, single-budded transplant seedcane material or whole-stick seedcane.

DEPARTMENT OF TRADE, INDUSTRY AND COMPETITION

NO. 1933 **25 March 2022**

STANDARDS ACT, 2008
STANDARDS MATTERS

In terms of the Standards Act, 2008 (Act No. 8 of 2008), the Board of the South African Bureau of Standards has acted in regard to standards in the manner set out in the Schedules to this notice.

SECTION A: DRAFTS FOR COMMENTS

The following draft standards are hereby issued for public comments in compliance with the norm for the development of the South Africa National standards in terms of section 23(2)(a) (ii) of the Standards Act.

Draft Standard No. and Edition	Title, scope and purport	Closing Date
SANS 3001-CO1-12 Ed 1	*Civil engineering test methods – Part CO1-12: Testing fresh concrete – Self-compacting concrete – Sieve segregation test*. Specifies the procedure for determining the sieve segregation resistance of compacting concrete.	2022-05-05
SANS 3001-CO1-9 Ed 1	*Civil engineering test methods – Part CO1-9: Testing fresh concrete – Self-compacting concrete – Slump-flow test.* Specifies the procedure for determining the slump-flow and t_{500} time for compacting concrete.	2022-05-10
SANS 3001-CO1-13 Ed 1	*Civil engineering test methods – Part CO1-13: Testing fresh concrete – Self-compacting concrete – J-ring test.* Specifies the procedure for determining the passing ability (measured by the blocking step), the flow spread and t_{500J} flow time of self-compacting concrete as the concrete flows through the J-ring.	2022-05-10
SANS 3001-CO1-11 Ed 1	*Civil engineering test methods – Part CO1-11: Testing fresh concrete – Self-compacting concrete – L box test. Specifies the procedure for determining the passing ability ratio for self-compacting concrete using the L box test.*	2022-05-10
SANS 60335-2-102 Ed 2	*Household and similar electrical appliances – Safety – Part 2-102: Particular requirements for gas, oil and solid-fuel burning appliances having electrical connections.* Deals with the safety of gas, oil and solid-fuel burning appliances having electrical connections, for household and similar purposes, their rated voltage being not more than 250 V for single-phase appliances and 480 V for other appliances.	2022-05-13
SANS 60317-25 Ed 1	*Specifications for particular types of winding wires – Part 25: Polyester or polyesterimide overcoated with polyamide-imide enamelledround aluminium wire, class 200.* Specifies the requirements of enamelled round aluminium winding wires of class 200 with a dual coating.	2022-05-13
SANS 10393 Ed 2	*Hair care products – General requirements.* Specifies the requirements for the labelling of all hair care products, and specifies the safety and efficacy of these products.	2022-05-23
SANS 1799 Ed 2	*Watt-hour meters – AC electronic meters for active energy.* Specifies requirements for newly manufactured static watt-hour meters of accuracy classes 1 and 2, for the measurement of alternating current (a.c.) electrical active energy of frequencies in the range 45 Hz to 65 Hz, and for their type tests.	2022-05-23
SANS 2235 Ed 1	*Raw pet food – Nutritional and manufacturing requirements.* Specifies nutritional requirements for commercially prepared raw pet food, complementary and complete, for dogs and cats, and includes the recommended feeding guide and metabolizable energy factor.	2022-05-23
SANS 22300 Ed 2	*Security and resilience – Vocabulary.* Defines terms used in security and resilience standards.	2022-05-23
SATS 17021-13 Ed 1	*Conformity assessment – Requirements for bodies providing audit and certification of management systems – Part 13: Competence requirements for auditing and certification of compliance management systems.* Specifies the competence requirements for personnel involved in the audit and certification process for compliance management systems (CMS). Complements the existing requirements of ISO/IEC 17021-1.	2022-05-23

This gazette is also available free online at **www.gpwonline.co.za**

SCHEDULE A.1: AMENDMENT OF EXISTING STANDARDS

The following draft amendments are hereby issued for public comments in compliance with the norm for the development of the South African National Standards in terms of section 23(2)(a) (ii) of the Standards Act.

Draft Standard No. and Edition	Title	Scope of amendment	Closing Date
ARP 056 Ed 1.2	*Low smoke solid fuel (LSSF) for household use*	Amended to update the cross references in the clause on methods of test and to delete the annex on notes to purchasers.	2022-05-01
SANS 1755 Ed 1.5	*Petroleum jelly (petrolatum)*	Amended to delete the annex on notes to purchasers.	2022-05-01

SCHEDULE A.2: WITHDRAWAL OF THE SOUTH AFRICAN NATIONAL STANDARDS

In terms of section 24(1)(C) of the Standards Act, the following published standards are issued for comments with regard to the intention by the South African Bureau of Standards to withdrawn them.

Draft Standard No. and Edition	Title	Reason for withdrawal	Closing Date

SCHEDULE A.3: WITHDRAWAL OF INFORMATIVE AND NORMATIVE DOCUMENTS

In terms of section 24(5) of the Standards Act, the following documents are being considered for withdrawal.

Draft Standard No. and Edition	Title	Reason for withdrawal	Closing Date

SECTION B: ISSUING OF THE SOUTH AFRICAN NATIONAL STANDARDS

SCHEDULE B.1: NEW STANDARDS

The following standards have been issued in terms of section 24(1)(a) of the Standards Act.

Standard No. and year	Title, scope and purport
SANS 1050-4:2022 Ed 1	*Laboratory controlled environments – Part 4: Microbiological safety cabinets – Class II Externally ventilated (fixed Ducting) Type B1 and B2*. Specifies basic requirements for the construction, fittings, and pre-installation and post-installation performance of class II microbiological safety cabinets (also known as biological safety cabinets) which are powered by external exhaust air systems and also discharged externally to the building/facility, that are intended to provide protection from hazardous microbiological agents (and, if required by the customer or the user (or both), from organic toxins and non-corrosive volatile organic agents) for the operator, the environment, and also to protect material used in the cabinet from cross contamination.
SANS 60335-2-84:2022 Ed 3	*Household and similar electrical appliances – Safety – Part 2-84: Particular requirements for toilet appliances*. Deals with the safety of electric toilet appliances having a rated voltage being not more than 250 V, in which excrement is stored, dried or destructed or which wash or dry parts of the human body.
SANS 7887:2022 Ed 2	*Water quality – Examination and determination of colour*. Specifies four different methods, designated A to D, for the examination of colour.

This gazette is also available free online at **www.gpwonline.co.za**

SCHEDULE B.2: AMENDED STANDARDS

The following standards have been amended in terms of section 24(1)(a) of the Standards Act.

Standard No. and year	Title, scope and purport
SANS 541:2022 Ed 3.2	*Precast concrete paving slabs. Consolidated edition incorporating amendment No.2.* Amended to update the requirements on dimensions and on modulus of rupture (MoR) (transverse strength), and to delete the annex on notes to purchasers.
SANS 1118-2:2022 Ed 2.5	*School clothing – Part 2: Blazers. Consolidated edition incorporating amendment No.5.* Amended to update normative references and to delete the appendix on notes to purchasers.
SANS 5247:2022 Ed 4.1	*Textiles – Nep count of cotton wool. Consolidated edition incorporating amendment No.1.* Amended to update the clauses on apparatus and material, and on sampling and preparation of test specimens.
SANS 60079-6:2022 Ed 4.1	*Explosive atmospheres – Part 6: Equipment protection by liquid immersion "o". Consolidated edition incorporating amendment No.1.* Amended to update the scope, referenced standards, terms and definitions, and the annex on supplementary requirements for electrical equipment with Level of Protection "oc" for voltages greater than 15 kV and up to and including 245 kV.
SATS 2:2022 Ed 1.1	*The development of normative documents other than South African National Standards. Consolidated edition incorporating amendment No.1. Amended to include an introduction, to delete the note to the scope, to update referenced documents, definitions, and abbreviations, to include reference to a guide and publicly available specifications (PAS), to delete reference to obsolete deliverables and the figure on the stages of development (figure 1), and to include a subclause on cosmetic changes.*
SANS 927:2022 Ed 3.4	Precast concrete kerbs, edgings and channels. *Consolidated edition incorporating amendment No.4.* Amended to update the subclause on procedure.
SANS 1015:2022 Ed 1.3	*Fire resisting door units for record rooms. Consolidated edition incorporating amendment No.3.* Amended to delete the appendix on notes to purchasers.
SANS 1510-1:2022 Ed 1.2	*Door closers – Part 1: Single-action overhead door closers. Consolidated edition incorporating amendment No.2.* Amended to delete the appendix on notes to purchasers.
SANS 1117:2022 Ed 1.3	*Plastics wrappings for the protection of steel pipelines. Consolidated edition incorporating amendment No.3.* Amended to delete the appendix on notes to purchasers.
SANS 1572:2022 Ed 1.3	*CO2 gas cartridges (steel). Consolidated edition incorporating amendment No.3.* Amended to delete the annex on notes to purchasers.
SANS 1567:2022 Ed 2.3	*Portable rechargeable fire extinguishers – CO2 type extinguishers. Consolidated edition incorporating amendment No.3.* Amended to delete the annex on notes to purchasers.
SANS 4001-BT2:2022 Ed 1.1	*Civil engineering specifications – Part BT2: Cutback bitumen. Consolidated edition incorporating amendment No.1.* Amended to delete the annex on notes to purchasers.
SANS 4001-BT3:2022 Ed 1.1	*Civil engineering specifications – Part BT3: Anionic bitumen road emulsion. Consolidated edition incorporating amendment No.1.* Amended to delete a trade name, and the annex on notes to purchasers.
SANS 4001-BT5:2022 Ed 1.1	*Civil engineering specifications – Part BT5: Inverted bitumen road emulsion. Consolidated edition incorporating amendment No.1.* Amended to delete the annex on notes to users.
SANS 10087-10:2022 Ed 1.3	*The handling, storage, distribution and maintenance of liquefied petroleum gas in domestic, commercial and industrial installations – Part 10: Mobile filling stations for refillable liquefied petroleum gas (LPG) containers of capacity not exceeding 9 kg. Consolidated edition incorporating amendment No.3.* Amended to update the foreword and referenced standards, to move reference to legislation and a government notice from the text to the foreword, and to update the subclause on water supply on site.

This gazette is also available free online at **www.gpwonline.co.za**

SCHEDULE B.3: WITHDRAWN STANDARDS

In terms of section 24(1)(C) of the Standards Act, the following standards have been withdrawn.

Standard No. and year	Title

SCHEDULE B4 ESTABLISHMENT OF TECHNICAL COMMITTEES

Committee No.	Title	Scope

If your organization is interested in participating in these committees, please send an e-mail to Dsscomments@sabs.co.za for more information.

SCHEDULE 5: ADDRESS OF THE SOUTH AFRICAN BUREAU OF STANDARDS HEAD OFFICE

Copies of the standards mentioned in this notice can be obtained from the Head Office of the South African Bureau of Standards at 1 Dr Lategan Road, Groenkloof, Private Bag X191, Pretoria 0001.

This gazette is also available free online at **www.gpwonline.co.za**

DEPARTMENT OF AGRICULTURE, LAND REFORM AND RURAL DEVELOPMENT

NOTICE 905 OF 2022

NAMC
Promoting market access for South African agriculture

Block A | 4th Floor | Meintjiesplein Building | 536 Francis Baard Street | Arcadia |0002
Private Bag X935 | Pretoria | 0001
Tel: 012 341 1115 | Fax: 012 341 1811/1911
http://www.namc.co.za

APPLICATION FOR AN **AMENDMENT TO A STATUTORY MEASURE** IMPLEMENTED AND AN APPLICATION FOR THE **ESTABLISHMENT OF A NEW STATUTORY MEASURE** IN TERMS OF THE MARKETING OF AGRICULTURAL PRODUCTS ACT, 1996, (ACT NO 47 OF 1996), (MAP ACT) AS AMENDED

....

INVITATION TO DIRECTLY AFFECTED GROUPS IN THE MAIZE, WHEAT, SUNFLOWER AND SOYBEAN INDUSTRIES TO COMMENT ON THE REQUEST FROM THE MAIZE FORUM FOR:
THE AMENDMENT TO AN EXISTING STATUTORY MEASURE TO INCLUDE THAT MONTHLY MAIZE DELIVERIES AND STOCK LEVELS BE REPORTED ON PER CLASS AND GRADE OF MAIZE ON A NATIONAL BASIS, AND
THE ESTABLISHMENT OF A NEW STATUTORY MEASURE, NAMELY RECORDS AND RETURNS IN RESPECT OF WEEKLY MAIZE, WHEAT, SOYBEANS AND SUNFLOWER SEED PRODUCER DELIVERIES

It is hereby made known that, in terms of section 10 of the Marketing of Agricultural Products Act, 1996 (Act No. 47 of 1996) (MAP Act), the Minister of Agriculture, Land Reform and Rural Development received a request from the Maize Forum for certain amendments to an existing statutory measure, as well as the establishment of a new statutory measure.

In the Maize Forum's letter dated 14 March 2022, ministerial approval is requested for the following:

1. that the existing statutory measure in respect of the monthly declarations to the SA Grain Information Service (SAGIS) on maize, oilseeds, sorghum and winter cereal as published by Government Notice No. 606 of 4 June 2008 as amended, be amended again to include that **monthly maize deliveries and stock levels be reported on per class and grade of maize on a national basis**.

2. Furthermore, that the Minister approve the proposed **establishment of a new statutory measure, namely Records and Returns on weekly producer deliveries of maize, wheat, soybeans and sunflower seed.**

Motivation by the applicant:

Proposed amendment: The actual class and grade of maize stock levels are becoming increasingly important in order for role-players to determine the availability of maize for specific purposes, especially at the end of each marketing season.

Proposed new statutory measure: In the past, the weekly producer deliveries of grains and oilseeds were reported by grain silo operators on a voluntary basis, but not reported by the other stakeholders that receive grains and oilseeds directly from producers. In order for the market to operate efficiently, the weekly deliveries should ideally be reported on by all stakeholders. The aim and objectives of this statutory measure are to compel any person directly and indirectly involved in receiving maize, wheat, soybeans and sunflower seed directly from a farm of a producer on his premises, to keep records and submit weekly returns to SAGIS. These persons include end-consumers, storers, exporters, processors, traders, transporters, agents, etc. The statutory measure is deemed necessary in order to ensure that accurate producer deliveries information in respect of maize, wheat, soybeans and sunflower seed is made available more frequently to all role-players and decision makers in the grain industry.

SAGIS was specifically established for the purpose of handling information gathering, processing and dissemination on behalf of the various cereal and oil seed industries in South Africa. This statutory measure will be administered by SAGIS but as a task separate to its main task of monthly national marketing information. The weekly information will be made available to the marked but will not be verified by SAGIS. Only monthly information will be verified in order to ensure accuracy.

Invitation for comments:

As the proposed amendment to the existing statutory measure, as well as the request for the establishment of a new statutory measure, are consistent with the objectives of the MAP Act, the NAMC is investigating the Maize Forum's requests, in order to make a recommendation to the Minister.

Directly affected groups in the maize, wheat, sunflower and soybean industries are kindly requested to submit comments or objections regarding the proposed amendment as well as the proposed establishment of a new statutory measure to the NAMC in writing (e-mail to lizettem@namc.co.za) on or before 8 April 2022, to enable the Council to formulate its recommendation to the Minister in this regard.

_____

This gazette is also available free online at **www.gpwonline.co.za**

DEPARTMENT OF AGRICULTURE, LAND REFORM AND RURAL DEVELOPMENT

NOTICE 906 OF 2022

NAMC
Promoting market access for South African agriculture

Block A | 4th Floor | Meintjiesplein Building | 536 Francis Baard Street | Arcadia |0002
Private Bag X935 | Pretoria | 0001
Tel: 012 341 1115 | Fax: 012 341 1811/1911
http://www.namc.co.za

APPLICATION FOR AN AMENDMENT TO A STATUTORY MEASURE IMPLEMENTED IN TERMS OF THE MARKETING OF AGRICULTURAL PRODUCTS ACT, 1996, (ACT NO 47 OF 1996), (MAP ACT) AS AMENDED

••••

INVITATION TO DIRECTLY AFFECTED GROUPS IN THE WHEAT INDUSTRY TO COMMENT ON THE REQUEST FROM THE WHEAT FORUM FOR THE AMENDMENT OF THE EXISTING STATUTORY MEASURE RELATING TO WEEKLY RECORDS AND RETURNS IN RESPECT OF IMPORT AND EXPORT INTENTIONS OF MAIZE, TO INCLUDE WHEAT

It is hereby made known that, in terms of section 10 of the Marketing of Agricultural Products Act, 1996 (Act No. 47 of 1996) (MAP Act), the Minister of Agriculture, Land Reform and Rural Development received a request from the Wheat Forum for certain amendments to a statutory measure.

In the Wheat Forum's letter dated 15 March 2022, approval is requested that the existing statutory measure in respect of the weekly declarations to the SA Grain Information Service (SAGIS) on **intentions to import or export** maize, eight weeks prior to the date on which the vessel transporting these products arrive or depart from South Africa, be amended **to include wheat**.

The statutory measure to be amended will expire on 30 April 2024, as published in Government Notice No. R.605 of 4 June 2008, as amended by Government Notices No's. R.826 of 7 October 2011, R.68 of 29 January 2016, R.503 of 18 May 2018 and R.1548 of 29 November 2019.

The amendment to the statutory measure relates to wheat.

The categories of directly affected groups, which would probably be affected by the establishment of the proposed statutory measure, are those groups of persons who are party to the import and export of wheat.

The support for the proposed statutory measure on wheat by the different categories of directly affected groups in the wheat industry, as represented on the Wheat Forum, is evidenced by a unanimous resolution adopted in this regard by the Forum.

The proposed amendment to the statutory measure will apply to the whole of the Republic of South Africa in order to have a uniform information system without discrimination or disparity.

Motivation by the applicants:

South Africa declares actual import and export data on a statutory and historical basis, which has proven to be very successful. However, there is a need to stipulate exports or imports that have already been contracted and are designated to and from South Africa, which information is not currently being reported on. Previously, various stakeholders agreed that import and export reporting will take place on a voluntary basis to the Supply and Demand Estimates Committee of the National Agricultural Marketing Council (NAMC). This process, unfortunately, does not facilitate free market functionality as it focuses only on the end of the marketing year and also does not include all the role-players to provide the information. Continued progressive reporting of contracting is furthermore not timely, which is highly important for the market to react on trade contracts and the implications in terms of changes in supply and demand. This information will not just assist the market to react, but would also assist in terms of policy governance.

According to the Wheat Forum, South Africa has an urgent need to ascertain trade intention information in the market. The following challenges were experienced during the past season and in the current circumstances, within the international market:

1. Congestion was rife at the ports with large quantities of wheat that was imported and large quantities of maize that was exported. This created difficulty for infrastructure and market players to cope and created a lot of uncertainty and inefficiencies in the market.
2. There were also challenges in delivering the local crop to specific processing plants in harvesting time due to the concentration of large imports. If knowledge of the intended imports were available to the broader market eight weeks in advance, the marketplace and infrastructure could adjust accordingly.
3. Slots at the harbours for the export of soybeans had to be cancelled due to the concentration of maize and wheat trade over the period.
4. Current uncertainty due to the military actions between Russia and Ukraine raised various questions in the market. By publishing the intended imports and exports the market would have clearer answers to these questions, for example “Will South Africa have sufficient imports to satisfy the local demand?”
5. Proper market information will eliminate panic in market prices driven by consumer uncertainty, will assist with timeous reactions and remedies, and will also assist the Supply and Demand Estimates Committee with their projections.
6. Currently only limited role-players have sufficient market information. This is regarded as uncompetitive in comparison to the rest of the market. It is very important to provide the whole value chain with the same information.

The current reporting by SAGIS on import and export intentions in the maize market proved that, if the correct methodology is used, the information is beneficial to the whole market without declaring individual market positions. Maize import and export intentions are

reported eight weeks in advance. SAGIS also reports the corrections if any changes took place in the logistical process. SAGIS only reports aggregated figures, although they receive detailed information.

Industry role-players are of the opinion that this request is in the interest of the entire industry and to the benefit of the public at large. It has been proven with the reporting of maize intentions that the information can be provided effectively within competition law compliance. The market is currently regarding this information as highly valuable as it will assist the industry to facilitate trade and market actions effectively.

Invitation for comments:

As the proposed amendment to the existing statutory measure is consistent with the objectives of the MAP Act, the NAMC is investigating the possible implementation of the proposed amendment, in order to make a recommendation to the Minister.

Directly affected groups in the wheat industry are kindly requested to submit comments or objections regarding the proposed amendment to the NAMC in writing (e-mail to lizettem@namc.co.za) on or before 8 April 2022, to enable the Council to formulate its recommendation to the Minister in this regard.

_____

This gazette is also available free online at **www.gpwonline.co.za**

DEPARTMENT OF AGRICULTURE, LAND REFORM AND RURAL DEVELOPMENT

NOTICE 907 OF 2022

National Agricultural Marketing Council
Promoting market access for South African agriculture

Block A | 4th Floor | Meintjiesplein Building | 536 Francis Baard Street | Arcadia |0002
Private Bag X935 | Pretoria | 0001
Tel: 012 341 1115 | Fax: 012 341 1811/1911
http://www.namc.co.za

PRESS RELEASE
BY THE NATIONAL AGRICULTURAL MARKETING COUNCIL

REQUEST FOR THE CONTINUATION OF STATUTORY MEASURES RELATING TO LEVIES, REGISTRATION AND RECORDS & RETURNS IN THE PORK INDUSTRY, IN TERMS OF THE MARKETING OF AGRICULTURAL PRODUCTS ACT

REQUEST FOR COMMENTS / INPUTS FROM ROLE PLAYERS IN THE PORK INDUSTRY

On 14 March 2022, the Minister of Agriculture, Land Reform and Rural Development received a request from the South African Pork Producers' Organisation (SAPPO), in terms of the Marketing of Agricultural Products Act (MAP Act), Act No 47 of 1996, for the continuation and amendment of statutory measures (registration, records & returns and statutory levies) in the pork industry.

SAPPO is a voluntary organisation established by pork producers in 1992 to act as the mouthpiece and representative organisation for pork producers in South Africa. It is proposed that statutory measures be implemented for a new period of three years from date of publication (1 November 2022) to 31 October 2025.

The current and proposed statutory measures applicable in the pork industry (the current statutory measures will expire on 31 October 2022), are as follows:

- Registration;
- Records & Returns; and
- Levies.

Council members: Mr. A. Petersen (Chairperson), Ms. T. Ntshangase (Deputy Chairperson), Prof. A. Jooste, Mr. S.J. Mhlaba, Ms. F. Mkile, Ms. N. Mokose, Ms. S. Naidoo, Mr. G. Schutte and Dr. S.T. Xaba.

The purpose and objective of the statutory measures in the pork industry are as follows:

- **Registration:**

  The purpose of the statutory measure relating to registrations is to compel abattoirs slaughtering pigs and exporters of live pigs, to register with SAPPO.

- **Records & Returns:**

  The purpose of the statutory measure relating to records & returns is to compel abattoirs and exporters of live pigs to render records and returns to SAPPO. These two statutory measures are necessary to ensure that continuous, timeous and accurate market information relating to pigs slaughtered, marketed and live pigs exported, is available to all role-players. Market information is deemed essential for all role-players in order for them to make informed decisions.

- **Statutory levies:**

  The payment of the proposed s**tatutory levies** will finance the following functions:

  - Consumer assurance;
  - Consumer communication and education (local promotions);
  - Research and development;
  - Business intelligence (information);
  - Corporate governance (administration); and
  - Business development (transformation).

  The following levy amounts are proposed:

Pigs slaughtered at abattoirs or live pigs exported	**Current levy (Excluding VAT)**	**Proposed new levy* (Excluding VAT)**		
	2021/22	**2022/23**	**2023/24**	**2024/25**
Levy	R13,41	R14,08	R14,78	R15,51

* The proposed levy will increase 5% annually.

The MAP Act stipulates that a statutory levy may not exceed 5% of the price realized for a specific agricultural product at the first point of sale. The maximum of 5% must be based on a guideline price calculated as the average price at the first point of sale over a period not exceeding three years. The proposed statutory levy for the 2022/23 financial year will be 0.7% of the calculated guideline price for a pork carcass (an average over three years) at the first point of sale.

The proposed business plan for the three (3) year period, is as follows:

	2022/2023	2023/24	2024/25
Pigs slaughtered at abattoirs or live pigs exported	3 701 468	3 829 168	3 961 275
Levy amount (excluding VAT)	R14,08	R14,78	R15,51
Less administration and abattoir fees	R2 605 833	R2 830 521	R3 071 969
TOTAL INCOME	**R49 510 836**	**R53 764 582**	**R58 367 406**
TOTAL EXPENDITURE	**R49 510 834**	**R53 779 904**	**R58 367 401**
Consumer assurance	R9 902 167	R10 755 981	R11 673 480
Consumer communication and education (local promotion)	R14 853 250	R16 133 971	R17 510 221
Research and development	R2 475 542	R2 688 995	R2 918 370
Business intelligence (Market information)	R7 426 625	R8 066 986	R8 755 110
Corporate governance (administration)	R4 951 083	R5 377 990	R5 836 740
Business development (transformation)	R9 902 167	R10 755 981	R11 673 480

The NAMC believes that the application by the pork industry for the continuation of the proposed statutory measures is consistent with the objectives of the MAP Act (as set out in section 2 of the Act).

Directly affected groups in the pork industry are kindly requested to submit any comments, in writing, regarding the proposed statutory measures, on or before 8 April 2022, to enable the NAMC to finalise its recommendation to the Minister in this regard.

Submissions should be in writing and be addressed to:

National Agricultural Marketing Council
Private Bag X 935
PRETORIA
0001
Enquiries: Mathilda van der Walt
E-mail: mathildavdw@namc.co.za
Cell no: 079 99 30903

DEPARTMENT OF AGRICULTURE, LAND REFORM AND RURAL DEVELOPMENT

NOTICE 908 OF 2022

NAMC
Promoting market access for South African agriculture

Block A | 4th Floor | Meintjiesplein Building | 536 Francis Baard Street | Arcadia |0002
Private Bag X935 | Pretoria | 0001
Tel: 012 341 1115 | Fax: 012 341 1811/1911
http://www.namc.co.za

NATIONAL AGRICULTURAL MARKETING COUNCIL
MARKETING OF AGRICULTURAL PRODUCTS ACT, 1996, AS AMENDED
(ACT No. 47 OF 1996)

REQUEST FOR THE CONTINUATION OF STATUTORY MEASURES RELATING TO LEVIES, REGISTRATION AND RECORDS & RETURNS IN THE RED MEAT INDUSTRY IN TERMS OF THE MARKETING OF AGRICULTURAL PRODUCTS ACT

It is hereby made known that, in terms of section 10 of the Marketing of Agricultural Products Act, 1996 (Act No. 47 of 1996) (MAP Act), the Minister of Agriculture, Land Reform and Rural Development has received a request from the red meat industry for the continuation of statutory measures relating to levies, registration, the keeping of records and the rendering of returns. The Red Meat and Livestock Primary Cluster, which was the initiative of the Red Meat Abattoir Association (RMAA), the South African Feedlot Association (SAFA), the Red Meat Producers' Organisation (RPO) and National Emerging Red Meat Producers' Organisation (NERPO), created a Not-for-profit Company, namely the Red Meat Industry Services (RMIS), to apply and to administer the proposed statutory measures.

The current statutory measures in the red meat industry will expire on 4 November 2022. The RMIS requested ministerial approval for the continuation of these statutory measures for a new period of four years, from 5 November 2022 to lapse on 4 November 2026. The proposed statutory measures are as follows:

- A statutory levy in terms of section 15 of the MAP Act;
- Records and returns in terms of section 18 of the MAP Act; and
- Registration in terms of section 19 of the MAP Act.

The proposed new statutory levies in the red meat industry for a 12-month period (applicable from 5 November to 4 November the next year), will be as follows:

Levy period	Levy per head of animal at point of slaughter (VAT excluded)	
	Cattle	Sheep and goats
2022/23	R13.00	R2.53
2023/24	R13.65	R2.66
2024/25	R14.33	R2.79
2025/26	R15.05	R2.93

The estimated income from the proposed levies is between R42.2 million (for 2022/23) and R50.5 million (for 2025/26). The proposed statutory levies will finance the following functions, namely –

- Animal Health, Public Health and Biosecurity – 30%
  - FMD high risk prioritisation
  - Traceability and Identification
  - Consumer assurance and product safety
- Market Access – 15%
  - Increase market size and value-chain participation
- Inclusive Growth – 20%
  - Transformation in the developing sector
- Competitiveness & Sustainability – 25%
  - Production development
  - Industry Information
  - Red meat research and development
  - Consumer communication and education
- Administration and Governance – 10%

The MAP Act stipulates that a statutory levy may not exceed 5% of the price released for a specific agricultural product at the first point of sale. The maximum of 5% must be based on a guideline price calculated as the average price at the first point of sale over a period not exceeding three years. The RMIS calculated the guideline price for cattle at R12 000 per head and the proposed levy of R13.00 per head from 5 November 2022, until 4 November 2023 equates to 0.11% of the guideline price. For sheep/goats the guideline price was calculated at R1 900 per head and the proposed levy of R2.53 per head for the first year equated to 0.13% of the guideline price. Both the level of the proposed statutory levies for cattle and sheep/goats, as a percentage of the guideline prices respectively, are well within the requirement of 5% as stipulated in the MAP Act.

The purpose of the statutory measure relating to registration is to compel all relevant role-players in the red meat industry to register with the Levy Administrator. The purpose of the statutory measure relating to records and returns is to compel all relevant role-players in the red meat industry to render records and returns to the Levy Administrator. By prescribing the keeping of records with the rendering of returns on an individual basis, market information for the whole of the industry can be processed and published. These statutory measures are necessary to ensure that continuous, timeous and accurate information relating to the designated animals slaughtered and their products, is available to all role-players. Market

This gazette is also available free online at **www.gpwonline.co.za**

information is deemed essential for all role-players in order for them to make informed decisions.

The National Agricultural Marketing Council (NAMC) took cognisance that the proposed continuation of the statutory measures relating to levies, registration, the keeping of records and the rendering of returns in the red meat industry as requested by RMIS, is consistent with the objectives of the MAP Act. The request is currently being investigated by the NAMC and recommendations in this regard will be made to the Minister in the near future.

Directly affected groups in the red meat industry are kindly requested to submit any comments, regarding the proposed statutory measures, to the NAMC on or before 8 April 2022, to enable the Council to finalise its recommendation to the Minister in this regard.

Submissions should be in writing and be addressed to:

National Agricultural Marketing Council
Private Bag X 935
PRETORIA
0001
Enquiries: Schalk Burger
E-mail: schalk@namc.co.za
Tel No.: (012) 341 1115
(082) 572 9789
Fax No.: (012) 341 1911

This gazette is also available free online at **www.gpwonline.co.za**

DEPARTMENT OF AGRICULTURE, LAND REFORM AND RURAL DEVELOPMENT

NOTICE 909 OF 2022

GENERAL NOTICE IN TERMS OF THE RESTITUTION OF LAND RIGHTS ACT, 1994 (ACT NO. 22 OF 1994)

Notice is hereby given in terms of Section 11 (1) of the Restitution of Land Rights Act, 1994 (Act No. 22 of 1994) that a claim for the restitution of land rights on the following properties have been lodged with the Regional Land Claims Commissioner: KwaZulu-Natal and that the Commission on Restitution of Land Rights will further investigate the claim in terms of provisions of the Act in due course:

Property	:	**Portion 0 (remaining extent) of the farm Wheatlands A No. 9139**
Extent of property	:	**90, 4545 ha**
Magisterial District	:	**Port Shepstone**
Administrative District:	:	**KwaZulu-Natal**
Current Title Deed No.	:	**T16603/1969**
Current Owner	:	**Regional & Land Affairs**
Bonds & Restrictive Conditions (Interdicts)	:	**I-370/1980LG**
Claimant	:	**Robert Ewald Bakeberg on behalf of the Bakeberg Family**
Date claim lodged	:	**15 March 1994**
Reference number	:	**KRN6/2/2/E/41/0/0/10**

Any party/parties who have an interest in the above-mentioned properties is hereby invited to submit, within **30 days** from the date of publication of this notice, any representations and/ or information which shall assist the Commissioner in proving or disproving this claim.

Should no information and/ or representations from the affected party/ parties be forthcoming within the stipulated period, the affected party/parties shall be *ipso facto* barred from further doing so and the Commission shall continue with the subsequent processes towards completion of the investigation.

Any comments and information should be submitted to:

The Regional Land Claims Commissioner: KwaZulu-Natal
Private Bag X9120
Pietermaritzburg 3200

Tel: (033) 355 - 8400
Fax: (033) 342 - 3409

Submissions may also be delivered to Second Floor, African Life Building, 200 Church Street, Pietermaritzburg.

LEBJANE MAPHUTHA
REGIONAL LAND CLAIMS COMMISSIONER: KWAZULU NATAL

DEPARTMENT OF AGRICULTURE, LAND REFORM AND RURAL DEVELOPMENT

NOTICE 910 OF 2022

GENERAL NOTICE IN TERMS OF THE RESTITUTION OF LAND RIGHTS ACT, 1994 (ACT NO. 22 OF 1994)

Notice is hereby given in terms of Section 11 (1) of the Restitution of Land Rights Act, 1994 (Act No. 22 of 1994) that a claim for the restitution of land rights on the following properties have been lodged with the Regional Land Claims Commissioner: KwaZulu-Natal and that the Commission on Restitution of Land Rights will further investigate the claim in terms of provisions of the Act in due course:

Property	**:**	**Lot 447 Queensburgh**
Extent of property	**:**	**0, 2163 hectares**
Magisterial District	**:**	**Ethekwini**
Administrative District	**:**	**KwaZulu-Natal**
Previous Title Deed No.	**:**	**T16296/1966**
Claimant	**:**	**Sivalingam Moodley**
Date claim lodged	**:**	**9 December 1998**
Reference number	**:**	**KRN6/2/3/E/39/812/1925/190**

Any party/parties who have an interest in the above-mentioned properties is hereby invited to submit, within **30 days** from the date of publication of this notice, any representations and/ or information which shall assist the Commissioner in proving or disproving this claim.

Should no information and/ or representations from the affected party/ parties be forthcoming within the stipulated period, the affected party/parties shall be *ipso facto* barred from further doing so and the Commission shall continue with the subsequent processes towards completion of the investigation.

Any comments and information should be submitted to:

The Regional Land Claims Commissioner: KwaZulu-Natal
Private Bag X9120
Pietermaritzburg 3200

Tel: (033) 355 - 8400
Fax: (033) 342 - 3409

Submissions may also be delivered to Second Floor, African Life Building, 200 Church Street, Pietermaritzburg.

LEBJANE MAPHUTHA
REGIONAL LAND CLAIMS COMMISSIONER: KWAZULU NATAL
DATE:

INDEPENDENT COMMUNICATIONS AUTHORITY OF SOUTH AFRICA

NOTICE 911 OF 2022

PURSUANT TO SECTION 34 (2) AND 34 (5) OF THE ELECTRONIC COMMUNICATIONS ACT 2005, (ACT NO. 36 OF 2005)

HEREBY ISSUES A NOTICE REGARDING THE NATIONAL RADIO FREQUENCY PLAN 2021.

The Independent Communications Authority of South Africa ("the Authority"), is, in terms of section 34 (2) and 34 (5) of the Electronic Communications Act (Act No. 36 of 2005) (as amended) publishing the **"National Radio Frequency Plan 2021".**

DR. KEABETSWE MODIMOENG

CHAIRPERSON

DATE: 15/03/2022

NATIONAL RADIO FREQUENCY PLAN 2021
(NRFP-21)

8.3 kHz – 3000 GHz

INDEPENDENT COMMUNICATIONS AUTHORITY OF SOUTH AFRICA

Table of Contents

1 TERMS, DEFINITIONS AND ACRONYMS 1-4
1.1 Terms and definitions 1-4
1.2 Acronyms 1-16

2 PREAMBLE 2-20
2.1 Legislative Framework 2-20
2.2 ITU-R Radio Regions 2-20
2.3 Structure of the Table of Frequency Allocations 2-21
2.3.1 Column 1 - ITU Region 1 Allocations and footnotes 2-21
2.3.2 Column 2 – South African allocations and footnotes 2-22
2.3.3 Column 3 – Typical Applications 2-22
2.3.4 Column 4 – Notes and comments 2-23
2.3.5 ITU-R Region 1 and National Footnotes 2-23
2.3.6 List of frequency bands used for Maritime services 2-23
2.3.7 Frequency and wavelength bands 2-23

3 CONTACT DETAILS 3-25

4 TABLE OF FREQUENCY ALLOCATIONS 4-26

5 RADIO ASTRONOMY 5-243

6 NATIONAL FOOTNOTES TO THE TABLE OF FREQUENCY ALLOCATIONS 6-246

7 ITU RADIO REGULATIONS FOOTNOTES 7-253

8 LIST OF FREQUENCY BANDS USED FOR MARITIME SERVICES 8-336

9 REFERENCE INFORMATION SOURCES 9-339

1 TERMS, DEFINITIONS AND ACRONYMS

1.1 Terms and definitions

accepted interference[1]*:*	*Interference* at a higher level than that defined as *permissible interference* and which has been agreed upon between two or more *administrations* without prejudice to other *administrations*.
active satellite:	A *satellite* carrying a *station* intended to transmit or retransmit *radiocommunication* signals.
active sensor:	A measuring instrument in the *earth exploration-satellite service* or in the *space research service* by means of which information is obtained by transmission and reception of *radio waves*.
adaptive system:	A *radiocommunication* system which varies its radio characteristics according to channel quality.
administration	Any governmental department or service responsible for discharging the obligations undertaken in the Constitution of the International Telecommunication Union, in the Convention of the International Telecommunication Union and in the Administrative Regulations (CS 1002).
aeronautical earth station:	An *earth station* in the *fixed-satellite service*, or, in some cases, in the *aeronautical mobile-satellite service*, located at a specified fixed point on land to provide a *feeder link* for the *aeronautical mobile-satellite service*.
[2]*aeronautical mobile (OR)** service:*	An *aeronautical mobile service* intended for communications, including those relating to flight coordination, primarily outside national or international civil air routes.
aeronautical mobile (R) service:*	An *aeronautical mobile service* reserved for communications relating to safety and regularity of flight, primarily along national or international civil air routes
aeronautical mobile service:	A *mobile service* between *aeronautical stations* and *aircraft stations*, or between *aircraft stations*, in which *survival craft stations* may participate; *emergency position-indicating radiobeacon stations* may also participate in this service on designated distress and emergency frequencies.
*aeronautical mobile-satellite (OR)** service:*	An *aeronautical mobile-satellite service* intended for communications, including those relating to flight coordination, primarily outside national and international civil air routes.
aeronautical mobile-satellite (R) service:*	An *aeronautical mobile-satellite service* reserved for communications relating to safety and regularity of flights, primarily along national or international civil air routes.
aeronautical mobile-satellite service:	A *mobile-satellite service* in which *mobile earth stations* are located on board aircraft; *survival craft stations* and *emergency position-indicating radiobeacon stations* may also participate in this service.
aeronautical radionavigation service:	A *radionavigation service* intended for the benefit and for the safe operation of aircraft.
aeronautical radionavigation-satellite service:	A *radionavigation-satellite service* in which *earth stations* are located on board aircraft.

[1] The terms "permissible interference" and "accepted interference" are used in the coordination of frequency assignments between *administrations*

*(R): route.
**(OR): off-route.

This gazette is also available free online at **www.gpwonline.co.za**

aeronautical station:	A *land station* in the *aeronautical mobile service*. In certain instances, an aeronautical station may be located, for example, on board ship or on a platform at sea.
aircraft earth station:	A *mobile earth station* in the *aeronautical mobile-satellite service* located on board an aircraft.
aircraft station:	A *mobile station* in the *aeronautical mobile service*, other than a *survival craft station*, located on board an aircraft.
allocation (of a frequency band):	Entry in the Table of Frequency Allocations of a given frequency band for the purpose of its use by one or more terrestrial or space *radiocommunication services* or the *radio astronomy service* under specified conditions. This term shall also be applied to the frequency band concerned.
allotment (of a radio frequency or radio frequency channel):	Entry of a designated frequency channel in an agreed plan, adopted by a competent conference, for use by one or more *administrations* for a terrestrial or space *radiocommunication service* in one or more identified countries or geographical areas and under specified conditions.
altitude of the apogee or *of the perigee:*	The altitude of the apogee or perigee above a specified reference surface serving to represent the surface of the Earth.
amateur service:	A *radiocommunication service* for the purpose of self-training, intercommunication and technical investigations carried out by amateurs, that is, by duly authorized persons interested in radio technique solely with a personal aim and without pecuniary interest.
amateur station:	A *station* in the *amateur service*.
amateur-satellite service:	A *radiocommunication service* using *space stations* on earth *satellites* for the same purposes as those of the *amateur service*.
assigned frequency band:	The frequency band within which the *emission* of a *station* is authorized; the width of the band equals the *necessary bandwidth* plus twice the absolute value of the *frequency tolerance*. Where *space stations* are concerned, the assigned frequency band includes twice the maximum Doppler shift that may occur in relation to any point of the Earth's surface.
assigned frequency:	The centre of the frequency band assigned to a *station*.
assignment (of a radio frequency or radio frequency channel):	Authorization given by an *administration* for a radio *station* to use a radio frequency or radio frequency channel under specified conditions.
base earth station:	An *earth station* in the *fixed-satellite service* or, in some cases, in the *land mobile-satellite service,* located at a specified fixed point or within a specified area on land to provide a *feeder link* for the *land mobile-satellite service*.
base station:	A *land station* in the *land mobile service*.
broadcasting service:	A *radiocommunication service* in which the transmissions are intended for direct reception by the general public. This service may include sound transmissions, *television* transmissions or other types of transmission (CS).
broadcasting station:	A *station* in the *broadcasting service*.
broadcasting-satellite service:	A *radiocommunication service* in which signals transmitted or retransmitted by *space stations* are intended for direct reception by the general public. In the broadcasting-satellite service, the term "direct reception" shall encompass both *individual reception* and *community reception*.
carrier power (of a radio transmitter):	The average power supplied to the antenna transmission line by a transmitter during one radio frequency cycle taken under the condition of no modulation.
characteristic frequency:	A frequency which can be easily identified and measured in a given *emission*. A carrier frequency may, for example, be designated as the characteristic frequency.

This gazette is also available free online at **www.gpwonline.co.za**

class of emission:	The set of characteristics of an *emission*, designated by standard symbols, e.g. type of modulation of the main carrier, modulating signal, type of information to be transmitted, and also, if appropriate, any additional signal characteristics.
coast earth station:	An *earth station* in the *fixed-satellite service* or, in some cases, in the *maritime mobile-satellite service*, located at a specified fixed point on land to provide a *feeder link* for the *maritime mobile-satellite service*.
coast station:	A *land station* in the *maritime mobile service*.
community reception (in the broadcasting-satellite service):	The reception of *emissions* from a *space station* in the *broadcasting-satellite service* by receiving equipment, which in some cases may be complex and have antennas larger than those used for *individual reception*, and intended for use: – by a group of the general public at one location; or – through a distribution system covering a limited area.
coordinated universal time (UTC):	Time scale, based on the second (SI), as described in Resolution **655 (WRC-15)**. (WRC-15)
coordination area:	When determining the need for coordination, the area surrounding an *earth station* sharing the same frequency band with *terrestrial stations*, or surrounding a transmitting *earth station* sharing the same bi-directionally allocated frequency band with receiving *earth stations*, beyond which the level of *permissible interference* will not be exceeded and coordination is therefore not required. (WRC-2000)
coordination contour:	The line enclosing the *coordination area*.
coordination distance:	When determining the need for coordination, the distance on a given azimuth from an *earth station* sharing the same frequency band with *terrestrial stations*, or from a transmitting *earth station* sharing the same bi-directionally allocated frequency band with receiving *earth stations*, beyond which the level of *permissible interference* will not be exceeded and coordination is therefore not required. (WRC-2000)
deep space:	Space at distances from the Earth equal to, or greater than, 2×10^6 km.
duplex operation:	Operating method in which transmission is possible simultaneously in both directions of a *telecommunication* channel[3].
earth exploration-satellite service:	A *radiocommunication service* between *earth stations* and one or more *space stations*, which may include links between *space stations*, in which: – information relating to the characteristics of the Earth and its natural phenomena, including data relating to the state of the environment, is obtained from *active sensors* or *passive sensors* on Earth *satellites*; – similar information is collected from airborne or Earth-based platforms; – such information may be distributed to *earth stations* within the system concerned; – platform interrogation may be included. This service may also include *feeder links* necessary for its operation.
earth station:	A *station* located either on the Earth's surface or within the major portion of the Earth's atmosphere and intended for communication: – with one or more *space stations*; or – with one or more *stations* of the same kind by means of one or more *reflecting satellites* or other objects in space.

[3] In general, *duplex operation* require two frequencies in *radiocommunication*

This gazette is also available free online at **www.gpwonline.co.za**

effective antenna gain contour (of a steerable satellite beam):	An envelope of antenna gain contours resulting from moving the boresight of a *steerable satellite beam* along the limits of the *effective boresight area*.
effective boresight area (of a steerable satellite beam):	An area on the surface of the Earth within which the boresight of a *steerable satellite beam* is intended to be pointed. There may be more than one unconnected effective boresight area to which a single *steerable satellite beam* is intended to be pointed.
effective monopole radiated power (e.m.r.p.) (in a given direction)*:*	The product of the power supplied to the antenna and its *gain relative to a short vertical antenna* in a given direction.
effective radiated power (e.r.p.) (in a given direction)*:*	The product of the power supplied to the antenna and its *gain relative to a half-wave dipole* in a given direction.
emergency position-indicating radiobeacon station:	A *station* in the *mobile service* the *emissions* of which are intended to facilitate search and rescue operations.
emission:	*Radiation* produced, or the production of *radiation*, by a radio transmitting *station*. For example, the energy radiated by the local oscillator of a radio receiver would not be an emission but a *radiation*.
equivalent isotropically radiated power (e.i.r.p.):	The product of the power supplied to the antenna and the antenna gain in a given direction relative to an isotropic antenna *(absolute or isotropic gain)*.
equivalent satellite link noise temperature:	The noise temperature referred to the output of the receiving antenna of the *earth station* corresponding to the radio frequency noise power which produces the total observed noise at the output of the *satellite link* excluding noise due to *interference* coming from *satellite links* using other *satellites* and from terrestrial systems.
experimental station:	A *station* utilizing *radio waves* in experiments with a view to the development of science or technique. This definition does not include *amateur stations.*
facsimile:	A form of *telegraphy* for the transmission of fixed images, with or without half-tones, with a view to their reproduction in a permanent form.
feeder link:	A radio link from an *earth station* at a given location to a *space station*, or vice versa, conveying information for a *space radiocommunication service* other than for the *fixed-satellite service*. The given location may be at a specified fixed point, or at any fixed point within specified areas.
fixed service:	*A radiocommunication service* between specified fixed points.
fixed station:	A *station* in the *fixed service*.
fixed-satellite service:	A *radiocommunication service* between *earth stations* at given positions, when one or more *satellites* are used; the given position may be a specified fixed point or any fixed point within specified areas; in some cases this service includes satellite-to-satellite links, which may also be operated in the *inter-satellite service*; the fixed-satellite service may also include *feeder links* for other *space radiocommunication services*.
frequency tolerance:	The maximum permissible departure by the centre frequency of the frequency band occupied by an *emission* from the *assigned frequency* or, by the *characteristic frequency* of an *emission* from the *reference frequency*. The frequency tolerance is expressed in parts in 10^6 or in hertz.
frequency-shift telegraphy:	*Telegraphy* by frequency modulation in which the telegraph signal shifts the frequency of the carrier between predetermined values.
full carrier single-sideband emission:	A *single-sideband emission* without reduction of the carrier.

This gazette is also available free online at **www.gpwonline.co.za**

gain of an antenna:	The ratio, usually expressed in decibels, of the power required at the input of a loss-free reference antenna to the power supplied to the input of the given antenna to produce, in a given direction, the same field strength or the same power flux-density at the same distance. When not specified otherwise, the gain refers to the direction of maximum *radiation*. The gain may be considered for a specified polarization. Depending on the choice of the reference antenna a distinction is made between: a) absolute or isotropic gain (G_i), when the reference antenna is an isotropic antenna isolated in space; b) gain relative to a half-wave dipole (G_d), when the reference antenna is a half-wave dipole isolated in space whose equatorial plane contains the given direction; c) gain relative to a short vertical antenna (G_v), when the reference antenna is a linear conductor, much shorter than one quarter of the wavelength, normal to the surface of a perfectly conducting plane which contains the given direction.
geostationary satellite:	A *geosynchronous satellite* whose circular and direct *orbit* lies in the plane of the Earth's equator and which thus remains fixed relative to the Earth; by extension, a *geosynchronous satellite* which remains approximately fixed relative to the Earth. (WRC-03)
geostationary-satellite orbit:	The *orbit* of a *geosynchronous satellite* whose circular and direct *orbit* lies in the plane of the Earth's equator.
geosynchronous satellite:	An earth *satellite* whose period of revolution is equal to the period of rotation of the Earth about its axis.
harmful interference:	*Interference* which endangers the functioning of a *radionavigation service* or of other *safety services* or seriously degrades, obstructs, or repeatedly interrupts a *radiocommunication service* operating in accordance with Radio Regulations (CS).
high altitude platform station:	A *station* located on an object at an altitude of 20 to 50 km and at a specified, nominal, fixed point relative to the Earth.
inclination of an orbit (of an earth satellite):	The angle determined by the plane containing the *orbit* and the plane of the Earth's equator measured in degrees between 0º and 180º and in counter-clockwise direction from the Earth's equatorial plane at the ascending node of the *orbit*. (WRC-2000)
individual reception (in the broadcasting-satellite service):	The reception of *emissions* from a *space station* in the *broadcasting-satellite service* by simple domestic installations and in particular those possessing small antennas.
industrial, scientific and medical (ISM) applications (of radio frequency energy):	Operation of equipment or appliances designed to generate and use locally radio frequency energy for industrial, scientific, medical, domestic or similar purposes, excluding applications in the field of *telecommunications*.
instrument landing system (ILS):	A *radionavigation* system which provides aircraft with horizontal and vertical guidance just before and during landing and, at certain fixed points, indicates the distance to the reference point of landing.
instrument landing system glide path:	A system of vertical guidance embodied in the *instrument landing system* which indicates the vertical deviation of the aircraft from its optimum path of descent.
instrument landing system localizer:	A system of horizontal guidance embodied in the *instrument landing system* which indicates the horizontal deviation of the aircraft from its optimum path of descent along the axis of the runway.

This gazette is also available free online at **www.gpwonline.co.za**

interference:	The effect of unwanted energy due to one or a combination of *emissions*, *radiations*, or inductions upon reception in a *radiocommunication* system, manifested by any performance degradation, misinterpretation, or loss of information which could be extracted in the absence of such unwanted energy.
inter-satellite service:	A *radiocommunication service* providing links between artificial *satellites*.
ionospheric scatter:	The propagation of *radio waves* by scattering as a result of irregularities or discontinuities in the ionization of the ionosphere.
land earth station:	An *earth station* in the *fixed-satellite service* or, in some cases, in the *mobile-satellite service,* located at a specified fixed point or within a specified area on land to provide a *feeder link* for the *mobile-satellite service*.
land mobile earth station:	A *mobile earth station* in the *land mobile-satellite service* capable of surface movement within the geographical limits of a country or continent.
land mobile service:	A *mobile service* between *base stations* and *land mobile stations*, or between *land mobile stations*.
land mobile station:	A *mobile station* in the *land mobile service* capable of surface movement within the geographical limits of a country or continent.
land mobile-satellite service:	A *mobile-satellite service* in which *mobile earth stations* are located on land.
land station:	A station in the mobile service not intended to be used while in motion.
left-hand (anticlockwise) *polarized wave:*	An elliptically- or circularly-polarized wave, in which the electric field vector, observed in any fixed plane, normal to the direction of propagation, whilst looking in the direction of propagation, rotates with time in a left-hand or anticlockwise direction.
maritime mobile service:	A *mobile service* between *coast stations* and *ship stations*, or between *ship stations*, or between associated *on-board communication stations*; *survival craft stations* and *emergency position-indicating radiobeacon stations* may also participate in this service.
maritime mobile-satellite service:	A *mobile-satellite service* in which *mobile earth stations* are located on board ships; *survival craft stations* and *emergency position-indicating radiobeacon stations* may also participate in this service.
maritime radionavigation service:	A *radionavigation service* intended for the benefit and for the safe operation of ships.
maritime radionavigation-satellite service:	A *radionavigation-satellite service* in which *earth stations* are located on board ships.
marker beacon:	A transmitter in the *aeronautical radionavigation service* which radiates vertically a distinctive pattern for providing position information to aircraft.
mean power (of a radio transmitter):	The average power supplied to the antenna transmission line by a transmitter during an interval of time sufficiently long compared with the lowest frequency encountered in the modulation taken under normal operating conditions.
meteorological aids land station:	A *station* in the *meteorological aids service* not intended to be used while in motion. (WRC-15)
meteorological aids mobile station:	A *station* in the *meteorological aids service* intended to be used while in motion or during halts at unspecified points. (WRC-15)
meteorological aids service:	A *radiocommunication service* used for meteorological, including hydrological, observations and exploration.
meteorological-satellite service:	An *earth exploration-satellite service* for meteorological purposes.

This gazette is also available free online at **www.gpwonline.co.za**

mobile earth station:	An *earth station* in the *mobile-satellite service* intended to be used while in motion or during halts at unspecified points.
mobile service:	A *radiocommunication service* between *mobile* and *land stations*, or between *mobile stations* (CV).
mobile station:	A *station* in the *mobile service* intended to be used while in motion or during halts at unspecified points.
mobile-satellite service:	A *radiocommunication service:* – between *mobile earth stations* and one or more *space stations*, or between *space stations* used by this service; or – between *mobile earth stations* by means of one or more *space stations*. This service may also include *feeder links* necessary for its operation.
multi-satellite link:	A radio link between a transmitting *earth station* and a receiving *earth station* through two or more *satellites*, without any intermediate *earth station*. A multi-satellite link comprises one up-link, one or more satellite-to-satellite links and one down-link.
necessary bandwidth:	For a given *class of emission*, the width of the frequency band which is just sufficient to ensure the transmission of information at the rate and with the quality required under specified conditions.
occupied bandwidth:	The width of a frequency band such that, below the lower and above the upper frequency limits, the *mean powers* emitted are each equal to a specified percentage b/2 of the total *mean power* of a given *emission*. Unless otherwise specified in an ITU-R Recommendation for the appropriate *class of emission*, the value of b/2 should be taken as 0.5%.
on-board communication station:	A low-powered *mobile station* in the *maritime mobile service* intended for use for internal communications on board a ship, or between a ship and its lifeboats and life-rafts during lifeboat drills or operations, or for communication within a group of vessels being towed or pushed, as well as for line handling and mooring instructions.
orbit:	The path, relative to a specified frame of reference, described by the centre of mass of a *satellite* or other object in space subjected primarily to natural forces, mainly the force of gravity.
out-of-band domain (of an emission):	The frequency range, immediately outside the *necessary bandwidth* but excluding the *spurious domain*, in which *out-of-band emissions* generally predominate. *Out-of-band emissions*, defined based on their source, occur in the out-of-band domain and, to a lesser extent, in the *spurious domain*. *Spurious emissions* likewise may occur in the out-of-band domain as well as in the *spurious domain*. (WRC-03)
out-of-band emission:	*Emission* on a frequency or frequencies immediately outside the *necessary bandwidth* which results from the modulation process, but excluding *spurious emissions*.
passive sensor:	A measuring instrument in the *earth exploration-satellite service* or in the *space research service* by means of which information is obtained by reception of *radio waves* of natural origin.
peak envelope power (of a radio transmitter):	The average power supplied to the antenna transmission line by a transmitter during one radio frequency cycle at the crest of the modulation envelope taken under normal operating conditions.
period (of a satellite):	The time elapsing between two consecutive passages of a *satellite* through a characteristic point on its *orbit*.
permissible interference[4]*:*	Observed or predicted *interference* which complies with quantitative *interference* and sharing criteria contained in these Regulations or in ITU-

[4] The terms "permissible interference" and "accepted interference" are used in the coordination of frequency assignments between *administrations*.

This gazette is also available free online at **www.gpwonline.co.za**

	R Recommendations or in special agreements as provided for in these Regulations.
port operations service:	A *maritime mobile service* in or near a port, between *coast stations* and *ship stations*, or between *ship stations*, in which messages are restricted to those relating to the operational handling, the movement and the safety of ships and, in emergency, to the safety of persons. Messages which are of a *public correspondence* nature shall be excluded from this service.
port station:	A *coast station* in the *port operations service*.
power:	Whenever the power of a radio transmitter, etc. is referred to it shall be expressed in one of the following forms, according to the class of *emission*, using the arbitrary symbols indicated: – *peak envelope power* (*P*X or *p*X); – *mean power* (*P*Y or *p*Y); – *carrier power* (*P*Z or *p*Z). For different *classes of emission*, the relationships between *peak envelope power*, *mean power* and *carrier power*, under the conditions of normal operation and of no modulation, are contained in ITU-R Recommendations which may be used as a guide. For use in formulae, the symbol *p* denotes power expressed in watts and the symbol *P* denotes power expressed in decibels relative to a reference level.
primary radar:	A *radiodetermination* system based on the comparison of reference signals with radio signals reflected from the position to be determined.
protection ratio (R.F.):	The minimum value of the wanted-to-unwanted signal ratio, usually expressed in decibels, at the receiver input, determined under specified conditions such that a specified reception quality of the wanted signal is achieved at the receiver output.
public correspondence:	Any *telecommunication* which the offices and *stations* must, by reason of their being at the disposal of the public, accept for transmission (CS).
radar beacon (racon):	A transmitter-receiver associated with a fixed navigational mark which, when triggered by a *radar*, automatically returns a distinctive signal which can appear on the display of the triggering *radar*, providing range, bearing and identification information.
radar:	A *radiodetermination* system based on the comparison of reference signals with radio signals reflected, or retransmitted, from the position to be determined.
radiation:	The outward flow of energy from any source in the form of *radio waves*.
radio altimeter:	*Radionavigation* equipment, on board an aircraft or *spacecraft,* used to determine the height of the aircraft or the *spacecraft* above the Earth's surface or another surface.
radio astronomy service:	A service involving the use of *radio astronomy*.
radio astronomy station:	A *station* in the *radio astronomy service*.
radio astronomy:	Astronomy based on the reception of *radio waves* of cosmic origin.
radio direction-finding station:	A *radiodetermination station* using *radio direction-finding*.
radio direction-finding:	*Radiodetermination* using the reception of *radio waves* for the purpose of determining the direction of a *station* or object.
radio waves or *hertzian waves:*	Electromagnetic waves of frequencies arbitrarily lower than 3 000 GHz, propagated in space without artificial guide.
radio:	A general term applied to the use of *radio waves*.

This gazette is also available free online at **www.gpwonline.co.za**

radiobeacon station:	A *station* in the *radionavigation service* the *emissions* of which are intended to enable a *mobile station* to determine its bearing or direction in relation to the radiobeacon station.
radiocommunication service:	A service as defined in this Section involving the transmission, *emission* and/or reception of *radio waves* for specific *telecommunication* purposes. In these Regulations, unless otherwise stated, any radiocommunication service relates to *terrestrial radiocommunication*.
radiocommunication:	*Telecommunication* by means of *radio waves* (CS) (CV).
radiodetermination service:	A *radiocommunication service* for the purpose of *radiodetermination*.
radiodetermination station:	A *station* in the *radiodetermination service*.
radiodetermination:	The determination of the position, velocity and/or other characteristics of an object, or the obtaining of information relating to these parameters, by means of the propagation properties of *radio waves*.
radiodetermination-satellite service:	*A radiocommunication service* for the purpose of *radiodetermination* involving the use of one or more *space stations*. This service may also include *feeder links* necessary for its own operation.
radiolocation land station:	A *station* in the *radiolocation service* not intended to be used while in motion.
radiolocation mobile station:	A *station* in the *radiolocation service* intended to be used while in motion or during halts at unspecified points.
radiolocation service:	A *radiodetermination service* for the purpose of *radiolocation*.
radiolocation:	*Radiodetermination* used for purposes other than those of *radionavigation*.
radiolocation-satellite service:	A *radiodetermination-satellite service* used for the purpose of *radiolocation*. This service may also include the *feeder links* necessary for its operation.
radionavigation land station:	A *station* in the *radionavigation service* not intended to be used while in motion.
radionavigation mobile station:	A *station* in the *radionavigation service* intended to be used while in motion or during halts at unspecified points.
radionavigation service:	A *radiodetermination service* for the purpose of *radionavigation*.
radionavigation:	*Radiodetermination* used for the purposes of navigation, including obstruction warning.
radionavigation-satellite service:	A *radiodetermination-satellite service* used for the purpose of *radionavigation*. This service may also include *feeder links* necessary for its operation.
radiosonde:	An automatic radio transmitter in the *meteorological aids service* usually carried on an aircraft, free balloon, kite or parachute, and which transmits meteorological data.
radiotelegram:	A *telegram*, originating in or intended for a *mobile station* or a *mobile earth station* transmitted on all or part of its route over the *radiocommunication* channels of the *mobile service* or of the *mobile-satellite service*.
radiotelemetry:	*Telemetry* by means of *radio waves*.
radiotelephone call:	A telephone call, originating in or intended for a *mobile station* or a *mobile earth station*, transmitted on all or part of its route over the *radiocommunication* channels of the *mobile service* or of the *mobile-satellite service*.
radiotelex call:	A telex call, originating in or intended for a *mobile station* or a *mobile earth station*, transmitted on all or part of its route over the *radiocommunication* channels of the *mobile service* or the *mobile-satellite service*.

This gazette is also available free online at **www.gpwonline.co.za**

reduced carrier single-sideband emission:	A *single-sideband emission* in which the degree of carrier suppression enables the carrier to be reconstituted and to be used for demodulation.
reference frequency:	A frequency having a fixed and specified position with respect to the *assigned frequency*. The displacement of this frequency with respect to the *assigned frequency* has the same absolute value and sign that the displacement of the *characteristic frequency* has with respect to the centre of the frequency band occupied by the *emission*.
reflecting satellite:	A *satellite* intended to reflect *radiocommunication* signals.
right-hand (clockwise) *polarized wave:*	An elliptically- or circularly-polarized wave, in which the electric field vector, observed in any fixed plane, normal to the direction of propagation, whilst looking in the direction of propagation, rotates with time in a right-hand or clockwise direction.
safety service:	Any *radiocommunication service* used permanently or temporarily for the safeguarding of human life and property.
satellite emergency position-indicating radiobeacon:	An *earth station* in the *mobile-satellite service* the *emissions* of which are intended to facilitate search and rescue operations.
satellite link:	A radio link between a transmitting *earth station* and a receiving *earth station* through one *satellite*. A satellite link comprises one up-link and one down-link.
satellite network:	A *satellite system* or a part of a *satellite system*, consisting of only one *satellite* and the cooperating *earth stations*.
satellite system:	A *space system* using one or more artificial earth *satellites*.
satellite:	A body which revolves around another body of preponderant mass and which has a motion primarily and permanently determined by the force of attraction of that other body.
secondary radar:	A *radiodetermination* system based on the comparison of reference signals with radio signals retransmitted from the position to be determined.
semi-duplex operation:	A method which is *simplex operation* at one end of the circuit and *duplex operation* at the other[5].
ship earth station:	A *mobile earth station* in the *maritime mobile-satellite service* located on board ship.
ship movement service:	A *safety service* in the *maritime mobile service* other than a *port operations service*, between *coast stations* and *ship stations*, or between *ship stations*, in which messages are restricted to those relating to the movement of ships. Messages which are of a *public correspondence* nature shall be excluded from this service.
ship station:	A *mobile station* in the *maritime mobile service* located on board a vessel which is not permanently moored, other than a *survival craft station*.
ship's emergency transmitter:	A ship's transmitter to be used exclusively on a distress frequency for distress, urgency or safety purposes.
simplex operation:	Operating method in which transmission is made possible alternately in each direction of a *telecommunication* channel, for example, by means of manual control. [6]
single-sideband emission:	An amplitude modulated *emission* with one sideband only.
space operation service:	A *radiocommunication service* concerned exclusively with the operation of *spacecraft*, in particular *space tracking, space telemetry* and *space telecommand*.

[5] In general, *semi-duplex operation* require two frequencies in *radiocommunication*;

[6] In general, *simplex operation* may use either one or two frequencies in *radiocommunication*;

This gazette is also available free online at **www.gpwonline.co.za**

	These functions will normally be provided within the service in which the *space station* is operating.
space radiocommunication:	Any *radiocommunication* involving the use of one or more *space stations* or the use of one or more *reflecting satellites* or other objects in space.
space research service:	A *radiocommunication service* in which *spacecraft* or other objects in space are used for scientific or technological research purposes.
space station:	A *station* located on an object which is beyond, is intended to go beyond, or has been beyond, the major portion of the Earth's atmosphere.
space system:	Any group of cooperating *earth stations* and/or *space stations* employing *space radiocommunication* for specific purposes.
space telecommand:	The use of *radiocommunication* for the transmission of signals to a *space station* to initiate, modify or terminate functions of equipment on an associated space object, including the *space station*.
space telemetry:	The use of *telemetry* for the transmission from a *space station* of results of measurements made in a *spacecraft*, including those relating to the functioning of the *spacecraft*.
space tracking:	Determination of the *orbit*, velocity or instantaneous position of an object in space by means of *radiodetermination*, excluding *primary radar*, for the purpose of following the movement of the object.
spacecraft:	A man-made vehicle which is intended to go beyond the major portion of the Earth's atmosphere.
special service:	A *radiocommunication service*, not otherwise defined in this Section, carried on exclusively for specific needs of general utility, and not open to *public correspondence*.
spurious domain (of an emission):	The frequency range beyond the *out-of-band domain* in which *spurious emissions* generally predominate. (WRC-03)
spurious emission:	*Emission* on a frequency or frequencies which are outside the *necessary bandwidth* and the level of which may be reduced without affecting the corresponding transmission of information. Spurious emissions include harmonic *emissions*, parasitic *emissions*, intermodulation products and frequency conversion products, but exclude *out-of-band emissions*.
standard frequency and time signal service:	A *radiocommunication service* for scientific, technical and other purposes, providing the transmission of specified frequencies, time signals, or both, of stated high precision, intended for general reception.
standard frequency and time signal station:	A *station* in the *standard frequency and time signal service*.
station:	One or more transmitters or receivers or a combination of transmitters and receivers, including the accessory equipment, necessary at one location for carrying on a *radiocommunication service*, or the *radio astronomy service*. Each station shall be classified by the service in which it operates permanently or temporarily.
steerable satellite beam:	A *satellite* antenna beam that can be re-pointed.
suppressed carrier single-sideband emission:	A *single-sideband emission* in which the carrier is virtually suppressed and not intended to be used for demodulation.
survival craft station:	A *mobile station* in the *maritime mobile service* or the *aeronautical mobile service* intended solely for survival purposes and located on any lifeboat, life-raft or other survival equipment.
telecommand:	The use of *telecommunication* for the transmission of signals to initiate, modify or terminate functions of equipment at a distance.
telecommunication:	Any transmission, emission or reception of signs, signals, writings, images and sounds or intelligence of any nature by wire, radio, optical or other electromagnetic systems (CS).

This gazette is also available free online at **www.gpwonline.co.za**

telegram:	Written matter intended to be transmitted by *telegraphy* for delivery to the addressee. This term also includes *radiotelegrams* unless otherwise specified (CS). In this definition the term *telegraphy* has the same general meaning as defined in the Convention.
telegraphy[7]	A form of *telecommunication* in which the transmitted information is intended to be recorded on arrival as a graphic document; the transmitted information may sometimes be presented in an alternative form or may be stored for subsequent use (CS 1016).
telemetry:	The use of *telecommunication* for automatically indicating or recording measurements at a distance from the measuring instrument.
telephony:	A form of *telecommunication* primarily intended for the exchange of information in the form of speech (CS 1017).
television:	A form of *telecommunication* for the transmission of transient images of fixed or moving objects.
terrestrial radiocommunication:	Any *radiocommunication* other than *space radiocommunication* or *radio astronomy.*
terrestrial station:	A *station* effecting *terrestrial radiocommunication*. In these Regulations, unless otherwise stated, any *station* is a terrestrial station.
tropospheric scatter:	The propagation of *radio waves* by scattering as a result of irregularities or discontinuities in the physical properties of the troposphere.
unwanted emissions:	Consist of *spurious emissions* and *out-of-band emissions*.

[7] A graphic document records information in a permanent form and is capable of being filed and consulted; it may take the form of written or printed matter or of a fixed image.

This gazette is also available free online at **www.gpwonline.co.za**

1.2 Acronyms

AAA	Astronomy Advantage Area
AGAA	Astronomy Geographic Advantage Act, 2007 (Act No. 21 of 2007)
ASDE	Airports Surface Detection Equipment
ATC/CGC	Auxiliary Terrestrial Component /Complimentary Ground Component
BFWA	Broadband Fixed Wireless Access
BSS	Broadcast Satellite Service
BTX	Base Transmit
C-band	Frequency range between about 4 and 6 GHz
CT2	Second generation cordless telephones operating to specification MPT1334.
dBW	Decibels relative to one Watt of power.
DECT	Digital European Cordless Telecommunication system. ERC Decision ERC/DEC/ (94)03 refers.
DF	Duplex Frequency
DSC	Digital Selective Calling
DSSS	Direct Sequence Spread Spectrum
ECA	Electronic Communications Act No 36 of 2005
ENG	Electronic News Gathering
ENG/OB	Electronic News Gathering / Outside Broadcasting
EPIRB	Emergency Position Indicating Radio Beacon
FDDA	Field Disturbance and Doppler Apparatus
FM	Frequency Modulation
FSS	Fixed Satellite Service
FWA	Fixed Wireless Access

This gazette is also available free online at **www.gpwonline.co.za**

GLONASS	Global Navigation Satellite System
GMDSS	Global Maritime Distress and Safety System.
GPS	Global Positioning System - a satellite radio navigation system.
GSM	Global System for Mobile communications. Originally Groupe Spécial Mobile. See ERC Decision ERC/DEC/ (94)01.
GSM-R	GSM Railways
GSO	Geostationary Orbit
HAP	High Altitude Platform
HDFS	High Density Fixed Service
HDFSS	High Density Fixed Satellite Service
HF	High Frequency (3 to 30 MHz)
ICAO	International Civil Aviation Organisation
ILS	Instrument Landing System-aeronautical radio navigation system.
IMO	International Maritime Organisation
IMT	International Mobile Telecommunications
ISM	Industrial, Scientific and Medical. The use of radio for non-communication purposes such as microwave heating etc.
ITU	International Telecommunication Union.
Ku-band	Part of the frequency band between about 12 and 18 GHz
LEO	Low Earth Orbit satellite
LMDS	Local Multipoint Distribution Services
LPVS	Low Power Video Surveillance
LTE	Long Term Evolution
MF	Medium Frequency (300 to 3000 kHz)
MMS	Maritime Mobile Service

This gazette is also available free online at **www.gpwonline.co.za**

MPT	Mobile Public Trunking
MSS	Mobile Satellite Service
NGSO	Non-geostationary Satellite Orbit
OB	Outside Broadcast.
PAMR	Public Access Mobile Radio.
PMR	Private Mobile Radio.
PPDR	Public Protection and Disaster Relief
PSTN	Public Switched Telephone Network
RFID	Radio Frequency Identification systems
RLAN	Radio Local Area Network
RNSS	Radio Navigation Satellite Service
RR	Radio Regulation of the International Telecommunication Union
RTT	Road Transport Telematics
SAB	Services Ancillary to Broadcasting
SABRE	South African Band Replanning Exercise
SADC	Southern African Development Community
SAP	Services Ancillary to Programme-making
S-DAB	Satellite Digital Audio Broadcasting
SHF	Super High Frequency (3 to 30 GHz)
SKA	Square Kilometre Array
SNG	Satellite News Gathering
SRDs	Short Range Devices, formerly referred to as Low Power Devices (LPDs).
T-DAB	Terrestrial Digital Audio Broadcasting.
TDD	Time Division Duplex

This gazette is also available free online at **www.gpwonline.co.za**

UHF	Ultra-High Frequency (300 to 3000 MHz)
UAV	Unmanned Aerial Vehicle
VHF	Very High Frequency (30 to 300 MHz)
VLF	Very Low Frequency (3 to 30 kHz)
VOR	Very high frequency Omnidirectional Range (aeronautical radionavigation system).
VSAT	Very Small Aperture Terminal
WAS	Wireless Access Services
WARC	World Administrative Radio Conference. The last WARC was held in 1992. WARCs are now superseded by WRCs.
WLAN	Wireless Local Area Network
WRC	World Radiocommunication Conference.

This gazette is also available free online at **www.gpwonline.co.za**

2 PREAMBLE

2.1 Legislative Framework

Section 30 (1) of the Electronic Communications Act, 2005 (Act No. 36 of 2005), herein after refered to as the "Act", provides that "*In carrying out its functions under this Act and the related legislation, the Authority controls,plans, administers and manages the use and licensing of the radio frequency spectrum …*"

This National Radio Frequency Plan 2021 (NRFP-21) has been prepared in alignment to section 34 of the Act, read with section 231 (2) of the Constitution of the Republic of South Africa, 1996.

The NRFP-21 allocates the Radio Frequency Spectrum to Radio Services in the Frequency Bands between 8.3 kHz and 3000 GHz. All frequency assignments must be in accordance with the national radio frequency plan.

This NRFP-21 incorporates the decisions taken by 2019 World Radiocommunication Conferences (WRC-19). The revision reflects the 2020 version of the ITU Radio Regulations edition, including the frequency allocations relevant to Region 1 and its associated footnotes. It also includes updates on the Table of Frequency Allocations extending up to 3000 GHz and South African National Footnotes.

A document containing relevant ITU – R Resolutions and Recommendations referred in this document can be found on the Authority's website.

The pattern of radio use is not static as it is continuously evolving to reflect the changes that are taking place in the radio environment, particularly in the field of technology. Spectrum allocations must reflect these changes and the position set out in this plan is therefore subject to regular reviews.

In view of the above, it is the intention of the Authority to update the NRFP when necessary, in order to keep the plan current with due regard given to the current and future usage of the radio frequency spectrum.

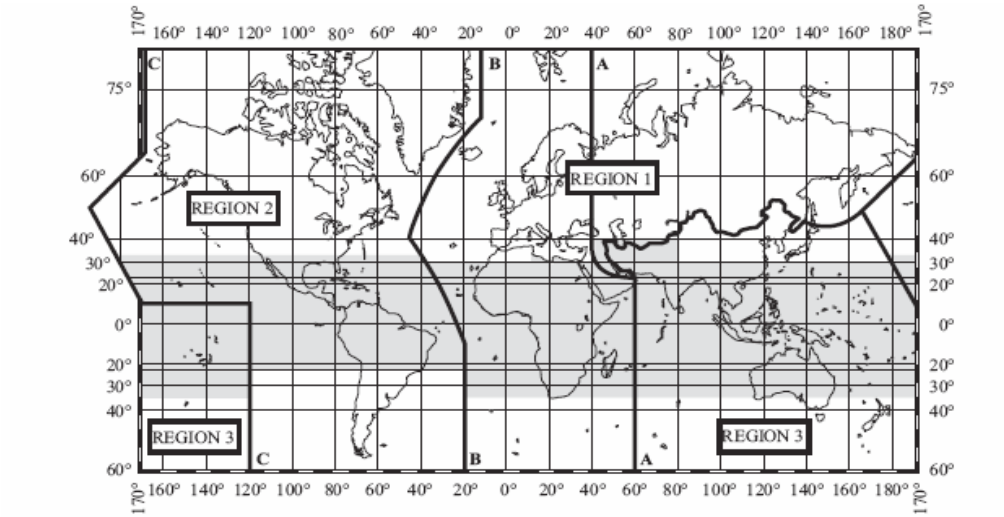
The following updates and amendments amongst others have been implemented in NRFP -21:

- National footnotes have been revised.
- The resolutions and decisions taken by World Radiocommunication Conferences preceding WRC-19.
- The resolutions and decisions taken by the WRC-19, as ratified by South Africa (Republic of), have been reflected.
- Incorporated references to the SADC Frequency Allocation Plan (FAP) and SADC Harmonised Guidelines
- Incorporated the published RFSAP's where applicable.

2.2 ITU-R Radio Regions

For the purposes of allocating frequencies, the ITU has divided the world into three Regions as shown on the following map:

This gazette is also available free online at **www.gpwonline.co.za**



Region 1: Region 1 includes the area limited on the east by line A (lines A, B and C are defined below) and on the west by line B, excluding any of the territory of the Islamic Republic of Iran which lies between these limits. It also includes the whole of the territory of Armenia, Azerbaijan, the Russian Federation, Georgia, Kazakhstan, Mongolia, Uzbekistan, Kyrgyzstan, Tajikistan, Turkmenistan, Turkey and Ukraine and the area to the north of Russian Federation which lies between lines A and C.

Region 2: Region 2 includes the area limited on the east by line B and on the west by line C.

Region 3: Region 3 includes the area limited on the east by line C and on the west by line A, except any of the territory of Armenia, Azerbaijan, the Russian Federation, Georgia, Kazakhstan, Mongolia, Uzbekistan, Kyrgyzstan, Tajikistan, Turkmenistan, Turkey and Ukraine and the area to the north of Russian Federation. It also includes that part of the territory of the Islamic Republic of Iran lying outside of those limits.

The Republic of South Africa falls under ITU Region 1 and thus aligns its frequency allocations with those specified for ITU Region 1 in the ITU Radio Regulations as required by the Act.

2.3 Structure of the Table of Frequency Allocations

The Table of Frequency Allocations (section 4) lists all the allocations in the radio-frequency spectrum in the Republic of South Africa. The structure of the Table, which is outlined below, is similar to that of the International Table of Frequency Allocations as it appears in Article **5** of the ITU Radio Regulations.

The Table of Frequency Allocations covers the frequency range 8.3 kilohertz (kHz) to 3 000 Gigahertz (GHz). The table of frequency allocations list for each frequency range the radiocommunication services that are permitted and which ones are currently in use in South Africa. Information is also given on possible future uses or changes in use of particular frequency bands.

2.3.1 Column 1 - ITU Region 1 Allocations and footnotes

This column shows the type of radiocommunications service allocated to the frequency band by ITU. These allocations are defined in the ITU Radio Regulations. Entries in UPPER CASE denote primary services while entries in lower case denote secondary services as defined in the ITU Radio Regulations. Footnotes (e.g., **5.149**) are the footnotes to the Table of Frequency Allocations as detailed in Article **5** of the Radio Regulations.

This gazette is also available free online at **www.gpwonline.co.za**

Values in this column denote the radio-frequency band. Magnitude of frequency units used in the column header are: kHz indicates kilohertz, MHz indicates Megahertz and GHz indicates Gigahertz.
Secondary services are on a non-interference and non-protection basis (NINP) to the primary services[8].
Spectrum assigned on a secondary basis means that the secondary station:

(i) cannot cause harmful interference to stations of primary services to which frequencies are already assigned or to which frequencies may be assigned at a later date;
(ii) cannot claim protection from harmful interference from stations of a primary service to which frequencies are already assigned or may be assigned at a later date, however;
(iii) can claim protection from interference from stations of the secondary service(s) to which frequencies may be assigned at a later date.

The frequency band referred to in each allocation is indicated in the left hand top corner of the part of the Table concerned.

The order of listing does not indicate relative priority within each category.
The footnote references are those that appear in Article 5 of the ITU Radio Regulations and are applicable to region 1.

- The footnote references which appear in the bottom of the table reflect the allocated service or services which apply to more than one of the allocated services, or to the whole of the allocation concerned.
- The footnote references which appear to the right of the name of a service are applicable only to that particular service.

2.3.2 Column 2 – South African allocations and footnotes

This column indicates the allocations of radiocommunication service(s) specified for South Africa, based on Article **5** of the ITU Radio Regulations. Names of services are based on the definitions in the ITU Radio Regulations and footnotes relevant to South Africa are included. The allocations highlighted with UPPER-CASE letters correspond to primary status allocations; the allocations with secondary status are written in lower-case.

Values in this column denote the radio-frequency band. The magnitude of the frequency units used in the column header are: kilohertz(kHz), Megahertz(MHz) and GHz indicates Gigahertz.
Whilst the South African allocations are broadly aligned with the ITU Region 1 requirements, a number of variations exist. In accordance with Radio Regulations No. **4.4**, such variations are subject to the condition that the associated radio installations do not cause harmful interference to the radio services or communications of other ITU Member States that operate in accordance with the provisions of the Radio Regulations, and that the possibility of harmful interference from such services and communications is accepted.

The column further makes reference to national footnotes (e.g., NF xx) that are indicated as 'NF' and appear in the table of allocation on the same basis as the ITU footnotes.

2.3.3 Column 3 – Typical Applications

This column indicates the current national usage of the frequency band in South Africa and contains allowed applications. Contains the main service, systems and application(s) of this frequency band or a part of it, authorized in South Africa. If the use covers more than one frequency band or concerns only one part of the band, the frequency range is generally indicated.

[8] Article **4.4** of the Radio Regulations: Administrations of the Member States shall not assign to a station any frequency in derogation of either the Table of Frequency Allocations in this Chapter or the other provisions of these Regulations, except on the express condition that such a station, when using such a frequency assignment, shall not cause harmful interference to, and shall not claim protection from harmful interference caused by, a station operating in accordance with the provisions of the Constitution, the Convention and these Regulations.

This gazette is also available free online at **www.gpwonline.co.za**

2.3.4 Column 4 – Notes and comments

This column gives relevant document references as well as other additional information applicable to the frequency band. This column contains information about reference documents and relevant standards as well as other guidelines applicable to the frequency band, e.g., Government Gazette Notices pertinent to specific frequency bands, future requirements in specific bands, and ITU-R Recommendations or Resolutions which require implementation.

2.3.5 ITU-R Region 1 and National Footnotes

South African National Footnotes and ITU-R footnotes applicable to Region 1 are contained in sections 5 and 6 respectively.

2.3.6 List of frequency bands used for Maritime services

The List of frequency bands used for Maritime services is contained in section 8.

2.3.7 Frequency and wavelength bands

The radio spectrum shall be subdivided into nine frequency bands, which shall be designated by progressive whole numbers in accordance with the following table. As the unit of frequency is the hertz (Hz), frequencies shall be expressed:

– in kilohertz (kHz), up to and including 3 000 kHz;

– in megahertz (MHz), above 3 MHz, up to and including 3 000 MHz;

– in gigahertz (GHz), above 3 GHz, up to and including 3 000 GHz.

However, where adherence to these provisions would introduce serious difficulties, for example in connection with the notification and registration of frequencies, the lists of frequencies and related matters, reasonable departures may be made. (WRC-15).

This gazette is also available free online at **www.gpwonline.co.za**

Table 1: Frequency and wavelength bands

Band number	Symbols	Frequency Range (lower limit exclusive, upper limit inclusive)	Corresponding metric Subdivision=
4	VLF	3 to 30 kHz	Myriametric waves
5	LF	30 to300 kHz	Kilometric waves
6	MF	300 to 3 000kHz	Hectometric waves
7	HF	3 to 30 MHz	Decametric waves
8	VHF	30 to300 MHz	Metric waves
9	UHF	300 to 3000 MHz	Decimetric waves
10	SHF	3 to 30 GHz	Centimetric waves
11	EHF	30 to300 GHz	Millimetric waves
12		300 to 3000 GHz	Decimillimetric waves

NOTE 1: "Band N" (N = band number) extends from 0.3×10^N Hz to 3×10^N Hz.
NOTE 2: Prefix: k = kilo (10^3), M = mega (10^6), G = giga (10^9).

Table 2: Standard Frequency Band Nomenclature

Table 2 below illustrates the standard letter-band designations.

Band	Frequency Range (GHz)	Wavelength in Free Space (centimeters)
L band	1 to 2	30.0 to 15.0
S band	2 to 4	15 to 7.5
C band	4 to 8	7.5 to 3.8
X band	8 to 12	3.8 to 2.5
Ku band	12 to 18	2.5 to 1.7
K band	18 to 27	1.7 to 1.1
Ka band	27 to 40	1.1 to 0.75
V band	40 to 75	0.75 to 0.40
W band	75 to 110	0.40 to 0.27
Millimetre band	110 to 300	0.27 to 0.10

This gazette is also available free online at **www.gpwonline.co.za**

3 CONTACT DETAILS

Further information on the South African Table of Frequency Allocations and its interpretation can be obtained by contacting:

Independent Communications Authority of South Africa
350 Witch-Hazel Ave.
Eco-Park Estate
Centurion
0144
Phone: +27 12 568 3000
URL: http://www.icasa.org.za
E-mail: info@icasa.org.za

This gazette is also available free online at **www.gpwonline.co.za**

This gazette is also available free online at www.gpwonline.co.za

4 TABLE OF FREQUENCY ALLOCATIONS

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
Below 8.3 kHz (Not allocated) 5.53 5.54	**Below 8.3 kHz** (Not allocated) 5.53 5.54		Frequency bands below 8.3 kHz are not allocated in South Africa
8.3-9 kHz METEOROLOGICAL AIDS 5.54A 5.54B 5.54C	**8.3-9 kHz** METEOROLOGICAL AIDS 5.54A	Thunderstorm detection stations	
9-11.3 kHz METEOROLOGICAL AIDS 5.54A RADIONAVIGATION	**9-11.3 kHz** METEOROLOGICAL AIDS 5.54A RADIONAVIGATION	Thunderstorm detection stations Navigational Aids Inductive Loop Systems (9 – 135 kHz)	Radio Frequency Spectrum Regulations as amended (Annex B) (GG. No. 38641, 30 March 2015).
11.3-14 kHz RADIONAVIGATION	**11.3-14 kHz** RADIONAVIGATION	Navigational Aids Inductive Loop Systems (9 – 135 kHz) SRDs – inductive short-range radiocommunications (9 – 135 kHz)	Radio Frequency Spectrum Regulations as amended (Annex B) (GG. No. 38641, 30 March 2015). SRDs - see ITU-R Rec.SM. 1896-1[9] latest version.

.

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
14-19.95 kHz FIXED MARITIME MOBILE 5.57 5.55 5.56	**14-19.95 kHz** FIXED MARITIME MOBILE 5.57 STANDARD FREQUENCY AND TIME SIGNAL 5.56	Maritime mobile communications Inductive Loop Systems (9 – 135 kHz) SRDs – inductive short-range radiocommunications (9 – 135 kHz)	Radio Frequency Spectrum Régulations as amended (Annex B) (GG. No. 38641, 30 March 2015). SRDs - see ITU-R Rec.SM. 2153-7 latest version.
19.95-20.05 kHz STANDARD FREQUENCY AND TIME SIGNAL (20 kHz)	**19.95-20.05 kHz** STANDARD FREQUENCY AND TIME SIGNAL (20 kHz)	Inductive Loop Systems (9 – 135 kHz) SRDs – inductive short-range radiocommunications (9 – 135 kHz)	Radio Frequency Spectrum Regulations as amended (Annex B) (GG. No. 38641, 30 March 2015) SRDs - see ITU-R Rec.SM. 1896-1 latest version.
20.05-70 kHz FIXED MARITIME MOBILE 5.57	**20.05-70 kHz** FIXED MARITIME MOBILE 5.57 STANDARD FREQUENCY AND TIME SIGNAL	Maritime mobile communications Inductive Loop Systems (9 – 135 kHz) RFID (59.75 – 60.25 kHz)	Radio Frequency Spectrum Regulations as amended (Annex B) (GG. No., 38641 March 2015)

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
5.56 5.58	5.56	SRDs – inductive short-range radiocommunications (9 –135 kHz)	SRDs - see ITU-R Rec.SM. 1896-1 latest version.
70-72 kHz RADIONAVIGATION 5.60	**70-72 kHz** RADIONAVIGATION 5.60	Navigational Aids Inductive Loop Systems (9 – 135 kHz) RFID (70 – 135 kHz) SRDs – inductive short-range radiocommunications (9 – 135 kHz)	Radio Frequency Spectrum Regulations as amended (Annex B) (GG. No. 386410 March 2015) SRDs - see ITU-R Rec.SM. 1896-1 latest version.
72-84 kHz FIXED MARITIME MOBILE 5.57 RADIONAVIGATION 5.60 5.56	**72-84 kHz** FIXED MARITIME MOBILE 5.57 RADIONAVIGATION 5.60 STANDARD FREQUENCY AND TIME SIGNAL 5.56	Maritime mobile communications Navigational Aids Inductive Loop Systems (9 – 135 kHz) RFID (70 – 135 kHz) SRDs – inductive short-range radiocommunications (9 – 135 kHz)	Radio Frequency Spectrum Regulations as amended (Annex B) (GG. No. 38641, 30 March 2015). SRDs - see ITU-R Rec.SM. 1896-1 latest version.

This gazette is also available free online at www.gpwonline.co.za

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
84-86 kHz RADIONAVIGATION 5.60	**84-86 kHz** RADIONAVIGATION 5.60	Navigational Aids Inductive Loop Systems (9 – 135 kHz) RFID (70 – 135 kHz) SRDs – inductive short-range radiocommunications (9 – 135 kHz)	Radio Frequency Spectrum Regulations (Annex B) (GG. No.38641, 30 March 2015). SRDs - see ITU-R Rec.SM. 1896-1 latest version.
86-90 kHz FIXED MARITIME MOBILE 5.57 RADIONAVIGATION 5.56	**86-90 kHz** FIXED MARITIME MOBILE 5.57 RADIONAVIGATION STANDARD FREQUENCY AND TIME SIGNAL 5.56	Maritime mobile communications Navigational Aids Inductive Loop Systems (9 – 135 kHz) RFID (70 – 135 kHz) SRDs – inductive short-range radiocommunications (9 – 135 kHz)	Radio Frequency Spectrum Regulations (Annex B) (GG. No.38641, 30 March 2015) SRDs - see ITU-R Rec.SM. 1896-1 latest version.
90-110 kHz RADIONAVIGATION 5.62 Fixed	**90-110 kHz** RADIONAVIGATION 5.62 Fixed	Navigational Aids	Radio Frequency Spectrum Regulations (Annex B) (GG. No. 38641, 30 March 2015).

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
5.64	5.64	Inductive Loop Systems (9 – 135 kHz) RFID (70 – 135 kHz) SRDs – inductive short-range radiocommunications (9 – 135 kHz)	SRDs - see ITU-R Rec.SM. 1896-1 latest version.
110-112 kHz FIXED MARITIME MOBILE RADIONAVIGATION 5.64	**110-112 kHz** FIXED MARITIME MOBILE RADIONAVIGATION 5.64	Maritime mobile communications Navigational Aids Inductive Loop Systems (9 – 135 kHz) RFID (70 – 135 kHz) SRDs – inductive short-range radiocommunications (9 – 135 kHz)	Radio Frequency Spectrum Regulations (Annex B) (GG. No. 38641, 30 March 2015). SRDs - see ITU-R Rec.SM. 1896-1 latest version.
112-115 kHz RADIONAVIGATION 5.60	**112-115 kHz** RADIONAVIGATION 5.60	Navigational Aids Inductive Loop Systems (9 – 135 kHz) RFID (70 – 135 kHz) SRDs – inductive short-range radiocommunications (9 – 135 kHz)	Radio Frequency Spectrum Regulations (Annex B) (GG. No.38641, 30 March 2015). SRDs - see ITU-R Rec.SM. 1896-1 latest version.
115-117.6 kHz RADIONAVIGATION 5.60	**115-117.6 kHz** RADIONAVIGATION 5.60	Navigational Aids	

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
Fixed Maritime mobile 5.64 5.66	Fixed Maritime mobile 5.64	Maritime mobile communications Inductive Loop Systems (9 – 135 kHz) RFID (70 – 135 kHz) SRDs – inductive short-range radiocommunications (9 – 135 kHz)	Radio Frequency Spectrum Regulations (Annex B) (GG. No.38641, 30 March 2015).) SRDs - see ITU-R Rec.SM. 1896-1 latest version.
117.6-126 kHz FIXED MARITIME MOBILE RADIONAVIGATION 5.60 5.64	**117.6-126 kHz** FIXED MARITIME MOBILE RADIONAVIGATION 5.60 5.64	Maritime mobile communications Navigational Aids Inductive Loop Systems (9 – 135 kHz) RFID (70 – 135 kHz) SRDs – inductive short-range radiocommunications (9 – 135 kHz)	Radio Frequency Spectrum Regulations (Annex B) (GG. No.38641, 30 March 2015). SRDs - see ITU-R Rec.SM. 1896-1 latest version.
126-129 kHz RADIONAVIGATION 5.60	**126-129 kHz** RADIONAVIGATION 5.60	Navigational Aids Inductive Loop Systems (9 – 135 kHz) RFID (70 – 135 kHz)	Radio Frequency Spectrum Regulations (Annex B) (GG. No.38641, 30 March 2015).

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
		SRDs – inductive short-range radiocommunications (9 – 135 kHz)	SRDs - see ITU-R Rec.SM. 1896-1 latest version.
129-130 kHz FIXED MARITIME MOBILE RADIONAVIGATION 5.60 5.64	**129-130 kHz** FIXED MARITIME MOBILE RADIONAVIGATION 5.60 5.64	Maritime mobile communications Navigational Aids Inductive Loop Systems (9 – 135 kHz) RFID (70 – 135 kHz) SRDs – inductive short-range radiocommunications (9 – 135 kHz)	Radio Frequency Spectrum Regulations (Annex B) (GG. No.38641, 30 March 2015). SRDs - see ITU-R Rec.SM. 1896-1 latest version.
130-135.7 kHz FIXED MARITIME MOBILE 5.64 5.67	**130-135.7 kHz** FIXED MARITIME MOBILE 5.64	Maritime mobile communications Inductive Loop Systems (9 – 135 kHz) RFID (70 – 135 kHz) SRDs – inductive short-range radiocommunications (9 – 135 kHz)	Radio Frequency Spectrum Regulations (Annex B) (GG. No.38641, 30 March 2015). SRDs - see ITU-R Rec.SM. 1896-1 latest version.
135.7-137.8 kHz FIXED	**135.7-137.8 kHz** FIXED		

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
MARITIME MOBILE Amateur 5.67A 5.64 5.67 5.67B	MARITIME MOBILE Amateur 5.67A 5.64	Maritime mobile communications Amateur	Amateur (135.7-137.8 kHz) services are limited to maximum radiated power of 1 W (e.i.r.p). Radio Frequency Spectrum Regulations (Annex B) (GG. No.38641, 30 March 2015).
137.8-148.5 kHz FIXED MARITIME MOBILE 5.64 5.67	**137.8-148.5 kHz** FIXED MARITIME MOBILE 5.64	Maritime mobile communications	
148.5-255 kHz BROADCASTING 5.68 5.69 5.70	**148.5-160 kHz** BROADCASTING **160-200 kHz** FIXED 5.68 **200-255 kHz** AERONAUTICAL RADIONAVIGATION 5.70	Broadcasting Navigational Aids	Frequency Assignment Plan (GE75) applies.

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
255-283.5 kHz BROADCASTING AERONAUTICAL RADIONAVIGATION 5.70	**255-283.5 kHz** AERONAUTICAL RADIONAVIGATION 5.70	Navigational Aids	
283.5-315 kHz AERONAUTICAL RADIONAVIGATION MARITIME RADIONAVIGATION (radiobeacons) 5.73	**283.5- 285.3 kHz** AERONAUTICAL RADIONAVIGATION MARITIME RADIONAVIGATION (radiobeacons) 5.73 MARITIME) RADIONAVIGATION 5.74	Navigational Aids Supplementary navigational information using narrow-band	
	285.3-285.7 kHz AERONAUTICAL RADIONAVIGATION MARITIME RADIONAVIGATION (radiobeacons) 5.73 5.74	Navigational Aids Supplementary navigational information using narrow-band	
	285.7-315 kHz AERONAUTICAL RADIONAVIGATION	Navigational Aids	

This gazette is also available free online at www.gpwonline.co.za

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
5.74	MARITIME RADIONAVIGATION (radiobeacons) 5.73 5.74	Supplementary navigational information using narrow-band	
315-325 kHz AERONAUTICAL RADIONAVIGATION Maritime radionavigation (radiobeacons) 5.73 5.75	**315-325 kHz** AERONAUTICAL RADIONAVIGATION Maritime radionavigation (radiobeacons) 5.73	Navigational Aids Coast Radio Telegraph Stations Radionavigation	
325-405 kHz AERONAUTICAL RADIONAVIGATION	**325-405 kHz** AERONAUTICAL RADIONAVIGATION	Navigational Aids	
405-415 kHz RADIONAVIGATION 5.76	**405-415 kHz** RADIONAVIGATION 5.76	Navigational Aids	
415-435 kHz MARITIME MOBILE 5.79 AERONAUTICAL RADIONAVIGATION	**415-435 kHz** MARITIME MOBILE 5.79 AERONAUTICAL RADIONAVIGATION	Maritime mobile communications Under the MMS the use of the band 415-495 kHz is limited to radiotelegraphy	NAVDAT System (TX for coast stations only)
435-472 kHz	**435-472 kHz**		

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
MARITIME MOBILE 5.79 Aeronautical radionavigation 5.77 5.82	**MARITIME MOBILE** 5.79 Aeronautical radionavigation 5.82	Maritime mobile communications Coast Stations in the NAVTEX service on 490 kHz; Res.339 applies. Transmission of navigational and meteorological warnings and urgent info for ships (NBDP telegraphy).	NAVDAT System (TX for coast stations only) Article 31 and Article 52 apply.
472-479 kHz MARITIME MOBILE 5.79 Amateur 5.80A Aeronautical radionavigation 5.77 5.80 5.80B 5.82	**472-479 kHz** MARITIME MOBILE 5.79 Amateur 5.80A Aeronautical radionavigation 5.82	Navigational Aids	NAVDAT System (TX for coast stations only)
479-495 kHz **MARITIME MOBILE** 5.79 5.79A Aeronautical radionavigation 5.77 5.82	**479-495 kHz** **MARITIME MOBILE** 5.79 5.79A Aeronautical radionavigation 5.82	NAVTEX service on 490 kHz	NAVDAT System (TX for coast stations only) Article 31 and Article 52 apply
495-505 kHz MARITIME MOBILE 5.82C	**495-505 kHz** MARITIME MOBILE 5.82C	Limited to radiotelegraphy;	NAVDAT System (TX for coast stations only) Article 31 and Article 52 apply.

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
505-526.5 kHz MARITIME MOBILE 5.79 5.79A 5.84 AERONAUTICAL RADIONAVIGATION	**505-526.5 kHz** MARITIME MOBILE 5.79 5.79A 5.84 AERONAUTICAL RADIONAVIGATION	Maritime mobile communications Maritime Radio Telegraphy NAVTEX service on 518 kHz Coast Stations in the NAVTEX service on 518 kHz; Navigational Aids	NAVDAT System (TX for coast stations only) Articles 31 and 52 apply. Resolution 339 Rev.WRC-07) applies. The use of the band 505-526.5 kHz in the MMS is limited to radiotelegraphy.
526.5-1 606.5 kHz BROADCASTING 5.87 5.87A	**526.5-1 606.5 kHz** BROADCASTING	Medium Wave Sound Broadcasting (535.5 -1606.5 kHz) Inductive Loop Systems (740 – 8800 kHz) Digital Sound Broadcasting (DSB) services	The Terrestrial Broadcasting Frequency Plan as amended (GG No. 36321) 02 April 2013 Radio Frequency Spectrum Regulations (Annex B) (GG. No.38641, 30 March 2015). Digital Sound Broadcasting (DSB) Regulations was published in GG44469 Notice 215 of 2021.
1 606.5-1 625 kHz FIXED MARITIME MOBILE 5.90 LAND MOBILE 5.92	**1 606.5-1 625 kHz** FIXED MARITIME MOBILE 5.90 LAND MOBILE RADIODETERMINATION 5.92	Maritime mobile communications Land mobile communications	

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
1 625-1 635 kHz RADIOLOCATION 5.93	**1 625-1 635 kHz** RADIOLOCATION	Navigational Aids	
1 635-1 800 kHz FIXED MARITIME MOBILE 5.90 LAND MOBILE 5.92 5.96	**1 635-1 800 kHz** FIXED MARITIME MOBILE 5.90 LAND MOBILE RADIODETERMINATION 5.92	Maritime mobile communications Land mobile communications	
1 800-1 810 kHz RADIOLOCATION 5.93	**1 800-1 810 kHz** RADIOLOCATION	Navigational Aids	
1 810-1 850 kHz AMATEUR 5.98 5.99 5.100	**1 810-1 850 kHz** AMATEUR	Amateur communications	Radio Frequency Spectrum Regulations (Annex B) (GG. No.38641, 30 March 2015).
1 850-2 000 kHz FIXED MOBILE except aeronautical mobile	**1 850-2 000 kHz** FIXED MOBILE except aeronautical mobile	Maritime mobile applications. Maritime mobile communications	1850-1950 kHz is used for Maritime Coast Stations; 1950-2045 kHz is

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
5.92 5.96 5.103	RADIODETERMINATION 5.92 5.103	Land mobile communications Amateur communications	used by ship stations SSB Radio Telephony. Radio Frequency Spectrum Regulations (Annex B) (GG. No.38641, 30 March 2015).
2 000-2 025 kHz FIXED MOBILE except aeronautical mobile (R) 5.92 5.103	**2 000-2 025 kHz** FIXED MOBILE except aeronautical mobile (R) RADIODETERMINATION 5.92 5.103	Maritime mobile communications Land mobile communications	1950-2045 kHz is used by ship stations SSB Radio Telephony
2 025-2 045 kHz FIXED MOBILE except aeronautical mobile (R) Meteorological aids 5.104 5.92 5.103	**2 025-2 045 kHz** FIXED MOBILE except aeronautical mobile (R) Meteorological aids 5.104 RADIODETERMINATION 5.92 5.103	Maritime mobile communications Limited to Oceanographic buoy stations	1950-2045 kHz is used by ship stations SSB Radio Telephony
2 045-2 160 kHz FIXED MARITIME MOBILE LAND MOBILE 5.92	**2 045-2 160 kHz** FIXED MARITIME MOBILE LAND MOBILE RADIODETERMINATION 5.92	Maritime mobile communications Land mobile communications	

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
2 160-2 170 kHz RADIOLOCATION 5.93 5.107	**2 160-2 170 kHz** RADIOLOCATION	Navigational Aids	
2 170-2 173.5 kHz MARITIME MOBILE	**2 170-2 173.5 kHz** MARITIME MOBILE	Maritime mobile communications	
2 173.5-2 190.5 kHz MOBILE (distress and calling) 5.108 5.109 5.110 5.111	**2 173.5-2 190.5 kHz** MOBILE (distress and calling) 5.108 5.109 5.110 5.111	Distress & Watch keeping (2182 kHz) 2 182 kHz is an international distress and calling frequency for radiotelephony. 2 187.5 kHz – DSC for distress and calling; 2 174.5 kHz – international distress frequency for NBDP telegraphy.	Article 31 and Article 52 applies
2 190.5-2 194 kHz MARITIME MOBILE	**2 190.5-2 194 kHz** MARITIME MOBILE	Maritime mobile communications	
2 194-2 300 kHz FIXED MOBILE except aeronautical mobile (R)	**2 194-2 300 kHz** FIXED MOBILE except aeronautical mobile (R)	Maritime mobile communications Land mobile communications	

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
5.92 5.103	RADIODETERMINATION 5.92 5.103		
2 300-2 498 kHz FIXED MOBILE except aeronautical mobile (R) BROADCASTING 5.113 5.103	**2 300-2 498 kHz** FIXED MOBILE except aeronautical mobile (R) BROADCASTING 5.113 5.103	Land Mobile and Maritime applications Sound Broadcasting	Terrestrial Broadcasting Frequency Plan 2013
2 498-2 501 kHz STANDARD FREQUENCY AND TIME SIGNAL (2 500 kHz)	**2 498-2 501 kHz** STANDARD FREQUENCY AND TIME SIGNAL (2 500 kHz)		
2 501-2 502 kHz STANDARD FREQUENCY AND TIME SIGNAL Space Research	**2 501-2 502 kHz** STANDARD FREQUENCY AND TIME SIGNAL Space Research		
2 502-2 625 kHz FIXED MOBILE except aeronautical mobile (R)	**2 502-2 625 kHz** FIXED MOBILE except aeronautical mobile (R) RADIODETERMINATION	Land Mobile and Maritime applications	

CONTINUES ON PAGE 258 OF BOOK 3

Printed by and obtainable from the Government Printer, Bosman Street, Private Bag X85, Pretoria, 0001
Contact Centre Tel: 012-748 6200. eMail: info.egazette@gpw.gov.za
Publications: Tel: (012) 748 6053, 748 6061, 748 6065

This gazette is also available free online at **www.gpwonline.co.za**



Government Gazette
Staatskoerant

REPUBLIC OF SOUTH AFRICA
REPUBLIEK VAN SUID AFRIKA

Vol. 681 25 March Maart 2022 No. 46088

PART 3 OF 6

N.B. The Government Printing Works will not be held responsible for the quality of "Hard Copies" or "Electronic Files" submitted for publication purposes

ISSN 1682-5845

9 771682 584003 46088

AIDS HELPLINE: 0800-0123-22 Prevention is the cure

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
5.92 5.103	5.92 5.103		
2 625-2 650 kHz MARITIME MOBILE MARITIME RADIONAVIGATION 5.92	**2 625-2 650 kHz** MARITIME MOBILE MARITIME RADIONAVIGATION RADIODETERMINATION 5.92	Sonobuoys Maritime mobile communications	
2 650-2 850 kHz FIXED MOBILE except aeronautical mobile (R) 5.92 5.103	**2 650-2 850 kHz** FIXED MOBILE except aeronautical mobile (R) RADIODETERMINATION 5.92 5.103	Fixed Services links Maritime mobile communications Land mobile communications	
2 850-3 025 kHz AERONAUTICAL MOBILE (R) 5.111 5.115	**2 850-3 025 kHz** AERONAUTICAL MOBILE (R) 5.111 5.115	Aeronautical mobile (R) 3 023 kHz may be used under the MMS for search and rescue operations	Appendix 27 Allotment Plan applies Article 31 applies
3 025-3 155 kHz AERONAUTICAL MOBILE (OR)	**3 025-3 155 kHz** AERONAUTICAL MOBILE (OR)	Aeronautical mobile (OR)	Appendix 26 Allotment Plan applies

This gazette is also available free online at www.gpwonline.co.za

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
3 155-3 200 kHz FIXED MOBILE except aeronautical mobile (R) 5.116 5.117	**3 155-3 200 kHz** FIXED MOBILE except aeronautical mobile (R) 5.116	Maritime mobile communications Land mobile communications SRD[10] Low power wireless hearing aids	Radio Frequency Spectrum Regulations (Annex B) (GG. No.38641, 30 March 2015). Worldwide channel for low power hearing aids (3155 to 3195 kHz). Additional channels may be assigned in the band 3155 – 3400 kHz.
3 200-3 230 kHz FIXED MOBILE except aeronautical mobile (R) BROADCASTING 5.113 5.116	**3 200-3 230 kHz** FIXED MOBILE except aeronautical mobile (R) BROADCASTING 5.113 5.116	Maritime mobile communications Land mobile communications HF Sound Broadcasting Low power wireless hearing aids	Radio Frequency Spectrum Regulations (Annex B) (GG. No.38641, 30 March 2015). The Terrestrial Broadcasting Frequency Plan (GG no.36321) 02 April 2013 Worldwide channel for low power hearing aids (3155 to 3195 kHz). Additional channels may be assigned in the band 3155 – 3400 kHz.

[10] http://www.crasa.org/common_up/crasa-setup/06-07-2015_SADC%20FREQUENCIES%20FOR%20SHORT%20RANGE%20DEVICE%20(SRDs)%20CRASA%20%202011%20-ANNEXURE%20B%20AND%20C.pdf

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
3 230-3 400 kHz FIXED MOBILE except aeronautical mobile BROADCASTING 5.113 5.116	**3 230-3 400 kHz** FIXED MOBILE except aeronautical mobile BROADCASTING 5.113 5.116	 HF Sound Broadcasting Low power wireless hearing aids	 The Terrestrial Broadcasting Frequency Plan (GG no.36321) 02 April 2013 Worldwide channel for low power hearing aids (3155 to 3195 kHz). Additional channels may be assigned in the band 3155 – 3400 kHz.
3 400-3 500 kHz AERONAUTICAL MOBILE (R)	**3 400-3 500 kHz** AERONAUTICAL MOBILE (R)	 Aeronautical mobile (R)	 Appendix 27 Allotment Plan applies
3 500-3 800 kHz AMATEUR FIXED MOBILE except aeronautical mobile 5.92	**3 500-3 800 kHz** AMATEUR FIXED MOBILE except aeronautical mobile RADIODETERMINATION 5.92	 Amateur communications Maritime communications Land mobile communications	 Radio Frequency Spectrum Regulations (Annex B) (GG. No.38641, 30 March 2015).

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
3 800-3 900 kHz FIXED AERONAUTICAL MOBILE (OR) LAND MOBILE	**3 800-3 900 kHz** FIXED AERONAUTICAL MOBILE (OR) LAND MOBILE	Aeronautical mobile (OR)	Appendix 26 Allotment Plan applies
3 900-3 950 kHz AERONAUTICAL MOBILE (OR) 5.123	**3 900-3 950 kHz** AERONAUTICAL MOBILE (OR) BROADCASTING 5.123	Aeronautical mobile (OR)	Appendix 26 Allotment Plan applies
3 950-4 000 kHz FIXED BROADCASTING	**3 950-4 000 kHz** FIXED BROADCASTING	HF Sound Broadcasting	The Terrestrial Broadcasting Frequency Plan (GG no.36321) 02 April 2013
4 000-4 063 kHz FIXED MARITIME MOBILE 5.127 5.126	**4 000-4 063 kHz** FIXED MARITIME MOBILE 5.127	Maritime mobile communications	Use of the band 4000-4063 kHz by the MMS is limited to ship stations using radiotelephony
4 063-4 438 kHz MARITIME MOBILE 5.79A 5.109 5.110 5.130 5.131 5.132	**4 063-4 4 438 kHz** MARITIME MOBILE 5.79A 5.109 5.110 5.130 5.131 5.132	Maritime mobile communications 4125 kHz – use of this frequency prescribed in Article 31.	See Section 7 for details ITU RR Appendix 17 Channelling Plan applies

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
	FIXED 5.128	4209.5 kHz - Coast Stations in the NAVTEX service; Res.339 applies. 4207.5 kHz – DSC for distress and calling; 4177.5 kHz – international distress frequency for NBDP telegraphy;. 4209.5 kHz – exclusive for transmission by coast stations of meteorological and navigational warnings and urgent information to ships (NBDP). 4210 kHz – maritime safety information (MSI)	ITU RR Appendix 25 Allotment Plan applies Resolution 339 (Rev. WRC-07) applies Articles 31 and Article 52 applies
4 438-4 488 kHz FIXED MOBILE except aeronautical mobile (R) Radiolocation 5.132A	**4 438-4 488 kHz** FIXED MOBILE except aeronautical mobile (R) Radiolocation 5.132A	Maritime communications Land mobile communications Oceanographic Radars	
4 488-4 650 kHz FIXED MOBILE except aeronautical mobile (R)	**4 488-4 650 kHz** FIXED MOBILE except aeronautical mobile (R)		

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
4 650-4 700 kHz AERONAUTICAL MOBILE (R)	**4 650-4 700 kHz** AERONAUTICAL MOBILE (R)	Aeronautical mobile (R)	Appendix 27 Allotment Plan applies
4 700-4 750 kHz AERONAUTICAL MOBILE (OR)	**4 700-4 750 kHz** AERONAUTICAL MOBILE (OR)	Aeronautical mobile (OR)	Appendix 26 Allotment Plan applies
4 750-4 850 kHz FIXED AERONAUTICAL MOBILE (OR) LAND MOBILE BROADCASTING 5.113	**4 750-4 850 kHz** FIXED AERONAUTICAL MOBILE (OR) LAND MOBILE BROADCASTING 5.113	Aeronautical mobile (OR) Land mobile HF Sound Broadcasting	Appendix 26 Allotment Plan applies The Terrestrial Broadcasting Frequency Plan (GG no.36321) 02 April 2013
4 850-4 995 kHz FIXED LAND MOBILE BROADCASTING 5.113	**4 850-4 995 kHz** FIXED LAND MOBILE BROADCASTING 5.113	Land mobile HF Sound Broadcasting	The Terrestrial Broadcasting Frequency Plan (GG no.36321) 02 April 2013
4 995-5 003 kHz STANDARD FREQUENCY AND TIME SIGNAL (5 000 kHz)	**4 995-5 003 kHz** STANDARD FREQUENCY AND TIME SIGNAL (5 000 kHz)		
5 003-5 005 kHz	**5 003-5 005 kHz**		

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
STANDARD FREQUENCY AND TIME SIGNAL Space research	STANDARD FREQUENCY AND TIME SIGNAL Space research		
5 005-5 060 kHz FIXED BROADCASTING 5.113	**5 005-5 060 kHz** FIXED BROADCASTING 5.113	HF Sound Broadcasting	The Terrestrial Broadcasting Frequency Plan (GG no.36321) 02 April 2013
5 060-5 250 kHz FIXED Mobile except aeronautical mobile 5.133	**5 060-5 250 kHz** FIXED Mobile except aeronautical mobile	SADC harmonised HF frequencies for cross-border mobile communications;	
5 250-5 275 kHz FIXED MOBILE except aeronautical mobile Radiolocation 5.132A	**5 250-5 275 kHz** FIXED MOBILE except aeronautical mobile Radiolocation 5.132A	SADC[11] harmonised HF frequencies for cross-border mobile communications; Oceanographic Radar	Oceanographic Radars are used in accordance with ITU Resolution 612 (Rev WRC-12).
5 275-5 351.5 kHz	**5 275- 5 351.5 kHz**		

[11] http://www.crasa.org/common_up/crasa-setup/10-03-2015_SADC%20FREQUENCY%20BAND%20%202013.pdf

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
FIXED MOBILE except aeronautical mobile	FIXED MOBILE except aeronautical mobile Amateur NF0	Amateur communications	
5 351.5-5 366.5 kHz FIXED MOBILE except aeronautical mobile Amateur 5.133B	**5 351.5-5 366.5 kHz** FIXED MOBILE except aeronautical mobile Amateur NF0	Amateur communications	
5 366.5-5 450 kHz FIXED MOBILE except aeronautical mobile	**5 366.5-5 450 kHz** FIXED MOBILE except aeronautical mobile		
5 450-5 480 kHz FIXED AERONAUTICAL MOBILE (OR) LAND MOBILE	**5 450-5 480 kHz** FIXED AERONAUTICAL MOBILE (OR) LAND MOBILE	Aeronautical mobile (OR)	Appendix 27 Allotment plan applies
5 480-5 680 kHz AERONAUTICAL MOBILE (R) 5.111 5.115	**5 480-5 680 kHz** AERONAUTICAL MOBILE (R) 5.111 5.115	Aeronautical mobile (R)	Appendix 27 Allotment plan applies

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
5 680-5 730 kHz AERONAUTICAL MOBILE (OR) 5.111 5.115	**5 680-5 730 kHz** AERONAUTICAL MOBILE (OR) 5.111 5.115	Aeronautical mobile (OR) 5 680 kHz may be used under the MMS for search and rescue operations . SRD[12] applications (5 725 – 5 875 kHz)	Appendix 26Allotment plan applies Article 31 applies on the use of 6215 kHz Common international SRD band; see ITU-R Rec.SM 1896-1 latest version. Radio Frequency Spectrum Regulations (Annex B) (GG. No.38641, 30 March 2015).
5 730-5 900 kHz FIXED LAND MOBILE	**5 730-5 900 kHz** FIXED LAND MOBILE	Land mobile communications	
5 900-5 950 kHz BROADCASTING 5.134 5.136	**5 900-5 950 kHz** BROADCASTING 5.134 Fixed 5.136 Land Mobile 5.136 5.136	HF Sound Broadcasting	The Terrestrial Broadcasting Frequency Plan (GG no.36321) 02 April 2013 Article 12 Planning Procedures and Res.517 apply.

[12] http://www.crasa.org/common_up/crasa-setup/06-07-2015_FRAME%20WORK%20FOR%20HARMONISATION%20FREQUENICES%20FOR%20SHORT%20RANGE%20DEVICES%20%20OF%20%20SHORT%20RANGE%20DEVICES%20%20(SRDs)%20-%20ANNEXURE%20A.pdf

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
5 950-6 200 kHz BROADCASTING	**5 950-6 200 kHz** BROADCASTING	HF Sound Broadcasting	The Terrestrial Broadcasting Frequency Plan (GG no.36321) 02 April 2013 Article 12 Planning Procedures and Res.517 apply.
6 200-6 525 kHz MARITIME MOBILE 5.109 5.110 5.130 5.132	**6 200-6 213.5 kHz** FIXED MARITIME MOBILE 5.109 5.110 5.130 5.132 5.137	Maritime mobile communications	ITU RR Appendix 17 Channelling Plan applies ITU RR Appendix 25 Allotment Plan applies FS may be used on a secondary basis in the band 6 200 – 6 213.5 kHz and 6 220.5 – 6 525 kHz.
	6 213.5-6 220.5 kHz MARITIME MOBILE 5.109 5.110 5.130 5.132 5.137	Maritime mobile communications 6215 kHz DSC for distress and calling;	ITU RR Appendix 17 Channelling Plan applies ITU RR Appendix 25 Allotment Plan applies Article 31 applies FS may be used on a secondary basis in the band 6 200 – 6 213.5 kHz and 6 220.5 – 6 525 kHz.

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
5.137	**6 220.5-6 525 kHz** FIXED MARITIME MOBILE 5.109 5.110 5.130 5.132 5.137	Maritime mobile communications 6312 kHz and 6215 kHz – DSC for distress and calling; 6268 kHz – international distress frequency for NBDP telegraphy;. 6314 kHz – maritime safety information (MSI); App.17 applies	ITU RR Appendix 17 Channelling Plan applies ITU RR Appendix 25 Allotment Plan applies Article 31 applies FS may be used on a secondary basis in the band 6 200 – 6 213.5 kHz and 6 220.5 – 6 525 kHz.
6 525-6 685 kHz AERONAUTICAL MOBILE (R)	**6 525-6 685 kHz** AERONAUTICAL MOBILE (R)	Aeronautical mobile communications (R)	Appendix 27 Allotment Plan applies
6 685-6 765 kHz AERONAUTICAL MOBILE (OR)	**6 685-6 765 kHz** AERONAUTICAL MOBILE (OR)	Aeronautical mobile communications (OR)	Appendix 26 Allotment Plan applies
6 765-7 000 kHz FIXED MOBILE except aeronautical mobile (R) 5.138	**6 765-7 000 kHz** FIXED MOBILE except aeronautical mobile (R) 5.138	Inductive Loop Systems (6765 – 6795 kHz)	

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
7 000-7 100 kHz AMATEUR AMATEUR-SATELLITE 5.140 5.141 5.141A	**7 000-7 100 kHz** AMATEUR AMATEUR-SATELLITE	Amateur communications Amateur-satellite communications	Radio Frequency Spectrum Regulations (Annex B) (GG. No.38641, 30 March 2015).
7 100-7 200 kHz AMATEUR 5.141A 5.141B	**7 100-7 200 kHz** AMATEUR	Amateur communications	Radio Frequency Spectrum Regulations (Annex B) (GG. No.38641, 30 March 2015).
7 200-7 300 kHz BROADCASTING	**7 200-7 300 kHz** BROADCASTING	HF Sound Broadcasting	ITU RR Article 12 Planning Procedures applies
7 300-7 400 kHz BROADCASTING 5.134	**7 300-7 350 kHz** BROADCASTING 5.134 5.143B 5.143	HF Sound Broadcasting	The Terrestrial Broadcasting Frequency Plan (GG no.36321) 02 April 2013 Article 12 Planning Procedures and Res.517 apply. NINP basis to broadcasting FS and LMS may operate in the band 7 300 – 7 450 kHz on a secondary basis
	7 350-7 400 kHz		

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
5.143 5.143A 5.143B 5.143C 5.143D	BROADCASTING 5.134 FIXED 5.143 LAND MOBILE 5.143 5.143A 5.143B 5.143D	HF Sound Broadcasting	The Terrestrial Broadcasting Frequency Plan (GG no.36321) 02 April 2013 Article 12 Planning Procedures and Res.517 apply. NINP basis to broadcasting
7 400-7 450 kHz BROADCASTING 5.143B 5.143C	**7 400-7 450 kHz** BROADCASTING 5.143B	HF Sound Broadcasting Inductive Loop Systems (7400 – 8800 kHz)	The Terrestrial Broadcasting Frequency Plan (GG no.36321) 02 April 2013 Article 12 Planning Procedures and Res.517 apply. Radio Frequency Spectrum Regulations (Annex B) (GG. No.38641, 30 March 2015). FS and LMS may operate in the band 7 350 – 7 450 kHz on a secondary basis
7 450-8 100 kHz FIXED MOBILE except aeronautical mobile (R) 5.144	**7 450-8 100 kHz** FIXED MOBILE except aeronautical mobile (R)	Inductive Loop Systems (7400 – 8800 kHz)	Radio Frequency Spectrum Regulations (Annex B) (GG. No.38641, 30 March 2015). SADC harmonised HF frequencies for cross-border mobile communications;

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
8 100-8 195 kHz FIXED MARITIME MOBILE	**8 100-8 195 kHz** FIXED MARITIME MOBILE	Maritime mobile communications Inductive Loop Systems (7400 – 8800 kHz)	Radio Frequency Spectrum Regulations (Annex B) (GG. No.38641, 30 March 2015).
8 195-8 815 kHz MARITIME MOBILE 5.109 5.110 5.132 5.145 5.111	**8 195-8 815 kHz** MARITIME MOBILE 5.109 5.110 5.132 5.145 5.111	Digital Selective Calling (GMDSS) Distress Watch keeping on 8414.5 kHz Transmission of meteorological bulletins and notices to navigators Inductive Loop Systems (7400 – 8800 kHz) Maritime mobile communications 8414.5 kHz – DSC for distress and calling; 8 376.5 kHz – international distress frequency for NBDP telegraphy; 8416.5 kHz – maritime safety information (MSI); App.17 applies.	Appendix 15 of ITU RR See Section 7 for details Radio Frequency Spectrum Regulations (Annex B) (GG. No.38641, 30 March 2015). ITU RR Appendix 17 Channelling Plan applies ITU RR Appendix 25 Allotment Plan applies Article 31 applies Article 31 applies.
8 815-8 965 kHz AERONAUTICAL MOBILE (R)	**8 815-8 965 kHz** AERONAUTICAL MOBILE (R)	Aeronautical mobile communications	Appendix 27 Allotment Plan applies
8 965-9 040 kHz	**8 965-9 040 kHz**		

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
AERONAUTICAL MOBILE (OR)	AERONAUTICAL MOBILE (OR)	Aeronautical mobile communications	Appendix 26 Allotment Plan applies
9 040-9 305 kHz FIXED	**9 040-9 305 kHz** FIXED	Fixed Applications	
9 305-9 355 kHz FIXED Radiolocation 5.145A 5.145B	**9 305-9 355 kHz** FIXED Radiolocation 5.145A	Fixed Applications Oceanographic radars	
9 355-9 400 kHz FIXED	**9 355-9 400 kHz** FIXED		
9 400-9 500 kHz BROADCASTING 5.134 5.146	**9 400-9 500 kHz** BROADCASTING 5.134 5.146	HF Sound Broadcasting	The Terrestrial Broadcasting Frequency Plan (GG no.36321) 02 April 2013 Fixed services may be used on a secondary basis
9 500-9 900 kHz BROADCASTING	**9 500-9 775 kHz** BROADCASTING	HF Sound Broadcasting	

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
	5.147		The Terrestrial Broadcasting Frequency Plan (GG no.36321) 02 April 2013 ITU RR Article 12 Planning Procedures applies
5.147	**9 775-9 900 kHz** BROADCASTING FIXED 5.147	HF Sound Broadcasting	The Terrestrial Broadcasting Frequency Plan (GG no.36321) 02 April 2013 ITU RR Article 12 Planning Procedures applies
9 900-9 995 kHz FIXED	**9 900-9 995 kHz** FIXED	Fixed Applications	
9 995-10 003 kHz STANDARD FREQUENCY AND TIME SIGNAL (10 000 kHz) 5.111	**9 995-10 003 kHz** STANDARD FREQUENCY AND TIME SIGNAL (10 000 kHz) 5.111		
10 003-10 005 kHz STANDARD FREQUENCY AND TIME SIGNAL Space research 5.111	**10 003-10 005 kHz** STANDARD FREQUENCY AND TIME SIGNAL Space research 5.111	Passive sensing	

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
10 005-10 100 kHz AERONAUTICAL MOBILE (R) 5.111	**10 005-10 100 kHz** AERONAUTICAL MOBILE (R) 5.111	Aeronautical mobile communications	Appendix 27 Allotment Plan applies
10 100-10 150 kHz FIXED Amateur	**10 100-10 150 kHz** FIXED Amateur	Fixed Applications Amateur communications	Radio Frequency Spectrum Regulations (Annex B) (GG. No.38641, 30 March 2015).
10 150-11 175 kHz FIXED Mobile except aeronautical mobile (R)	**10 150-11 175 kHz** FIXED Mobile except aeronautical mobile (R)	SADC harmonised HF frequencies for cross-border mobile communications;	
11 175-11 275 kHz AERONAUTICAL MOBILE (OR)	**11 175-11 275 kHz** AERONAUTICAL MOBILE (OR)	Aeronautical mobile communications	Appendix 26 Allotment Plan applies
11 275-11 400 kHz AERONAUTICAL MOBILE (R)	**11 275-11 400 kHz** AERONAUTICAL MOBILE (R)	Aeronautical mobile communications	Appendix 27 Allotment Plan applies
11 400-11 600 kHz	**11 400-11 600 kHz**		

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
FIXED	FIXED	Fixed Applications	
11 600-11 650 kHz BROADCASTING 5.134 5.146	**11 600-11 650 kHz** BROADCASTING 5.134 FIXED	HF Sound Broadcasting	Article 12 Planning Procedures and Res.517 apply.
11 650-12 050 kHz BROADCASTING 5.147	**11 650-11 700 kHz** BROADCASTING FIXED `	HF Sound Broadcasting	ITU RR Article 12 Planning Procedures applies
	11 700-11 975 kHz BROADCASTING 5.147	HF Sound Broadcasting	ITU RR Article 12 Planning Procedures applies
	11 975-12 050 kHz BROADCASTING FIXED 5.147	HF Sound Broadcasting	ITU RR Article 12 Planning Procedures applies
12 050-12 100 kHz BROADCASTING 5.134 5.146	**12 050-12 100 kHz** BROADCASTING 5.134 FIXED 5.146	HF Sound Broadcasting	Article 12 Planning Procedures and Res.517 apply.

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
12 100-12 230 kHz FIXED	**12 100-12 230 kHz** FIXED	Fixed Applications	
12 230-13 200 kHz MARITIME MOBILE 5.109 5.110 5.132 5.145	**12 230-13 200 kHz** MARITIME MOBILE 5.109 5.110 5.132 5.145	Maritime mobile communications Digital Selective Calling(GMDSS) Distress Watch keeping (12 577 kHz) 12 577 kHz – DSC for distress and calling; 12 520 kHz – international distress frequency for NBDP telegraphy; 12 579 kHz – maritime safety information (MSI)	ITU RR Appendix 17 Channeling Plan applies Appendix 15 of ITU RR Transmission of meteorological bulletins and notices to navigators See Section 7 for details ITU RR Appendix 17 Channelling Plan applies ITU RR Appendix 25 Allotment Plan applies Article 31 applies.
13 200-13 260 kHz AERONAUTICAL MOBILE (OR)	**13 200-13 260 kHz** AERONAUTICAL MOBILE (OR)	Aeronautical mobile communications	Appendix 26 Allotment Plan applies
13 260-13 360 kHz AERONAUTICAL MOBILE (R)	**13 260-13 360 kHz** AERONAUTICAL MOBILE (R)	Aeronautical mobile communications	Appendix 27 Allotment Plan applies
13 360-13 410 kHz	**13 360-13 410 kHz**		

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
FIXED RADIO ASTRONOMY 5.149	FIXED RADIO ASTRONOMY 5.149	Radio astronomy (Observations of decametric radiation)	See section 5 for coordination with radio astronomy
13 410-13 450 kHz FIXED Mobile except aeronautical mobile (R)	**13 410-13 450 kHz** FIXED Mobile except aeronautical mobile (R)	Maritime and/or land mobile communications	Radio Frequency Spectrum Regulations (Annex B) (GG. No.38641, 30 March 2015).
13 450-13 550 kHz FIXED Mobile except aeronautical mobile (R) Radiolocation 5.132A 5.149A	**13 450-13 550 kHz** FIXED Mobile except aeronautical mobile (R) Radiolocation 5.132A	Oceanographic radars	
13 550-13 570 kHz FIXED Mobile except aeronautical mobile (R) 5.150	**13 550-13 570 kHz** FIXED Mobile except aeronautical mobile (R) 5.150	Inductive Loop Systems (13 553 – 13 567 kHz) RFID and EAS systems (13 553 – 13 567 kHz) SRD[13] applications (13 553-13 567kHz)	Common international SRD band; see ITU-R Rec. SM. 1896-1 latest version Radio Frequency Spectrum Regulations (Annex B) (GG. No.38641, 30 March 2015).

[13] http://www.crasa.org/common_up/crasa-setup/06-07-2015_SADC%20FREQUENCIES%20%20FOR%20SHORT%20RANGE%20%20DEVICES%20CRASA%202011.pdf

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
13 570-13 600 kHz BROADCASTING 5.134 5.151	**13 570-13 600 kHz** BROADCASTING 5.134 Fixed Mobile except aeronautical mobile (R)	HF Sound Broadcasting	Article 12 Planning Procedures and Res.517 apply.
13 600-13 800 kHz BROADCASTING	**13 600-13 800 kHz** BROADCASTING	HF Sound Broadcasting	ITU RR Article 12 Planning Procedures applies
13 800-13 870 kHz BROADCASTING 5.134 5.151	**13 800-13 870 kHz** BROADCASTING 5.134	HF Sound Broadcasting	Article 12 Planning Procedures and Res.517 apply.
13 870-14 000 kHz FIXED Mobile except aeronautical mobile (R)	**13 870-14 000 kHz** FIXED Mobile except aeronautical mobile (R)	Fixed Applications Land mobile communications Maritime communications	
14 000-14 250 kHz AMATEUR AMATEUR-SATELLITE	**14 000-14 250 kHz** AMATEUR AMATEUR-SATELLITE	Amateur communications Amateur-satellite communications	Radio Frequency Spectrum Regulations (Annex B) (GG. No.38641, 30 March 2015).

This gazette is also available free online at www.gpwonline.co.za

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
14 250-14 350 kHz AMATEUR 5.152	**14 250-14 350 kHz** AMATEUR	Amateur communications	Radio Frequency Spectrum Regulations (Annex B) (GG. No.38641, 30 March 2015).
14 350-14 990 kHz FIXED Mobile except aeronautical mobile (R)	**14 350-14 990 kHz** FIXED Mobile except aeronautical mobile (R)	SADC harmonised HF frequencies for cross-border mobile communications;	
14 990-15 005 kHz STANDARD FREQUENCY AND TIME SIGNAL (15 000 kHz) 5.111	**14 990-15 005 kHz** STANDARD FREQUENCY AND TIME SIGNAL (15 000 kHz) 5.111		
15 005-15 010 kHz STANDARD FREQUENCY AND TIME SIGNAL Space research	**15 005-15 010 kHz** STANDARD FREQUENCY AND TIME SIGNAL Space research		
15 010-15 100 kHz AERONAUTICAL MOBILE (OR)	**15 010-15 100 kHz** AERONAUTICAL MOBILE (OR)	Aeronautical mobile communications	Appendix 26 Allotment Plan applies

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
15 100-15 600 kHz BROADCASTING	**15 100-15 600 kHz** BROADCASTING	HF Sound Broadcasting	The Terrestrial Broadcasting Frequency Plan (GG no.36321) 02 April 2013. ITU RR Article 12 Planning Procedures applies
15 600-15 800 kHz BROADCASTING 5.134 5.146	**15 600-15 800 kHz** BROADCASTING 5.134 FIXED 5.146	HF Sound Broadcasting	The Terrestrial Broadcasting Frequency Plan (GG no.36321) 02 April 2013. Article 12 Planning Procedures and Res.517 apply.
15 800-16 100 kHz FIXED	**15 800-16 100 kHz** FIXED	Fixed Applications	
16 100-16 200 kHz FIXED Radiolocation 5.145A 5.145B	**16 100-16 200 kHz** FIXED Radiolocation 5.145A	Oceanographic radars	
16 200-16 360 kHz FIXED	**16 200-16 360 kHz** FIXED	Fixed Applications	

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
16 360-17 410 kHz MARITIME MOBILE 5.109 5.110 5.132 5.145	**16 360-17 410 kHz** MARITIME MOBILE 5.109 5.110 5.132 5.145	Maritime mobile communications Digital Selective Calling (GMDSS) Transmission of meteorological bulletins and notices to navigators. 16 804.5 kHz – DSC for distress and calling; 16 695 kHz – international distress frequency for NBDP telegraphy; 16 806.5 kHz – maritime	Appendix 15 of ITU RR See Section 7 for details ITU RR Appendix 17 Channelling Plan applies ITU RR Appendix 25 Allotment Plan applies Article 31 applies.
17 410-17 480 kHz FIXED	**17 410-17 480 kHz** FIXED	Fixed	
17 480-17 550 kHz BROADCASTING 5.134 5.146	**17 480-17 550 kHz** BROADCASTING 5.134 FIXED 5.146	HF Sound Broadcasting	The Terrestrial Broadcasting Frequency Plan (GG no.36321) 02 April 2013. Article 12 Planning Procedures and Res.517 apply.
17 550-17 900 kHz BROADCASTING	**17 550-17 900 kHz** BROADCASTING	HF Sound Broadcasting	The Terrestrial Broadcasting Frequency Plan (GG no.36321) 02 April 2013. ITU RR Article 12 Planning Procedures applies

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
17 900-17 970 kHz AERONAUTICAL MOBILE (R)	**17 900-17 970 kHz** AERONAUTICAL MOBILE (R)	Aeronautical mobile communications	Appendix 27 Allotment Plan applies
17 970-18 030 kHz AERONAUTICAL MOBILE (OR)	**17 970-18 030 kHz** AERONAUTICAL MOBILE (OR)	Aeronautical mobile communications	Appendix 26 Allotment Plan applies
18 030-18 052 kHz FIXED	**18 030-18 052 kHz** FIXED	Fixed Applications	
18 052-18 068 kHz FIXED Space research	**18 052-18 068 kHz** FIXED Space research	Fixed Applications	
18 068-18 168 kHz AMATEUR AMATEUR-SATELLITE 5.154	**18 068-18 168 kHz** AMATEUR AMATEUR-SATELLITE	Amateur communications Amateur-satellite communications	Radio Frequency Spectrum Regulations (Annex B) (GG. No.38641, 30 March 2015).
18 168-18 780 kHz FIXED Mobile except aeronautical mobile	**18 168-18 780 kHz** FIXED Mobile except aeronautical mobile	Land mobile communications	

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
18 780-18 900 kHz MARITIME MOBILE	**18 780-18 900 kHz** MARITIME MOBILE	Maritime communications	ITU RR Appendix 17 Channelling Plan applies
18 900-19 020 kHz BROADCASTING 5.134 5.146	**18 900-19 020 kHz** BROADCASTING 5.134 FIXED 5.146	HF Sound Broadcasting	The Terrestrial Broadcasting Frequency Plan (GG no.36321) 02 April 2013. Article 12 Planning Procedures and Res.517 apply.
19 020-19 680 kHz FIXED	**19 020-19 680 kHz** FIXED	Fixed Applications	
19 680-19 800 kHz MARITIME MOBILE 5.132	**19 680-19 800 kHz** MARITIME MOBILE 5.132	19 680.5 kHz – maritime safety information (MSI); App.17 applies	The frequency 19 680.5 kHz is the international frequency for transmission of MSI.
19 800-19 990 kHz FIXED	**19 800-19 990 kHz** FIXED	Fixed Applications	

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
19 990-19 995 kHz STANDARD FREQUENCY AND TIME SIGNAL Space research 5.111	**19 990-19 995 kHz** STANDARD FREQUENCY AND TIME SIGNAL Space research 5.111		
19 995-20 010 kHz STANDARD FREQUENCY AND TIME SIGNAL (20 000 kHz) 5.111	**19 995-20 010 kHz** STANDARD FREQUENCY AND TIME SIGNAL (20 000 kHz) 5.111		
20 010-21 000 kHz FIXED Mobile	**20 010-21 000 kHz** FIXED Mobile		
21 000-21 450 kHz AMATEUR AMATEUR-SATELLITE	**21 000-21 450 kHz** AMATEUR AMATEUR-SATELLITE	Amateur communications Amateur-satellite communications	Radio Frequency Spectrum Regulations (Annex B) (GG. No.38641, 30 March 2015).
21 450-21 850 kHz BROADCASTING	**21 450-21 850 kHz** BROADCASTING	HF Sound Broadcasting	The Terrestrial Broadcasting Frequency Plan (GG no.36321) 02 April 2013. ITU RR Article 12 Planning Procedures applies

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
21 850-21 870 kHz FIXED 5.155A 5.155	**21 850-21 870 kHz** FIXED	Fixed Applications[14]	
21 870-21 924 kHz FIXED 5.155B	**21 870-21 924 kHz** FIXED 5.155B	Fixed Applications	This band is used by the FS for services related to aircraft flight safety (5.155B)
21 924-22 000 kHz AERONAUTICAL MOBILE (R)	**21 924-22 000 kHz** AERONAUTICAL MOBILE (R)	Aeronautical mobile communications	Appendix 27 Allotment Plan applies
22 000-22 855 kHz MARITIME MOBILE 5.132 5.156	**22 000-22 855 kHz** MARITIME MOBILE 5.132	22 376 kHz – maritime safety information (MSI); App.17 applies	ITU RR Appendix 17 Channelling Plan applies. ITU RR Appendix 25 Allotment Plan applies. The frequency 22 376 kHz is the international frequency for transmission of MSI. See Section 7 for details

[14] http://www.crasa.org/common_up/crasa-setup/10-03-2015_FREQUENCY%20CHANNELING%20ARRANGEMENTS%20FOR%20TERRESTRIAL%20FIXED%20AND%20MOBILE%202011.pdf

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
22 855-23 000 kHz FIXED 5.156	**22 855-23 000 kHz** FIXED	Fixed Applications	
23 000-23 200 kHz FIXED Mobile except aeronautical mobile (R) 5.156	**23 000-23 200 kHz** FIXED Mobile except aeronautical mobile (R)		
23 200-23 350 kHz FIXED 5.156A AERONAUTICAL MOBILE (OR)	**23 200-23 350 kHz** FIXED 5.156A AERONAUTICAL MOBILE (OR)	Aeronautical mobile communications	The use of this band by the FS is limited to the provision of services related to aircraft flight safety (5.156A)
23 350-24 000 kHz FIXED MOBILE except aeronautical mobile 5.157	**23 350-24 000 kHz** FIXED MARITIME MOBILE 5.157	Inter-ship radiotelegraphy	The use of this band by the MMS is limited to inter-ship radiotelegraphy (5.157).
24 000-24 450 kHz FIXED LAND MOBILE	**24 000-24 450 kHz** FIXED LAND MOBILE		
24 450-24 600 kHz	**24 450-24 600 kHz**		

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
FIXED LAND MOBILE Radiolocation 5.132A 5.158	FIXED LAND MOBILE Radiolocation 5.132A	Oceanographic radars	
24 600-24 890 kHz FIXED LAND MOBILE	**24 600-24 890 kHz** FIXED LAND MOBILE		
24 890-24 990 kHz AMATEUR AMATEUR-SATELLITE	**24 890-24 990 kHz** AMATEUR AMATEUR-SATELLITE		Radio Frequency Spectrum Regulations (Annex B) (GG. No.38641, 30 March 2015).
24 990-25 005 kHz STANDARD FREQUENCY AND TIME SIGNAL (25 000 kHz)	**24 990-25 005 kHz** STANDARD FREQUENCY AND TIME SIGNAL (25 000 kHz)		
25 005-25 010 kHz STANDARD FREQUENCY AND TIME SIGNAL Space research	**25 005-25 010 kHz** STANDARD FREQUENCY AND TIME SIGNAL Space research		
25 010-25 070 kHz	**25 010-25 070 kHz**		

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
FIXED MOBILE except aeronautical mobile	FIXED MOBILE except aeronautical mobile		
25 070-25 210 kHz MARITIME MOBILE	**25 070-25 210 kHz** MARITIME MOBILE	Maritime mobile communications	ITU RR Appendix 17 Channelling Plan applies
25 210-25 550 kHz FIXED MOBILE except aeronautical mobile	**25 210-25 550 kHz** FIXED MOBILE except aeronautical mobile		
25 550-25 670 kHz RADIO ASTRONOMY 5.149	**25 550-25 670 kHz** RADIO ASTRONOMY 5.149	Radio astronomy (Observations of decametric radiation)	See section 5 for coordination with radio astronomy
25 670-26 100 kHz BROADCASTING	**25 670-26 100 kHz** BROADCASTING	HF Sound Broadcasting	The Terrestrial Broadcasting Frequency Plan (GG no.36321) 02 April 2013 ITU RR Article 12 Planning Procedures applies.
26 100-26 175 kHz	**26 100-26 175 kHz**		

This gazette is also available free online at www.gpwonline.co.za

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
MARITIME MOBILE 5.132	MARITIME MOBILE 5.132	26 100.5 kHz – maritime safety information (MSI); App.17 applies	ITU RR Appendix 17 Channelling Plan applies. ITU RR Appendix 25 Allotment Plan applies. The frequency 26 100.5 kHz is the international frequency for transmission of MSI.
26 175-26 200 kHz FIXED MOBILE except aeronautical mobile	**26 175-26 200 kHz** FIXED MOBILE except aeronautical mobile	Single Frequency Mobile Mobile systems (single frequency) CB Radio (26.96-27.410 MHz) ISM applications (26.975-27.283 MHz) SRD applications (26 957-27 283 kHz)	Radio Frequency Spectrum Regulations (Annex B) (GG. No.38641, 30 March 2015). Common international SRD band; see ITU-R Rec. SM. 1896-1 latest version.
26 200-26 350 kHz FIXED MOBILE except aeronautical mobile Radiolocation 5.132A 5.133A	**26 200-26 350 kHz** FIXED MOBILE except aeronautical mobile Radiolocation 5.132A	Single Frequency Mobile Oceanography radars	

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
26 350-27 500 kHz FIXED MOBILE except aeronautical mobile 5.150	**26 350-27 500 kHz** FIXED MOBILE except aeronautical mobile 5.150	Single Frequency Mobile Inductive Loop Systems, Non-specific SRD's (26.957 – 27.283 MHz) Surface Model Control (26.995 MHz, 27.045 MHz, 27.095 MHz, 27.145 MHz and 27.195 MHz)	Radio Frequency Spectrum Regulations (Annex B) (GG. No.38641, 30 March 2015).
27.5-28 MHz METEOROLOGICAL AIDS FIXED MOBILE	**27.5-28 MHz** METEOROLOGICAL AIDS FIXED MOBILE	Radiosondes	
28-29.7 MHz AMATEUR AMATEUR-SATELLITE	**28-29.7 MHz** AMATEUR AMATEUR-SATELLITE	Amateur communications Amateur-satellite communications	Radio Frequency Spectrum Regulations (Annex B) (GG. No.38641, 30 March 2015).
29.7-30.005 MHz FIXED MOBILE	**29.7-30.005 MHz** FIXED MOBILE Amateur NF1	Single frequency mobile (29.7-29.99 MHz) Government Services	Amateur – disaster and emergencies

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
			Radio Frequency Spectrum Regulations (Annex B) (GG. No.38641, 30 March 2015).
30.005-30.01 MHz SPACE OPERATION (satellite identification) FIXED MOBILE SPACE RESEARCH	**30.005-30.01 MHz** SPACE OPERATION (satellite identification) FIXED MOBILE SPACE RESEARCH	Government Services	
30.01-37.5 MHz FIXED MOBILE	**30.01-37.5 MHz** FIXED MOBILE	Single Frequency Mobile (32 – 32.325 MHz) Government Services Mobile 1 MTX (32.325 – 33.675 MHz) Single Frequency Mobile (33.675 – 34.175 MHz) Mobile 2 MTX (34.175 – 35 MHz) Model Aircraft Control (35 – 35.5 MHz) Wireless microphone (36.65 – 36.75 MHz) Single Frequency Mobile (33.25 – 33.5 MHz) Mobile 3 BTX 35.5 – 36.825 MHz Single Frequency Mobile 36.825 – 38.5 MHz	Paired with 41.65 – 43 MHz Paired with 40.625 – 41.25 MHz Exclusive use by Model Aircraft Control Radio Frequency Spectrum Regulations (Annex B) (GG. No.38641, 30 March 2015). Paired with 38.5 – 39.825 MHz

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
		PMR[15]	
37.5-38.25 MHz FIXED MOBILE Radio astronomy 5.149	**37.5-38.25 MHz** FIXED MOBILE Radio astronomy 5.149	 Single Frequency Mobile (36.825 – 38.5 MHz) Government Services Radio Astronomy (Observations of decametric radiation)	 See Section 5 for coordination with radio astronomy
38.25-39 MHz FIXED MOBILE	**38.25-39 MHz** FIXED MOBILE	 Single Frequency Mobile (36.825 – 38.5 MHz) Government Services Mobile 3 MTX (38.5 – 39.825 MHz)	 Paired with 35.5 – 36.825 MHz
39-39.5 MHz FIXED MOBILE Radiolocation 5.132A 5.159	**39-39.5 MHz** FIXED MOBILE Radiolocation 5.132A	 Mobile 3 MTX (38.5 – 39.825 MHz) Single Frequency Mobile (39.825 – 40.625 MHz) Oceanographic radars	 Paired with 35.5 – 36.825 MHz

[15] http://www.crasa.org/common_up/crasa-setup/10-03-2015_GUIDELINES%20%20ON%20PMR%202014.pdf

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
39.5-39.986 MHz FIXED MOBILE	**39.5-39.986 MHz** FIXED MOBILE	Mobile 3 MTX (38.5 – 39.825 MHz) Single Frequency Mobile (39.825 – 40.625 MHz) PMR	Paired with 35.5 – 36.825 MHz
39.986-40.02 MHz FIXED MOBILE Space research	**39.986-40.02 MHz** FIXED MOBILE Space research	Single Frequency Mobile (39.825 – 40.625 MHz) PMR	
40.02-40.98 MHz FIXED MOBILE 5.150	**40.02-40.98 MHz** FIXED MOBILE 5.150	Single Frequency Mobile (39.825 – 40.625 MHz) Mobile 2 BTX (40.625 – 41.45 MHz) Wireless microphones (40.65 – 40.7 MHz) Non-specific SRD's (40.66 – 40.7 MHz) Surface Model Control (40.665 MHz, 40.675 MHz, 40.685 MHz, 40.695 MHz) ISM applications (40.66 – 40.7 MHz) PMR	Paired with 34.175 – 35 MHz Radio Frequency Spectrum Regulations (Annex B) (GG. No.38641, 30 March 2015). Common international SRD band; see ITU-R Rec. SM.1896 latest version.

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
40.98-41.015 MHz FIXED MOBILE Space research 5.160 5.161	**40.98-41.015 MHz** FIXED MOBILE Space research	Mobile 2 BTX (40.625 – 41.45 MHz) PMR	Paired with 34.175 – 35 MHz
41.015-42 MHz FIXED MOBILE 5.160 5.161 5.161A	**41.015-42 MHz** FIXED MOBILE	Mobile 2 BTX (40.625 – 41.45 MHz) Single Frequency Mobile (41.45 – 41.65 MHz) Mobile 1 BTX (41.65 – 43 MHz) Government Services PMR	Paired with 34.175 – 35 MHz Paired with 32.325 – 33.675 MHz
42-42.5 MHz FIXED MOBILE Radiolocation 5.132A 5.160 5.161B	**42-42.5 MHz** FIXED MOBILE Radiolocation 5.132A	Mobile 1 BTX (41.65 – 43 MHz) Government Services Oceanographic radars	Paired with 32.325 – 33.675 MHz
42.5-44 MHz FIXED MOBILE 5.160 5.161 5.161A	**42.5-44 MHz** FIXED MOBILE	Mobile 1 BTX (41.65 – 43 MHz) Government Services	Paired with 32.325 – 33.675 MHz

This gazette is also available free online at www.gpwonline.co.za

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
44-47 MHz FIXED MOBILE 5.162 5.162A	**44-47 MHz** FIXED MOBILE	Meteor Burst (45.3 – 46.9 MHz) CT0 Cordless Telephones BTX (46.61 – 46.97 MHz) Government Services PMR	Paired with 47.5 – 49.1 MHz 10 frequency pairs assigned to CT0; paired with 49.67 – 49.97 MHz; Radio Frequency Spectrum Regulations (Annex B) (GG. No.38641, 30 March 2015).
47-**50 MHz** BROADCASTING 5.162A 5.163 5.164 5.165	**47-50 MHz** BROADCASTING LAND MOBILE 5.164	 CT0 Cordless Telephones MTX (49.67 – 49.97 MHz) PMR Meteor Burst (47.5-49.1 MHz) CT0 Cordless Telephony MTX (49.67-49.97 MHz) Government	The Terrestrial Broadcasting Frequency Plan (GG no.36321) 02 April 2013 Paired with 45.3-46.9 MHz Paired with 46.61 – 46.97 MHz Paired with 45.3-46.9 MHz Radio Frequency Spectrum Regulations (Annex B) (GG. No.38641, 30 March 2015).
50-52 MHz BROADCASTING Amateur 5.166A 5.166B 5.166C 5.166D 5.166E 5.169 5.169A 5.169B 5.162A 5.164 5.165	**50-54 MHz** AMATEUR 5.169	Government Wireless microphones (53 – 54 MHz)	Radio Frequency Spectrum Regulations as amended (Annex B) (GG. No. 38641, 30 March 2015).

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
52-68 MHz BROADCASTING 5.162A 5.163 5.164 5.165 5.169 5.169A 5.169B 5.171	**54-68 MHz** BROADCASTING FIXED 5.171 MOBILE except aeronautical mobile 5.171	Government Services Model control (54.45 – 54.55 MHz) PMR Single Frequency Mobile (54 – 54.325 MHz) Mobile 1 BTX (54.325 – 54.45 MHz) Mobile 2 BTX (55.45 – 56.85 MHz) Single Frequency Mobile (56.85 – 58.5 MHz) Mobile 2 MTX (58.5 – 59.9 MHz) Mobile 1 MTX (59.9 – 60.025 MHz) Spare60.025-60.215 MHz Sport Stadium Communications (62.8 – 62.85 MHz) National Emergency Alarm Radio (NEAR) (66 – 68 MHz)	The Terrestrial Broadcasting Frequency Plan (GG no.36321) 02 April 2013 Radio Frequency Spectrum Regulations (Annex B) (GG. No.38641, 30 March 2015). Paired with 59.9 – 60.025 MHz Paired with 58.5 – 59.9 MHz Paired with 55.45 – 56.85 MHz Paired with 54.325 – 54.45 MHz
68-74.8 MHz FIXED MOBILE except aeronautical mobile	**68-74.8 MHz** FIXED MOBILE except aeronautical mobile	Single Frequency Mobile (68 – 69.25 MHz) Mobile 1 BTX (69.25 – 70 MHz)	Paired with 76.175 – 76.925 MHz

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
5.149 5.175 5.177 5.179	Amateur (70 – 70.3 MHz) NF2 Radio Astronomy (73 – 74.6 MHz) 5.149	Mobile 2 BTX (70 – 70.975 MHz) Single Frequency Mobile (70.975 – 71.475 MHz) Mobile 3 BTX (71.475 – 72.525 MHz) Single Frequency Mobile (72.525 – 73.425 MHz) Mobile 4 BTX (73.425 – 74.8 MHz) PMR and/or PAMR	Paired with 75.2 – 76.175 MHz Current assignments for fire fighting Paired with 76.925 – 77.975 MHz Paired with 78.625 – 80 MHz Radio Frequency Spectrum Regulations (Annex B) (GG. No.38641, 30 March 2015).
74.8-75.2 MHz AERONAUTICAL RADIONAVIGATION 5.180 5.181	**74.8-75.2 MHz** AERONAUTICAL RADIONAVIGATION 5.180	Instrument Landing System Markers 74.80 – 75.20 Marker beacons (75 MHz)	
75.2-87.5 MHz FIXED MOBILE except aeronautical mobile	**75.2-87.5 MHz** FIXED MOBILE except aeronautical mobile	Mobile 2 MTX (75.2 – 76.175 MHz) Mobile 1 MTX (76.175 – 76.925 MHz) Mobile 3 MTX (76.925 – 77.975 MHz) Mobile 4 MTX (78.625 – 80 MHz) Mobile 5 BTX (77.975 – 78.625 MHz)	Paired with 70 – 70.975 MHz Paired with 69.25 – 70 MHz Paired with 71.475 – 72.525 MHz Paired with 73.425 – 74.8 MHz Paired with 82.975 – 83.625 MHz

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
5.175 5.179 5.187		Mobile 6 BTX (80 – 80.5 MHz) Single Frequency Mobile (80.5 – 81 MHz) Mobile 7 BTX (81 – 81.625 MHz) Mobile 8 BTX (81.625 – 82.975 MHz) Mobile 5 MTX (82.975 – 83.625 MHz) Single Frequency Mobile (83.625 – 85.025 MHz) Mobile 8 MTX (85.025 – 86.375 MHz) Mobile 7 MTX (86.375 – 87 MHz) Mobile 6 MTX (87 – 87.5 MHz) PMR and/or PAMR	Paired with 87 – 87.5 MHz Paired with 86.375 - 87 MHz Paired with 85.025 - 86.375 MHz Paired with 77.975 - 78.625 MHz Paired with 81.625 - 82.975 MHz Paired with 81 - 81.625 MHz Paired with 80 - 80.5 MHz Radio Frequency Spectrum Assignment Plan GG 42286 Notice 124 of 2019
87.5-100 MHz BROADCASTING 5.190	**87.5-100 MHz** BROADCASTING	FM Sound Broadcasting (87.5-108 MHz) Digital sound broadcasting (DSB)	The Terrestrial Broadcasting Frequency Plan (GG no.36321) 02 April 2013 Geneva agreement GE84 Digital Sound Broadcasting (DSB) Regulations was published in GG44469 Notice 215 of 2021
100-108 MHz BROADCASTING	**100-108 MHz** BROADCASTING	FM Sound Broadcasting (87.5-108 MHz)	

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
5.192 5.194		Digital sound broadcasting (DSB)	The Terrestrial Broadcasting Frequency Plan (GG no.36321) 02 April 2013 Geneva agreement GE84 Digital Sound Broadcasting (DSB) Regulations was published in GG44469 Notice 215 of 2021
108-117.975 MHz AERONAUTICAL RADIONAVIGATION 5.197 5.197A	**108-112 MHz** AERONAUTICAL RADIONAVIGATION AERONAUTICAL MOBILE (R) (ground to air)(ground based TX and associated RX for navigational information for navigational functions) 5.197A	ILS localiser (108 – 112 MHz) Aeronautical mobile communications (108-117.975 MHz	AM(R)S shall operate in accordance with Res.413(Rev.WRC-07). Safety and regularity of flights; in the band 108-112 MHz AM(R)S limited to ground based transmitters.
	112-117.975 MHz AERONAUTICAL MOBILE (R) AERONAUTICAL RADIONAVIGATION 5.197A	Aeronautical mobile communications (108-117.975 MHz VOR (VHF Omni-directional Range) (112 – 117.975 MHz)	

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
117.975-137 MHz AERONAUTICAL MOBILE (R) 5.111 5.200 5.201 5.202	**117.975-137 MHz** AERONAUTICAL MOBILE (R) 5.111 5.200 5 201	Aeronautical mobile communications (117.975-121.450 MHz) International Distress Frequency (121.5 MHz) - (121.450-121.550 MHz) Aeronautical mobile communications (121.550-137.000 MHz)	Safety and regularity of flights EPIRBs at 121.5 MHz ITU RR Article 31 applies 123.1 MHz - auxiliary emergency frequency
137-137.025 MHz SPACE OPERATION (space-to-Earth) 5.203C METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) 5.208A 5.208B 5.209 SPACE RESEARCH (space-to-Earth) Fixed Mobile except aeronautical mobile (R) 5.204 5.205 5.206 5.207 5.208	**137-137.025 MHz** SPACE OPERATION (space-to-Earth) 5.203C METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) (non-GSO) 5.208A 5.208B 5.209 SPACE RESEARCH (space-to-Earth) Fixed Mobile except aeronautical mobile (R) 5.208	MET SAT	

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
137.025-137.175 MHz SPACE OPERATION (space-to-Earth) 5.203C METEOROLOGICAL-SATELLITE (space-to-Earth) SPACE RESEARCH (space-to-Earth) Fixed Mobile-satellite (space-to-Earth) 5.208A 5.208B 5.209 Mobile except aeronautical mobile (R) 5.204 5.205 5.206 5.207 5.208	**137.025-137.175 MHz** SPACE OPERATION (space-to-Earth) 5.203C METEOROLOGICAL-SATELLITE (space-to-Earth) SPACE RESEARCH (space-to-Earth) Fixed Mobile-satellite (space-to-Earth) (non-GSO) 5.208A 5.208B 5.209 Mobile except aeronautical mobile (R) 5.208		
137.175-137.825 MHz SPACE OPERATION (space-to-Earth) 5.203C 5.209A METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) 5.208A 5.208B 5.209 SPACE RESEARCH (space-to-Earth) Fixed Mobile except aeronautical mobile (R) 5.204 5.205 5.206 5.207 5.208	**137.175-137.825 MHz** SPACE OPERATION (space-to-Earth) 5.203C 5.209A METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) (non-GSO) 5.208A 5.208B 5.209 SPACE RESEARCH (space-to-Earth) Fixed Mobile except aeronautical mobile (R) 5.208	NOAA meteorological satellite (137.5 – 137.62 MHz)	

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
137.825-138 MHz SPACE OPERATION (space-to-Earth) 5.203C METEOROLOGICAL-SATELLITE (space-to-Earth) SPACE RESEARCH (space-to-Earth) Fixed Mobile-satellite (space-to-Earth) 5.208A 5.208B 5.209 Mobile except aeronautical mobile (R) 5.204 5.205 5.206 5.207 5.208	**137.825-138 MHz** SPACE OPERATION (space-to-Earth) 5.203C METEOROLOGICAL-SATELLITE (space-to-Earth) SPACE RESEARCH (space-to-Earth) Fixed Mobile-satellite (space-to-Earth) (non-GSO) 5.208A 5.208B 5.209 Mobile except aeronautical mobile (R) 5.208		
138-143.6 MHz AERONAUTICAL MOBILE (OR) 5.210 5.211 5.212 5.214	**138-144 MHz** FIXED MOBILE	Single Frequency Alarms (140.5 – 141 MHz) Mobile 1 MTX (138 – 140.5 MHz) Single Frequency Mobile (141 – 141.5 MHz) Mobile 1 BTX (141.5 – 144 MHz) Remote control industrial apparatus (141 – 142 MHz) PMR and / or PAMR	 Paired with 141.5 - 144 MHz Paired with 138 – 140.5 MHz Radio Frequency Spectrum Regulations (Annex B) (GG. No.38641, 30 March 2015).

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
143.6-143.65 MHz AERONAUTICAL MOBILE (OR) SPACE RESEARCH (space-to-Earth) 5.211 5.212 5.214		Mobile 1 BTX (141.5 – 144 MHz) PMR and / or PAMR	Paired with 138 – 140.5 MHz Allocation includes BTX assignments at 142.8 – 143.275 MHz and 143.325 - 143.975 MHz Radio Frequency Spectrum Assignment Plan GG 41512 Notice 146 of 2018 Final Frequency Migration Plan 2019 (GG No.42337 Notice 36 of 2019)
143.65-144 MHz AERONAUTICAL MOBILE (OR) 5.210 5.211 5.212 5.214			
144-146 MHz AMATEUR AMATEUR-SATELLITE 5.216	**144-146 MHz** AMATEUR AMATEUR-SATELLITE		
146-148 MHz FIXED MOBILE except aeronautical mobile (R)	**146-148 MHz** FIXED MOBILE except aeronautical mobile (R)	Mobile 2 MTX (146 – 148.95 MHz) PMR and / or PAMR	Paired with 153.05 – 156 MHz

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
148-149.9 MHz FIXED MOBILE except aeronautical mobile (R) MOBILE-SATELLITE (Earth-to-space) 5.209 5.218 5.218A 5.219 5.221	**148-149.9 MHz** FIXED MOBILE except aeronautical mobile (R) MOBILE-SATELLITE (Earth-to-space) (non-GSO) 5.209 NF3 SPACE OPERATION (Earth-to-space) 5.218 5.219 5.221	 Mobile 2 MTX (146 – 148.95 MHz) Single Frequency Mobile (148.950 – 151 MHz) Wildlife telemetry Tracking (148 – 152 MHz) Low Earth Orbit systems	 Paired with 153.05 – 156 MHz Systems are paired with either 137 – 138 MHz or 400.15 – 401 MHz For some small LEO systems this band is supplemented by the band 149.9-150.05 MHz Radio Frequency Spectrum Regulations (Annex B) (GG. No.38641, 30 March 2015).
149.9-150.05 MHz MOBILE-SATELLITE (Earth-to-space) 5.209 5.220	**149.9-150.05 MHz** MOBILE-SATELLITE (Earth-to-space) (non-GSO) 5.209 5.220 NF3	 Low Earth Orbit systems Mobile-satellite communications Wildlife telemetry Tracking (148 – 152 MHz) Single Frequency Mobile (148.950 – 151 MHz)	 Radio Frequency Spectrum Regulations (Annex B) (GG. No.38641, 30 March 2015). Radio Frequency Spectrum Assignment Plan GG 41512 Notice 149 of 2018

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
150.05-153 MHz FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY 5.149	**150.05-153 MHz** FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY 5.149	Single frequency alarms (152.05 – 152.55 MHz) Alarms, Single Frequency Mobile and Load Shedding (148.950 – 151 MHz) PMR and PAMR Paging Government Services Wildlife Telemetry Tracking (148 – 152 MHz) Single Frequency Mobile (152.55 – 153.05 MHz) Radio Astronomy (continuum band and also used for pulsar and solar observations).	Channels 150.550 MHz and 150.5625 MHz are used for load shedding. Channels 150.625 MHz and 150.675 MHz are reserved for in-house paging Radio Frequency Spectrum Regulations (Annex B) (GG. No.38641, 30 March 2015). RFSAP was published in GG 41512 Notice 149 0f 2018. See section 5 for coordination with radio astronomy
153-154 MHz FIXED MOBILE except aeronautical mobile (R) Meteorological aids	**153-154 MHz** FIXED MOBILE except aeronautical mobile (R) Meteorological aids	Single Frequency Mobile (152.55 – 153.05 MHz) Mobile 2 BTX (153.05 – 156 MHz) PMR and/or PAMR	Paired with 146 – 148.95 MHz

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
154-156.4875 MHz FIXED MOBILE except aeronautical mobile (R) 5.225A 5.226	**154-156.4875 MHz** FIXED MOBILE except aeronautical mobile (R) 5.226	PMR and/or PAMR(154-156 MHz) Maritime Mobile 2 BTX (153.05 – 156 MHz) Mobile 3 MTX (156 – 156.7625 MHz) Single Frequency Mobile (156.375 – 156.7625 MHz)	See Section 7 for details Paired with 146 – 148.95 MHz Paired with 160.6 – 160.975 MHz (156 – 156.375 MHz allocated to Land Mobile MTX in inland areas) Limited to inland areas
		Maritime mobile communications (Ship stations) (156.00-156.4875 MHz) Land mobile in areas remote from coast (156.00-156.4875 MHz)	Paired with 160.625-160.950 MHz, single frequency 156.3 MHz and in the band 156.375-156.475 MHz ITU RR Articles 31 and 52 and Appendix 18 apply.
156.4875-156.5625 MHz MARITIME MOBILE (distress and calling via DSC)	**156.4875-156.5125 MHz** MARITIME MOBILE (distress and calling via DSC). FIXED 5.227 LAND MOBILE 5.227	Single Frequency Mobile (156.375 – 156.7625 MHz) The band 156.4875-156.5125 MHz may also be used for land mobile services while protecting the maritime mobile service.	The use of this band by the maritime services shall be in accordance with ITU Appendix 18. ITU RR Articles 31 and 52 and Appendix 18 apply.

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
	5.111 5.226 5.227		NINP basis to Maritime Mobile Service; Limited to inland areas
	156.5125-156.5375 MHz MARITIME MOBILE (distress and calling via DSC) 5.111 5.111 5.226 5.227	Maritime mobile distress, safety and calling frequency 156.525 MHz for maritime mobile VHF radiotelephone service using DSC. Single Frequency Mobile (156.375 – 156.7625 MHz)	The use of this band by the maritime services shall be in accordance with ITU Appendix 18. ITU RR Articles 31 and 52 and Appendix 18 apply.
5.111 5.226 5.227	**156.5375-156.5625 MHz** FIXED LAND MOBILE MARITIME MOBILE (distress and calling via DSC) 5.111 5.226 5.227	The bands 156.5375-156.5625 MHz may also be used for land mobile services while protecting the maritime mobile service. Single Frequency Mobile (156.375 – 156.7625 MHz)	The use of this band by the maritime services shall be in accordance with ITU Appendix 18. ITU RR Articles 31 and 52 and Appendix 18 apply.
156.5625-156.7625 MHz FIXED MOBILE except aeronautical mobile (R) 5.226	**156.5625-156.7625 MHz** FIXED MOBILE except aeronautical mobile (R) 5.226	Fixed and Mobile applications. Maritime mobile communications (156.5625-156.7625 MHz). Land mobile in areas remote from coast.	Single frequency applications ITU RR Articles 31 and 52 and Appendix 18 apply.

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
156.7625-156.7875 MHz MARITIME MOBILE Mobile-satellite (Earth-to-space) 5.111 5.226 5.228	**156.7625-156.7875 MHz** MARITIME MOBILE Mobile-satellite (Earth-to-space) 5.111 5.226 5.228	International distress, safety and calling frequency at 156.8 MHz for the maritime mobile VHF radiotelephone service. Distress safety and calling (156.76250 – 156.8375) Reception of AIS emissions of long-range AIS broadcast messages	ITU RR Article 31 and Appendix 18 apply to the use of the frequency 156.8 MHz and this band.
156.7875-156.8125 MHz MARITIME MOBILE (distress and calling) 5.111 5.226	**156.7875-156.8125 MHz** MARITIME MOBILE (distress and calling) 5.111 5.226	Distress safety and calling (156.76250 – 156.8375, channel 16)	See Section 7 for details
156.8125-156.8357 MHz MARITIME MOBILE Mobile-satellite (Earth-to-space) 5.111 5.226 5.228	**156.8125-156.8375 MHz** MARITIME MOBILE Mobile-satellite (Earth-to-space)	Distress safety and calling (156.76250 – 156.8375) Reception of AIS emissions of long-range AIS broadcast messages	See section 7 for details.

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
156.8357-156.8375 MHz MARITIME MOBILE Mobile-satellite (Earth-to-space) 5.111 5.226 5.228	5.111 5.226 5.228		
156.8375-157.1875 MHz FIXED MOBILE -except aeronautical mobile 5.226	**156.8375-157.1875 MHz** FIXED MOBILE -except aeronautical mobile 5.226	Government Services 156.8375-157.45 MHz Maritime mobile communications (ship stations). Land mobile in areas remote from coast.	Paired with 161.5-162.0 MHz and single frequency applications; ITU RR Articles 31 and 52 and Appendix 18 apply
157.1875-157.3375 MHz FIXED MOBILE -except aeronautical mobile Maritime mobile-satellite 5.208A 5.208B 5.228AB 5.228AC 5.226	**157.1875-157.3375 MHz** FIXED MOBILE -except aeronautical mobile Maritime mobile-satellite (Earth-to-space) (non-GSO) Maritime mobile-satellite (space-to-Earth) (non-GSO) 5.228AB 5.228AC 5.208A 5.208B 5.226	Government Services	Resolution 739 (Rev.WRC-19) apply MSS and Maritime mobile-satellite shall protect RAS in line with 5.208A

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
157.3375-161.7875 MHz FIXED MOBILE -except aeronautical mobile 5.226	**157.3375-161.7875 MHz** FIXED MOBILE -except aeronautical mobile 5.226	Government Services (157.450-160.6 MHz) PMR and/or PAMR (160.600-160.975 MHz) Maritime mobile communications (Coast stations). Land mobile in areas remote from coast (160.975-161.475 MHz) PMR and/or PAMR (161.475-162.050 MHz)	Single frequency applications Paired with 156.025-156.350 MHz; Paired with 156.9-157.4 MHz; ITU RR Article 31 and Article 52 apply Appendix 18 apply.

This gazette is also available free online at www.gpwonline.co.za

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
161.7875-161.9375 MHz FIXED MOBILE -except aeronautical mobile Maritime mobile-satellite 5.208A 5.208B 5.228AB 5.228AC 5.226	**161.7875-161.9375 MHz** FIXED MOBILE -except aeronautical mobile Maritime mobile-satellite (Earth-to-space) (non-GSO) 5.228A 5.228B 5.228AB 5.228AC Maritime mobile-satellite (space-to-Earth) (non-GSO) 5.228A 5.228B 5.228AB 5.228AC 5.226	Government Services (161.475-162.050 MHz) Maritime mobile communications (Coast stations) Land mobile in areas remote from coast Automatic Identification System (AIS) at 161.975 MHz, 162.025 MHz and 162.050-174 MHz PMR and/or PAMR	ITU RR Article 31 and Article 52 Appendix 18 apply.
161.9375 -161.9625 MHz FIXED MOBILE except aeronautical mobile Maritime mobile-satellite (Earth-to-space) 5.228AA	**161.9375 -161.9625 MHz** FIXED MOBILE except aeronautical mobile NF4 Maritime mobile-satellite (Earth-to-space) 5.228AA	Sonobuoy (161.875 – 173.875) Transmission of meteorological bulletins and notice to navigators Mobile 1 MTX-DF (161.475 – 165.0375 MHz)	See Section 7 for details Paired with Mobile 1 BTX-DF (156.875 – 160.4375 MHz)

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
5.226	5.226	Single Frequency Mobile (160.45 – 161.475 MHz) Single Frequency Mobile (156.8375 – 156.875 MHz) Private Maritime MTX (157.45 – 157.95 MHz)	Inland areas only Paired with 162.05 – 162.55 MHz
161.9625-161.9875 MHz FIXED MOBILE except aeronautical mobile Mobile-satellite (Earth-to-space) 5.228F 5.226 5.228A 5.228B	**161.9625-161.9875 MHz** FIXED MOBILE except aeronautical mobile NF4 Mobile-satellite (Earth-to-space) 5.228F 5.226 5.228A 5.228B	Search and rescue (air to ground) Mobile 1 MTX-DF (161.475 – 165.0375 MHz) Reception of AIS emissions from stations in the mms	Search and rescue operations and other safety-related communications (air to ground) Paired with Mobile 1 BTX-DF (156.875 – 160.4375 MHz)
161.9875-162.0125 MHz FIXED MOBILE except aeronautical mobile Maritime mobile-satellite (Earth-to-space) 5.228AA 5.226 5.229	**161.9875-162.0125 MHz** FIXED MOBILE except aeronautical mobile NF4 Maritime mobile-satellite (Earth-to-space) 5.228AA 5.226	Transmission of meteorological bulletins and notice to navigators Mobile 1 MTX-DF (161.475 – 165.0375 MHz)	See Section 7 for details Paired with Mobile 1 BTX-DF (156.875 – 160.4375 MHz)

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
162.0125-162.0375 MHz FIXED MOBILE except aeronautical mobile Mobile-satellite (Earth-to-space) 5.228F 5.226 5.228A 5.228B 5.229	**162.0125-162.0375 MHz** FIXED MOBILE except aeronautical mobile NF4 Mobile-satellite (Earth-to-space) 5.228F 5.226 5.228A 5.228B	Mobile 1 MTX-DF (161.475 – 165.0375 MHz) Reception of AIS emissions from stations in the mms. Search and rescue (air to ground)	Paired with Mobile 1 BTX-DF (156.875 – 160.4375 MHz) Search and rescue operations and other safety-related communications (air to ground)
162.0375-174 MHz FIXED MOBILE except aeronautical mobile	**162.0375-174 MHz** FIXED MOBILE except aeronautical mobile NF4	Sonobuoy in maritime service Mobile 1 MTX-DF (161.475 – 165.0375 MHz) Mobile 2 MTX-DF (165.05 – 165.5375 MHz) Single Frequency Mobile (168.95 – 170.05 MHz) Mobile 3 MTX-DF (165.55 – 167.4875 MHz) Single Frequency Mobile (172 – 172.0375 MHz) Mobile 4 MTX-DF (167.5 – 168.9375 MHz) Meter Reading (169.4 – 169.475 MHz)	Paired with Mobile 1 BTX-DF (156.875 – 160.4375 MHz) Paired with Mobile 2 BTX-DF (170.05 – 170.5375 MHz) Paired with Mobile 3 BTX-DF (172.05 – 173.9875 MHz) Paired with Mobile 4 BTX (170.55 – 171.9875 MHz)

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
5.226 5.229	5.226 NF5	Non-specific SRD's – Telecommand only (173.2125 – 173.2375 MHz) Non-specific SRDs (173.2375 – 173.2875 MHz) Wireless microphones and assistive listening devices (173.7 – 175.1 MHz)	Radio Frequency Spectrum Regulations (Annex B) (GG. No.38641, 30 March 2015). .
174-223 MHz BROADCASTING 5.235 5.237 5.243	**174-223 MHz** BROADCASTING NF5	Analogue Television Broadcasting (174 – 214 MHz) T-DAB (214 – 230 MHz) Digital Sound-Broadcasting Digital Television Broadcasting (174 – 214 MHz) Wireless microphones (173.7 – 175.1 MHz)	TV Band III Migration from analogue to digital is harmonised in SADC. Digital Sound Broadcasting (DSB) planned in this band. TV Band III Regulations was published in GG44469 Notice 215 of 2021 The Terrestrial Broadcasting Frequency Plan as amended (GG no.36321) 02 April 2013 Radio Frequency Spectrum Regulations (Annex B) (GG. No.38641, 30 March 2015)

This gazette is also available free online at www.gpwonline.co.za

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
223-230 MHz BROADCASTING Fixed Mobile 5.243 5.246 5.247	**223-230 MHz** BROADCASTING Fixed Mobile	T-DAB (214 – 230 MHz) Digital Sound Broadcasting	Migration from analogue to digital is harmonised in SADC. Digital sound broadcasting is being planned in this band. Digital Sound Broadcasting (DSB) Regulations was published in GG44469 Notice 215 of 2021 The Terrestrial Broadcasting Frequency Plan as amended (GG no.36321) 02 April 2013
230-235 MHz FIXED MOBILE 5.247 5.251 5.252	**230-238 MHz** BROADCASTING 5.252	Digital Television Broadcasting (230 – 238 MHz)	The Terrestrial Broadcasting Frequency Plan as amended (GG no.36321) 02 April 2013
235-267 MHz FIXED MOBILE	**238-246 MHz** FIXED MOBILE	PMR and/or PAMR(238- 242.95 MHz) International Distress Frequency at 243 MHz (242.95 – 243.05 MHz) Low-power devices (243.05-246.00 MHz)	Band available for distress and safety purposes. Low-power devices ancillary to the broadcasting service.

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
	Mobile-satellite 5.111 5.252 5.254 5.256	DAB+ (238-242.95 MHz)	Mobile-satellite may be used in (235 -322 MHz) and (335.4 -399.9 MHz) Future consideration for Digital Sound Broadcasting in the band 238 – 240 MHz Channel 13F (239.2 MHz) can be used nationally for DAB+ as currently used.during DAB+ trials Radio Frequency Spectrum Regulations (Annex B) (GG. No.38641, 30 March 2015)
	246-254 MHz BROADCASTING 5.254	Digital Television broadcasting (246-254 MHz)	The Terrestrial Broadcasting Frequency Plan as amended (GG no.36321) 02 April 2013
5.111 5.252 5.254 5.256 5.256A	**254-267 MHz** MOBILE FIXED Mobile-satellite 5.111 5.254 5.256	Trunking BTX (254 – 259.4 MHz) Trunking MTX (262 – 267.4 MHz) Government Services (267.4-272 MHz)	Paired with 262 – 267.4 MHz Paired with 254 – 259.4 MHz Mobile-satellite may be used in (235 -322 MHz) and (335.4 -399.9 MHz)
267-272 MHz FIXED	**267-272 MHz** FIXED	Government Services	

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
MOBILE Space operation (space-to-Earth) 5.254 5.257	MOBILE SPACE OPERATION (telemetry) Mobile-satellite Space operation (space-to-Earth) 5.254 5.257	Trunking MTX (262 – 267.4 MHz) Space Telemetry (267 – 272 MHz)	Paired with 254 – 259.4 MHz Mobile-satellite may be used in (235 -322 MHz) and (335.4 -399.9 MHz)
272-273 MHz SPACE OPERATION (space-to-Earth) FIXED MOBILE 5.254	**272-273 MHz** SPACE OPERATION (space-to-Earth) FIXED MOBILE Mobile-satellite 5.254	Government Services	Mobile-satellite may be used in (235 -322 MHz) and (335.4 -399.9 MHz)
273-312 MHz FIXED MOBILE 5.254	**273-312 MHz** FIXED MOBILE Mobile-satellite 5.254	Government Services Single Frequency Mobile (278 – 286 MHz)	Mobile-satellite may be used in (235 -322 MHz) and (335.4 -399.9 MHz)
312-315 MHz FIXED MOBILE Mobile-satellite (Earth-to-space)	**312-315 MHz** FIXED MOBILE Mobile-satellite (Earth-to-space)	Government Services	

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
5.254 5.255	5.254 5.255		Mobile-satellite may be used in (235 -322 MHz) and (335.4 -399.9 MHz)
315-322 MHz FIXED MOBILE 5.254	**315-322 MHz** FIXED MOBILE Mobile-satellite 5.254	Government Services	Mobile-satellite may be used in (235 -322 MHz) and (335.4 -399.9 MHz)
322-328.6 MHz FIXED MOBILE RADIO ASTRONOMY 5.149	**322-328.6 MHz** FIXED MOBILE RADIO ASTRONOMY 5.149	Government Services Radio Astronomy (Observation of deuterium)	See Section 5 coordination with radio astronomy
328.6-335.4 MHz AERONAUTICAL RADIONAVIGATION 5.258 5.259	**328.6-335.4 MHz** AERONAUTICAL RADIONAVIGATION 5.258	ILS Glide Path	

This gazette is also available free online at www.gpwonline.co.za

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
335.4-387 MHz FIXED MOBILE 5.254	**335.4-387 MHz** FIXED NF6 MOBILE NF7 Mobile-satellite 5.254	 PTP/PTMP FWA (336 – 346 MHz) FWA (356 – 366 MHz) Government Services (366-380 MHz) Digital Trunking (Emergency) (380 – 387 MHz) (PPDR[16]) PMR and/or PAMR (335.4-336 MHz) Unmanned Aerial Vehicle (UAV) (366.0-380.0 MHz)	 Paired with 356 – 366 MHz Paired with 336 – 346 MHz Paired with 390 – 397 MHz (Coordination is required with PTP/PTMP in the implement of UAV) Radio Frequency Spectrum Assignment Plan GG 41512 Notice 148 of 2018
387-390 MHz FIXED MOBILE Mobile-satellite (space-to-Earth)	**387-390 MHz** FIXED MOBILE NF7 Mobile-satellite (space-to-Earth)	 Digital Trunking (387 – 390 MHz) (Govt.) PMR and/or PAMR	 Paired with 397 – 399.9 MHz (To be used mainly for digital systems.) Radio Frequency Spectrum Assignment Plan GG 41512 Notice 148 of 2018

[16] http://www.crasa.org/common_up/crasa-setup/12-03-2015_GUIDELINES%20ON%20FREQUENCIES%20FOR%20PPDR%202014.pdf

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
5.208A 5.208B 5.254 5.255	5.208A 5.208B 5.254 5.255		Final Frequency Migration Plan 2019 (GG No.42337 Notice 36 of 2019)
390-399.9 MHz FIXED MOBILE 5.254	**390-399.9 MHz** FIXED MOBILE NF7 Mobile-satellite 5.254	Digital Trunking Emergency) (390 – 397 MHz) (PPDR) Government Services Digital Trunking (397 – 399.9 MHz) (Govt.) PMR and/or PAMR	Paired with 380 – 387 MHz Paired with 387 – 390 MHz In accordance with Resolution 646 and Recommendation ITU-R M.2015-2 latest version. Radio Frequency Spectrum Assignment Plan GG 41512 Notice 148 of 2018 Final Frequency Migration Plan 2019 (GG No.42337 Notice 36 of 2019)
399.9-400.05 MHz MOBILE-SATELLITE (Earth-to-space) 5.209 5.220 5.260A 5.260B	**399.9-400.05 MHz** MOBILE-SATELLITE (Earth-to-space) (non-GSO) 5.209 5.220 5.260A 5.260B		Radio Frequency Spectrum Assignment Plan GG 41512 Notice 148 of 2018
400.05-400.15 MHz	**400.05-400.15 MHz**		

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
STANDARD FREQUENCY AND TIME SIGNAL-SATELLITE (400.1 MHz) 5.261 5.262	STANDARD FREQUENCY AND TIME SIGNAL-SATELLITE (400.1 MHz) 5.261 5.262		
400.15-401 MHz METEOROLOGICAL AIDS METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) 5.208A 5.208B 5.209 SPACE RESEARCH (space-to-space) 5.263 Space operation (space-to-Earth) 5.262 5.264	**400.15-401 MHz** METEOROLOGICAL AIDS METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth)(non-GSO) 5.208A 5.208B 5.209 SPACE RESEARCH (space-to-space) 5.263 Space operation (space-to-Earth) 5.264	Radiosonde Communication with manned space vehicles	
401-402 MHz METEOROLOGICAL AIDS SPACE OPERATION (space-to-Earth) EARTH EXPLORATION-SATELLITE (Earth-to-space)	**401-402 MHz** METEOROLOGICAL AIDS SPACE OPERATION (space-to-Earth) EARTH EXPLORATION-SATELLITE (Earth-to-space)	Radiosonde	Note limitations in e.i.r.p 5.264A

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
METEOROLOGICAL-SATELLITE (Earth-to-space) Fixed Mobile except aeronautical mobile 5.264A 5.264B	METEOROLOGICAL-SATELLITE (Earth-to-space) Fixed Mobile except aeronautical mobile 5.264A 5.264B	Data uplink to Geostationary Satellite orbit	
402-403 MHz METEOROLOGICAL AIDS EARTH EXPLORATION-SATELLITE (Earth-to-space) METEOROLOGICAL-SATELLITE (Earth-to-space) Fixed Mobile except aeronautical mobile 5.264A 5.264B	**402-403 MHz** METEOROLOGICAL AIDS EARTH EXPLORATION-SATELLITE (Earth-to-space) METEOROLOGICAL-SATELLITE (Earth-to-space) Fixed Mobile except aeronautical mobile 5.264A 5.264B	Radiosonde Medical implants (402 – 405 MHz) Various SRD's (402 – 406 MHz) SRDs – ultra low power active medical implants	Radio Frequency Spectrum Regulations (Annex B) (GG. No.38641, 30 March 2015). Note limitations in e.i.r.p 5.264A SRDs (402 – 405 MHz) ITU-R Recommendation. SM.1896-1 latest version ITU-R Recommendation. RS.1346 latest version.
403-406 MHz METEOROLOGICAL AIDS Fixed Mobile except aeronautical mobile	**403-406 MHz** METEOROLOGICAL AIDS Fixed Mobile except aeronautical mobile	Radiosonde Medical implants (402 – 405 MHz) Various SRD's (402 – 406 MHz)	Radio Frequency Spectrum Regulations (Annex B) (GG. No.38641, 30 March 2015). Note limitations in e.i.r.p 5.264A SRDs (402 – 405 MHz)

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
5.265	5.265		ITU-R Recommendation. SM.1896-1 latest version ITU-R Recommendation. RS.1346 latest version
406-406.1 MHz MOBILE-SATELLITE (Earth-to-space) 5.265 5.266 5.267	**406-406.1 MHz** MOBILE-SATELLITE (Earth-to-space) 5.265 5.266 5.267	COSPAS – SARSAT: Emergency Position Indicating Radio Beacon (EPIRB) Low power satellite EPIRBs (distress and safety purposes)	Public Locator Beacon ITU RR Articles 32 apply ITU RR Articles 34 apply Appendix 15 apply
406.1-410 MHz FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY 5.149 5.265	**406.1-410 MHz** FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY 5.149 5.265	Fixed Links (406.1 – 407.625 MHz) Mobile MTX (407.625 – 410 MHz) Government use for public safety PMR and/or PAMR PPDR Radio Astronomy (continuum observations)	Paired with 416.1 – 417.625 MHz Paired with BTX(417.625 – 420 MHz) The use of this band for PPDR to be studied. See section 5 for coordination with radio astronomy.

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
410-420 MHz FIXED MOBILE except aeronautical mobile SPACE RESEARCH (space-to-space) 5.268	**410-420 MHz** FIXED MOBILE except aeronautical mobile SPACE RESEARCH (space-to-space) 5.268	 Government Services Mobile MTX (410 – 413 MHz) Mobile Data MTX (413-413.7625 MHz) Digital Trunking MTX (413.7625 – 416.1 MHz) Mobile BTX (416.1 – 417.625 MHz) PMR and/or PAMR PPDR Communication links with an orbiting, manned space vehicle	 Paired with BTX (420 – 423 MHz) (Government Services) Paired with BTX (423-423.7625 MHz) Paired with 423.7625 – 426.1 MHz Paired with MTX (406.1 – 407.625 MHz) The use of this band for PPDR to be studied. Final Frequency Migration Plan 2019 (GG No.42337 Notice 36 of 2019)
420-430 MHz FIXED MOBILE except aeronautical mobile	**420-430 MHz** FIXED MOBILE except aeronautical mobile	 Single Frequency Links (426.1 – 430 MHz) Digital Trunked Mobile BTX (420 – 423 MHz) Mobile Data BTX (423 – 423.7625 MHz) Digital Trunking BTX (423.7625 – 426.1 MHz) PMR and/or PAMR PPDR	 Frequencies will only be assigned for SF links where migration above 1 GHz would be impractical Paired with 410 - 413 MHz (Government use) Paired with MTX (413 – 413.7625 MHz) Paired with MTX (413.7626 – 416.1 MHz) The use of this band for PPDR to be studied.

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
Radiolocation 5.269 5.270 5.271	Radiolocation		Final Frequency Migration Plan 2019 (GG No.42337 Notice 36 of 2019)
430-432 MHz AMATEUR RADIOLOCATION 5.271 5.274 5.275 5.276 5.277	**430-432 MHz** AMATEUR NF8 RADIOLOCATION	Amateur Applications	Radio Frequency Spectrum Regulations (Annex B) (GG. No.38641, 30 March 2015).
432-438 MHz AMATEUR RADIOLOCATION Earth exploration-satellite (active) 5.279A 5.138 5.271 5.276 5.277 5.280 5.281 5.282	**432-438 MHz** AMATEUR NF8 RADIOLOCATION Earth exploration-satellite (active) 5.279A Amateur -satellite 5.138 5.282	Amateur (432-438 MHz) ISM (433.0-434.79 MHz) Non Specific SRD including RFID (433.05 – 434.79 MHz) ISM applications Amateur-satellite (435-438 MHz)	Conditions for amateur satellite service is given in 5.282 Radio Frequency Spectrum Regulations (Annex B) (GG. No.38641, 30 March 2015). For earth exploration-satellite see Rec. ITU-R RS.1260-2 latest version Conditions for amateur satellite service is given in 5.282 For earth exploration-satellite see Rec. ITU-R RS.1260-2

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
438-440 MHz AMATEUR RADIOLOCATION 5.271 5.274 5.275 5.276 5.277 5.283	**438-440 MHz** AMATEUR NF8 RADIOLOCATION	Amateur	Radio Frequency Spectrum Regulations (Annex B) (GG. No.38641, 30 March 2015).
440-450 MHz FIXED	**440-450 MHz** FIXED	Telemetry / Data BTX (440 – 441 MHz) FIXED (telemetry, dual frequency alarm systems) Agricultural Telemetry Application Roving simplex Application Simplex Applications	Paired with MTX (445 – 446 MHz) Channels 440.0125, 440.3625, 445.0125 and 445.3625 MHz are used for Agricultural Telemetry. Channels 440.275 MHz, 440.2875 MHz, 445.2750 MHz, 445.2875 MHz, 440.375 MHz and 445.375 MHz are roving simplex channels. Channels 440 - 440.100 MHz and 445 – 445.1 MHz are used as simplex.
MOBILE except aeronautical mobile	MOBILE except aeronautical mobile	Mobile MTX (441.1 – 445 MHz) Single Frequency Mobile (441 – 441.1 MHz) PPDR PMR and/or PAMR446 (446 – 446.1 MHz)	Paired with BTX (446.1 – 450 MHz) 8 channels - PMR446-ERC/DEC/ (98)25

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
Radiolocation 5.269 5.270 5.271 5.284 5.285 5.286	SPACE OPERATION (Earth-to-space) SPACE RESEARCH (Earth-to-space) Radiolocation 5.269 5.270 5.271 5.284 5.285 5.286		Radio Frequency Spectrum Assignment Plan GG 42230 Notice 74 of 2019 Radio Frequency Spectrum Regulations (Annex B) (GG. No.38641, 30 March 2015). Further studies Final Frequency Migration Plan 2019 (GG No.42337 Notice 36 of 2019)
450-455 MHz FIXED MOBILE 5.286AA	**450-455 MHz** FIXED MOBILE 5.286AA NF9	Fixed links (450 – 453 MHz) Government Services Single Frequency Mobile (453 – 454 MHz) Paging (454 – 454.425 MHz) Trunked Mobile BTX (454.425 – 460 MHz) IMT450 PMR and/or PAMR	Paired with 460 – 463 MHz Paired with MTX (464.425 – 470 MHz) This band is currently used for a variety of fixed and mobile systems in the various SADC countries. ITU-R Recommendation M.1036-6 latest version. Resolution 224 (Rev WRC-19) Radio Frequency Spectrum Regulations as amen ded (Annex B) (GG. No. 38641, 30 March 2015).

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
5.209 5.271 5.286 5.286A 5.286B 5.286C 5.286D 5.286E	SPACE OPERATION (Earth-to-space) SPACE RESEARCH (Earth-to-space) 5.209 5.286 5.286A 5.286B 5.286C		Radio Frequency Spectrum Assignment Plan 2015, Government Gazette 38640 (Notice 270 of 2015) International Mobile Telecommunication Roadmap (GG No.42829 Notice 600 of 2019). New RFSAP to be developed.
455-456 MHz FIXED MOBILE 5.286AA 5.209 5.271 5.286A 5.286B 5.286C 5.286E	**455-456 MHz** FIXED MOBILE 5.286AA NF9 5.209 5.286A 5.286B 5.286C	Government Services Trunked mobile BTX (454.425 – 460 MHz) IMT450	Paired with 464.425 – 470 MHz ITU-R Recommendation M.1036-6 latest version Resolution 224 (Rev WRC-19) Radio Frequency Spectrum Regulations as amended (Annex B) (GG. No. 38641, 30 March 2015). Radio Frequency Spectrum Assignment Plan 2015, Government Gazette 38640 (Notice 270 of 2015) International Mobile Telecommunication Roadmap (GG No.42829 Notice 600 of 2019). New RFSAP to be developed
456-459 MHz	**456-459 MHz**		

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
FIXED MOBILE 5.286AA 5.271 5.287 5.288	FIXED MOBILE 5.286AA NF9 5.287	Trunked mobile BTX (454.425 – 460 MHz) IMT450 Government Services	Paired with 464.425 – 470 MHz ITU-R Recommendation M.1036-6 latest version Resolution 224 (Rev WRC-19) Radio Frequency Spectrum Regulations as amended (Annex B) (GG. No. 38641, 30 March 2015). Radio Frequency Spectrum Assignment Plan 2015, Government Gazette 38640 (Notice 270 of 2015) International Mobile Telecommunication Roadmap (GG No.42829 Notice 600 of 2019). New RFSAP to be developed
459-460 MHz FIXED MOBILE 5.286AA	**459-460 MHz** FIXED MOBILE 5.286AA NF9	Trunked Mobile BTX 454.425 – 460 MHz IMT450 Government Services	Paired with 464.425 – 470 MHz ITU-R Recommendation M.1036-6 latest version Resolution 224 (Rev WRC-19) Radio Frequency Spectrum Regulations as amended (Annex B) (GG. No. 38641, 30 March 2015). Radio Frequency Spectrum Assignment Plan 2015, Government Gazette 38640 (Notice 270 of 2015)

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
5.209 5.271 5.286A 5.286B 5.286C 5.286E	5.209 5.286A 5.286B 5.286C		International Mobile Telecommunication Roadmap (GG No.42829 Notice 600 of 2019). New RFSAP to be developed
460-470 MHz FIXED MOBILE 5.286AA Meteorological-satellite (space-to-Earth) 5.287 5.288 5.289 5.290	**460-470 MHz** FIXED MOBILE 5.286AA NF9 Meteorological-satellite (space-to-Earth) Earth exploration-satellite (space-to-Earth) 5.287 5.289	 Fixed Links (460 – 463 MHz) Single Frequency Mobile (463.025 – 463.975 MHz) Low Power Mobile Radio (463.975 MHz, 464.125 MHz, 464.175 MHz, 464.325 MHz, 464.375 MHz) Single Frequency Mobile (464.375 – 464.425 MHz) Trunked Mobile MTX (464.425 – 470 MHz) IMT450 Security Systems (464.5375 MHz) Non-specific SRDs (464.5 – 464.5875 MHz) Government Services	 Paired with 450 – 453 MHz Paired with BTX (454.425 – 460 MHz) ITU-R Recommendation M.1036-6 latest versionResolution 224 (Rev WRC-19) Radio Frequency Spectrum Regulations as amended (Annex B) (GG. No. 38641, 30 March 2015). Radio Frequency Spectrum Assignment Plan 2015, GG 38640 (Notice 270 of 2015) International Mobile Telecommunication Roadmap (GG No.42829 Notice 600 of 2019). New RFSAP to be developed

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
470-694 MHz BROADCASTING	**470-606 MHz** BROADCASTING Land mobile 5.149 5.296 5.304 5.306	DTT Broadcasting (470-694 MHz) SAP/SAB Applications Applications ancillary to broadcasting and programme-making	Broadcasting Allotments in accordance with GE89 and GE06. Broadcast assignments in accordance with the latest version of the Terrestrial Broadcasting Frequency Plan as amended (GG No.36321) 02 April 2013. Band IV/V Analogue television is to be migrated to digital television and ensure harmonisation with SADC. The use of Television Whitespaces in the band 470 – 694 MHz excluding sub band 606 to 614 MHz, subject to non-Interference non-Protection basis to users under a primary allocation, max. 50 mW ERP. Regulations Television Whitespaces – GG 44373 (Notice 164 of 2021) and Government Gazette No. 41512 (Notice 147 of 2018) Radio Frequency Spectrum Assignment Plan, GG 43341 (Notice 284 of 2020 The use of land mobiles in accordance with footnote No. 5.296

This gazette is also available free online at **www.gpwonline.co.za**

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
	606-614 MHz BROADCASTING RADIO ASTRONOMY Land mobile 5.149 5.296 5.304 5.306	DTT Broadcasting (470-694 MHz) Radio Astronomy (606 – 614 MHz) SAP/SAB Applications Applications ancillary to broadcasting and programme-making	Broadcasting Allotments in accordance with GE89 and GE06. Broadcast assignments in accordance with the latest version of the Terrestrial Broadcasting Frequency Plan as amended (GG No.36321) 02 April 2013. Band IV/V Analogue television is to be migrated to digital television and ensure harmonisation with SADC. Radio Frequency Spectrum Assignment Plan, GG 43341 Notice 284 of 2020 RAS VLBI Observations (608 – 614 MHz). See Section 5 for coordination with radio astronomy.
	614-694 MHz BROADCASTING Land mobile	DTT Broadcasting (470-694 MHz) SAP/SAB Applications Applications ancillary to broadcasting and programme-making	Broadcasting Allotments in accordance with GE89 and GE06. Broadcast assignments in accordance with the latest version of the Terrestrial Broadcasting Frequency Plan as amended (GG No.36321) 02 April 2013. Band IV/V Analogue television is to be migrated to digital television and ensure harmonisation with SADC.

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
5.149 5.291A 5.294 5.296 5.300 5.304 5.306 5.312	5.149 5.296 5.304 5.306		The use of Television Whitespaces in the band 470 – 694 MHz excluding sub band 606 to 614 MHz, subject to non-Interference non-Protection basis (to users under a primary allocation, max. 50 mW ERP). Regulations Television Whitespaces – GG 44373 Notice 164 of 2021 and Government Gazette No. 41512 1913 (Notice 147 of 2018) Radio Frequency Spectrum Assignment Plan, GG 43341 Notice 284 of 2020
694-790 MHz MOBILE except aeronautical mobile 5.312A 5.317A BROADCASTING	**694-790 MHz** MOBILE except aeronautical mobile 5.312A 5.317A NF9 NF9	IMT700 MTX (703 – 733 MHz) IMT750 (733 to 758 MHz) LTE LTE Advance	Paired with BTX (758 – 788 MHz) International Mobile Telecommunication Roadmap (GG No.42829 Notice 600 of 2019) . Radio Frequency Spectrum Assignment Plan (GG 38640 Notice 271 and 272 of 2015) as amended IMT in accordance with ITU-R Recommendation ITU-R M.2090 latest version and Resolution **760 (WRC-15)** applies Recommendation ITU-R M.1036-6

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
5.300 5.312	5.312A 5.317A		Consideration of the future spectrum needs of Broadband Public Protection and Disaster Relief (PPDR) in the range 694-790 MHz as described in the most recent ITU-R M.2015, while taking into account studies called for by Resolution 646 (WRC15) for technical and operational measures. Band IV/V analogue television is to be migrated to digital television and ensure harmonisation with SADC. WRC-07, WRC-12 and WRC-15 allocated this band to Mobile service except aeronautical mobile and identified it for IMT. Fixed links operating in this band will have to be migrated in order to accommodate IMT.
790-862 MHz FIXED MOBILE except aeronautical mobile 5.316B 5.317A BROADCASTING	**790-862 MHz** FIXED MOBILE except aeronautical mobile 5.316B 5.317A NF9 5.312A 5317A	 Fixed Links (856 – 864.1 MHz) Wireless Access (827.775 – 832.695 MHz) IMT800 MTX (832 - 862 MHz) IMT850 MTX (825 – 830 MHz)	 Paired with 868.1 – 876 MHz Paired with 827.775- 832.695 MHz Paired with BTX (791 – 821 MHz) Paired with BTX (870 – 875 MHz) International Mobile Telecommunication Roadmap (GG No.42829 Notice 600 of 2019) . Radio Frequency Spectrum

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
			Assignment Plan (GG 38640 Notice 271 and 272 of 2015) as amended IMT in accordance with ITU-R Recommendation ITU-R M.2090 latest version and Resolution **760 (WRC-15**) applies Recommendation ITU-R M.1036-6 Consideration of the future spectrum needs of Broadband Public Protection and Disaster Relief (PPDR) in the range 694-790 MHz as described in the most recent ITU-R M.2015, while taking into account studies called for by Resolution 646 (WRC15) for technical and operational measures. Band IV/V analogue television is to be migrated to digital television and ensure harmonisation with SADC. WRC-07, WRC-12 and WRC-15 allocated this band to Mobile service except aeronautical mobile and identified it for IMT. Fixed links operating in this band will have to be migrated in order to accommodate IMT. Radio Frequency Spectrum Assignment Plan GG 42337 Notice 165 of 2019 Radio Frequency Spectrum Assignment Plan (GG 38640 Notice 273 of 2015) as amended

This gazette is also available free online at www.gpwonline.co.za

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
5.312 5.319			Radio Frequency Spectrum Assignment Plan GG 41082 Notice 648 of 2017
862-890 MHz FIXED MOBILE except aeronautical mobile 5.317A BROADCASTING 5.322 5.319 5.323	**862-890 MHz** FIXED MOBILE except aeronautical mobile 5.317A NF10	Fixed Links (856 – 864.1 MHz) Wireless Access (872.775 877.695 MHz) GSM-R MTX (877.695 – 880 MHz) NF10 IMT900 MTX (880-915 MHz) IMT850 BTX (870-875 MHz) Wireless Audio systems and Wireless microphones (863 – 865 MHz) CT2 cordless phones (864.1 – 868.1 MHz) FWA (864.1 – 868.1 MHz) RFID (865 – 868 MHz) Non-specific SRD and RFID (869.4 – 869.65 MHz) Non Specific SRDs (868 – 868.6 MHz, 868.7 – 869.2 MHz, 869.4 – 869.65 MHz, 869.7 – 870.0 MHz) Alarms (868.6 – 868.7 MHz, 869.25 – 869.3 MHz, 869.65 – 869.7 MHz)	Paired with 868.1 – 876 MHz Paired with 827.775 – 832.695 MHz Paired with 921 – 925 MHz Paired with BTX (925 – 960 MHz) Paired with MTX (825-830 MHz) Radio Frequency Spectrum Regulations as amended (Annex B) (GG. No. 38641, 30 March 2015). Recommendation ITU-R M.1036-6 Radio Frequency Spectrum Assignment Plan GG 42337 Notice 165 of 2019 Radio Frequency Spectrum Assignment Plan (GG 38640 Notice 275 of 2015) as amended International Mobile Telecommunication Roadmap GG No.42829 Notice 600 of 2019).

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
890-942 MHz FIXED MOBILE except aeronautical mobile 5.317A BROADCASTING 5.322 Radiolocation 5.323	**890-942 MHz** FIXED MOBILE except aeronautical mobile 5.317A NF9 NF10 NF11 Radiolocation	IMT900 MTX (880 – 915 MHz) GSM-R (BTX) (921 - 925 MHz) RFID (including, passive tags and vehicle location (915.1 – 921 MHz)	Paired with BTX (925 – 960 MHz Paired with MTX (877.695 – 880 MHz) Radio Frequency Spectrum Assignment Plan (GG 38640 Notice 275 of 2015) as amended International Mobile Telecommunication Roadmap GG No.42829 Notice 600 of 2019). Final Frequency Migration Plan 2019 (GG No.42337 Notice 36 of 2019)
942-960 MHz FIXED MOBILE except aeronautical mobile 5.317A BROADCASTING 5.322 5.323	**942-960 MHz** FIXED MOBILE except aeronautical mobile 5.317A NF9	IMT900 BTX (925 – 960 MHz)	Paired with MTX(880 – 915 MHz) Recommendation ITU-R M.1036-6
960-1 164 MHz AERONAUTICAL MOBILE (R) 5.327A	**960-1 087.7 MHz** AERONAUTICAL MOBILE (R) 5.327A	Distance measuring equipment / Secondary surveillance radar	Resolution 425 (rev WRC-19) apply.

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
AERONAUTICAL RADIONAVIGATION 5.328	AERONAUTICAL RADIONAVIGATION 5.328	(Airborne electronic aids to air navigation and any directly associated ground-based facilities	
	1087.7 -1 093.3 MHz AERONAUTICAL MOBILE (R) 5.327A AERONAUTICAL MOBILE-SATELLITE (R) (Earth-to-space) AERONAUTICAL RADIONAVIGATION 5.328	Space station reception of ADS-B emissions from aircraft transmitters) Airborne electronic aids to air navigation and any directly associated ground-based facilities	Resolution 425 (rev WRC-19) apply.
5.328AA	**1093.3 -1 164 MHz** AERONAUTICAL MOBILE (R) 5.327A AERONAUTICAL RADIONAVIGATION 5.328	Airborne electronic aids to air navigation and any directly associated ground-based facilities	Resolution 425 (rev WRC-19) apply.
1 164-1 215 MHz AERONAUTICAL RADIONAVIGATION 5.328	**1 164-1 215 MHz** AERONAUTICAL RADIONAVIGATION 5.328 RADIONAVIGATION-SATELLITE (space-to-Earth)	Galileo (1164 – 1214 MHz) GLONASS (1190.3 – 1213.8 MHz)	

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
RADIONAVIGATION-SATELLITE (space-to-Earth) (space-to-space) 5.328B 5.328A	(space-to-space) 5.328A	Airborne electronic aids to air navigation and any directly associated ground-based facilities	
1 215-1 240 MHz EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION RADIONAVIGATION-SATELLITE (space-to-Earth) (space-to-space) 5.328B 5.329 5.329A SPACE RESEARCH (active) 5.330 5.331 5.332	**1 215-1 240 MHz** EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION RADIONAVIGATION-SATELLITE (space-to-Earth) (space-to-space) 5.328B 5.329 5.329A SPACE RESEARCH (active) 5.331 5.332	Radar/navigation systems (1215 – 1300 MHz) GPS (1215 – 1260 MHz) GLONASS (1237.8-1253.8 MHz)	
1 240-1 300 MHz EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION RADIONAVIGATION-SATELLITE (space-to-Earth) (space-to-space) 5.328B 5.329 5.329A SPACE RESEARCH (active)	**1 240-1 260 MHz** EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION RADIONAVIGATION RADIONAVIGATION-SATELLITE (space-to-Earth) (space-to-space) 5.328B 5.329 5.329A SPACE RESEARCH (active)	Air Traffic Control Radar (1240 – 1350 MHz) Radar/navigation systems (1215 – 1300 MHz) GPS (1215 – 1260 MHz) GLONASS (1237.8 – 1253.8 MHz)	

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
Amateur 5.282 5.330 5.331 5.332 5.335 5.335A	Amateur 5.282 5.331 5.332 5.335A	Amateur (1 240 – 1 300 MHz)	
	1 260-1 270 MHz EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION RADIONAVIGATION RADIONAVIGATION-SATELLITE (space-to-Earth) (space-to-space) 5.329A SPACE RESEARCH (active) Amateur Amateur-Satellite (Earth-to-space) 5.331 5.332 5.335A	Air Traffic Control Radar (1 240 – 1 350 MHz) Radar/navigation systems (1215 – 1300 MHz) Galileo (1260 – 1300 MHz) Amateur (1 240 – 1 300 MHz)	

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
	1 270-1 300 MHz EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION RADIONAVIGATION RADIONAVIGATION-SATELLITE (space-to-Earth) (space-to-space) 5.328B 5.329 5.329A SPACE RESEARCH (active) Amateur 5.282 5.331 5.332 5.335A	 Air Traffic Control Radar (1 240 – 1 350 MHz) Radar/navigation systems (1215 – 1300 MHz) Galileo (1260 – 1300 MHz) Amateur (1 240 – 1 300 MHz)	
1 300-1 350 MHz AERONAUTICAL RADIONAVIGATION 5.337 RADIOLOCATION RADIONAVIGATION-SATELLITE (Earth-to-space) 5.149 5.337A	**1 300-1 350 MHz** AERONAUTICAL RADIONAVIGATION 5.337 RADIOLOCATION RADIONAVIGATION-SATELLITE (Earth-to-space) Radio Astronomy 5.149 5.337A	 Air Traffic Control Radar (1 240 – 1 350 MHz) Ground-based radars and associated airborne transponders Radio Astronomy (Doppler shifted radiation from hydrogen	 See section 5 for coordination with radio astronomy

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
1 350-1 400 MHz FIXED MOBILE RADIOLOCATION 5.149 5.338 5.338A 5.339	**1 350-1 400 MHz** FIXED NF 14 MOBILE RADIOLOCATION Radio Astronomy 5.149 5.338A 5.339	 1 350-1 375 MHz Fixed links (duplex) 1 375-1 400 MHz Fixed links (duplex) Radio Astronomy applicable to band 1350 to 1370 MHz. Radio Astronomy (Doppler shifted radiation from hydrogen	 Paired with 1492-1517 MHz; ITU-R F.1242 refers. Paired with 1427-1452 MHz; ITU-R F.1242 refers Resolution 528 (Rev. WRC-19) Resolution 739 (Rev. WRC-19). See section 5 for coordination with radio astronomy
1 400-1 427 MHz EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340 5.341	**1 400-1 427 MHz** EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340 5.341	 Radio Astronomy (Doppler shifted radiation from hydrogen Passive sensing	 All emissions are prohibited in this band
1 427-1 429 MHz SPACE OPERATION (Earth-to-space) FIXED	**1 427-1 429 MHz** SPACE OPERATION (Earth-to-space) FIXED NF14	 Fixed links (duplex)(1 427-1 452 MHz) IMT	 Paired with 1 375 – 1 400 MHz In accordance with Recommendation ITU-R F.1242

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
MOBILE except aeronautical mobile 5.341A 5.341B 5.341C 5.338A 5.341	MOBILE except aeronautical mobile 5.341A 5.338A 5.341		ITU Res. 223 (Rev.WRC-15) Recommendation ITU-R M.1036-6 (International Mobile Telecommunications (IMT)) RFSAP's to be developed Resolution 528 (Rev. WRC-19) Resolution 739 (Rev. WRC-19).
1 429-1 452 MHz FIXED MOBILE except aeronautical mobile 5.341A 5.338A 5.341 5.342	**1 429-1 452 MHz** FIXED MOBILE except aeronautical mobile 5.341A 5.338A 5.341	Fixed links (duplex)(1 427-1 452 MHz) IMT	Paired with 1 375 – 1 400 MHz) In accordance with Recommendation ITU-R F.1242 Recommendation ITU-R M.1036-6 (International Mobile Telecommunications (IMT)) RFSAP's to be developed Resolution 528 (Rev. WRC-19) Resolution 739 (Rev. WRC-19).

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
1 452-1 492 MHz FIXED MOBILE except aeronautical mobile 5.346 BROADCASTING BROADCASTING-SATELLITE 5.208B 5.341 5.342 5.345	**1 452-1 492 MHz** FIXED NF14 MOBILE except aeronautical mobile 5.346 BROADCASTING BROADCASTING-SATELLITE 5.208B 5.341 5.345	 IMT Terrestrial Digital Audio Broadcasting (T-DAB)	 Resolution 528 (Rev. WRC-19) Resolution 739 (Rev. WRC-19).. Recommendation ITU-R M.1036-6 International Mobile Telecommunications (IMT)) Final Frequency Migration Plan 2019 (GG No.42337 Notice 36 of 2019) RFSAP to be Developed.
1 492-1 518 MHz FIXED MOBILE except aeronautical mobile 5.341A 5.341 5.342	**1 492-1 518 MHz** FIXED MOBILE except aeronautical mobile 5.341A 5.341	 Fixed Links (1 492 – 1 517 MHz) Single Frequency Links (1 517 – 1 525 MHz) IMT	 Paired with 1 350 – 1 375 MHz. In accordance with Recommendation ITU-R F.1242 ITU-R Res. 223 (Rev.WRC-15) Resolution 528 (Rev. WRC-19) and Resolution 739 (Rev. WRC-19) Recommendation ITU-R M.1036-6 International Mobile Telecommunications (IMT)) RFSAP's to be considered

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
1 518-1 525 MHz FIXED MOBILE except aeronautical mobile MOBILE-SATELLITE (space-to-Earth) 5.348 5.348A 5.348B 5.351A 5.341 5.342	**1 518-1 525 MHz** FIXED MOBILE except aeronautical mobile MOBILE-SATELLITE (space-to-Earth) 5.348 5.348A 5.351A 5.341	IMT Satellite component	The band 1518-1559 MHz is identified for satellite component of IMT; Res.225 applies. Radio Frequency Spectrum Assignment Plan GG42286 Notice 125 of 2019 Final Frequency Migration Plan 2019 (GG No.42337 Notice 36 of 2019)
1 525-1 530 MHz SPACE OPERATION (space-to-Earth) FIXED MOBILE-SATELLITE (space-to-Earth) 5.208B 5.351A Earth exploration-satellite Mobile except aeronautical mobile 5.349 5.341 5.342 5.350 5.351 5.352A 5.354	**1 525-1 530 MHz** SPACE OPERATION (space-to-Earth) FIXED MOBILE-SATELLITE (space-to-Earth) 5.208B 5.351A Earth exploration-satellite Mobile except aeronautical mobile 5.341 5.351 5.354	GMDSS Maritime satellite (1 525 – 1 544 MHz) Mobile satellite (1544 – 1545 MHz) Aeronautical Mobile satellite (1545 – 1555 MHz) Land Mobile satellite (1555 – 1559 MHz)	ITU Resolution 212(Rev.WRC-19) and 225 (Rev WRC-07) Paired with 1 626.5 – 1 660.5 MHz The band 1518-1559 MHz is identified for satellite component of IMT; Res.225 applies.

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
1 530-1 535 MHz SPACE OPERATION (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) 5.208B 5.351A 5.353A Earth exploration-satellite Fixed Mobile except aeronautical mobile 5.341 5.342 5.351 5.354	**1 530-1 535 MHz** SPACE OPERATION (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) 5.208B 5.351A 5.353A Earth exploration-satellite Fixed Mobile except aeronautical mobile 5.341 5.351 5.354	GMDSS Maritime satellite (1 525 – 1 544 MHz) Mobile satellite (1544 – 1545 MHz) Aeronautical Mobile satellite (1545 – 1555 MHz) Land Mobile satellite (1555 – 1559 MHz)	Paired with 1 626.5 – 1 660.5 MHz The band 1518-1559 MHz is identified for satellite component of IMT; Res.225 applies. In the band 1530-1544 MHz priority for maritime mobile distress, urgency and safety communications (GMDSS); Res.222 applies.
1 535-1 559 MHz MOBILE-SATELLITE (space-to-Earth) 5.208B 5.351A	**1 535-1 544 MHz** MOBILE-SATELLITE (space-to-Earth) 5.208B 5.351A 5.341 5.351 5.353A 5.354 5.356 5.357 5.357A	GMDSS Maritime satellite (1 525 – 1 544 MHz)	Paired with 1 626.5 – 1 660.5 MHz The band 1518-1559 MHz is identified for satellite component of IMT; Res.225 applies. In the band 1530-1544 MHz priority for maritime mobile distress, urgency and safety communications (GMDSS); Res.222 applies.
	1 544-1 545 MHz MOBILE-SATELLITE (space-to-Earth) 5.208B 5.351A	Mobile satellite (1544 – 1545 MHz)	

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
	5.341 5.351 5.353A 5.354 5.356 5.357 5.357A	(Distress and safety)	The band 1518-1559 MHz is identified for satellite component of IMT; Res.225 applies.
	1 545-1 555 MHz AERONAUTICAL MOBILE (R) MOBILE-SATELLITE (space-to-Earth) 5.208B 5.351A 5.341 5.351 5.353A 5.354 5.356 5.357 5.357A	Aeronautical Mobile satellite (1545 – 1555 MHz) (Air to air) (Ground to air)	The band 1518-1559 MHz is identified for satellite component of IMT; Res.225 applies.
5.341 5.351 5.353A 5.354 5.355 5.356 5.357 5.357A 5.359 5.362A	**1 555-1 559 MHz** MOBILE-SATELLITE (space-to-Earth) 5.208B 5.351A 5.341 5.351 5.353A 5.354 5.356 5.357 5.357A	Land Mobile satellite (1555 – 1559 MHz)	The band 1518-1559 MHz is identified for satellite component of IMT; Res.225 applies.
1 559-1 610 MHz AERONAUTICAL RADIONAVIGATION RADIONAVIGATION-SATELLITE (space-to-Earth)	**1 559-1 610 MHz** AERONAUTICAL RADIONAVIGATION RADIONAVIGATION-SATELLITE (space-to-Earth)	Global Positioning System (1 563.42 – 1 587.42 MHz) GALILEO (1559.42 – 1591.42 MHz)	

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
(space-to-space) 5.208B 5.328B 5.329A 5.341	(space-to-space) 5.208B 5.328B 5.329A 5.341	GLONAS (1592.9 – 1610.5 MHz)	
1 610-1 610.6 MHz MOBILE-SATELLITE (Earth-to-space) 5.351A AERONAUTICAL RADIONAVIGATION 5.341 5.355 5.359 5.364 5.366 5.367 5.368 5.369 5.371 5.372	**1 610-1 610.6 MHz** MOBILE-SATELLITE (Earth-to-space) 5.351A AERONAUTICAL RADIONAVIGATION Radiodetermination-satellite 5.341 5.364 5.366 5.367 5.368 5.371 5.372	MSS (1 610 – 1 626.5 MHz) GLONASS (1 592.9 – 1610.5 MHz) Airborne electronic aids to air navigation and any directly associated ground-based or satellite-borne facilities	Paired with 2 483.5 – 2 500 MHz for some systems The band 1610-1645.5 MHz is identified for satellite component of IMT; Res.225 applies. This band is designated world-wide for the MSS. Paired with 2483.5-2484.1 MHz for some systems.
1 610.6-1 613.8 MHz MOBILE-SATELLITE (Earth-to-space) 5.351A	**1 610.6-1 613.8 MHz** MOBILE-SATELLITE (Earth-to-space) 5.351A	MSS (1 610 – 1 626.5 MHz)	Paired with 2 483.5 – 2 500 MHz for some systems The band 1610-1645.5 MHz is identified for satellite component of IMT; Res.225 applies. This band is designated world-wide for the MSS. Paired with 2484.1-2487.3 MHz for some systems.

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
RADIO ASTRONOMY AERONAUTICAL RADIONAVIGATION 5.149 5.341 5.355 5.359 5.364 5.366 5.367 5.368 5.369 5.371 5.372	RADIO ASTRONOMY AERONAUTICAL RADIONAVIGATION Radiodetermination-satellite 5.149 5.341 5.364 5.366 5.367 5.368 5.371 5.372	Radio Astronomy (Observation of OH radical and molecules) Airborne electronic aids to air navigation and any directly associated ground-based or satellite-borne facilities	See Section 5 for coordination with radio astronomy
1 613.8-1 621.35 MHz MOBILE-SATELLITE (Earth-to-space) 5.351A AERONAUTICAL RADIONAVIGATION Mobile-satellite (space-to-Earth) 5.208B 5.341 5.355 5.359 5.364 5.365 5.366 5.367 5.368 5.369 5.371 5.372	**1 613.8-1 621.35 MHz** MOBILE-SATELLITE (Earth-to-space) 5.351A AERONAUTICAL RADIONAVIGATION Mobile-satellite (space-to-Earth) 5.208B Radiodetermination-satellite 5.341 5.364 5.365 5.366 5.367 5.368 5.371 5.372	MSS (1 610 – 1 626.5 MHz) Airborne electronic aids to air navigation and any directly associated ground-based or satellite-borne facilities	Paired with 2 483.5 – 2 500 MHz for some systems The band 1610-1645.5 MHz is identified for satellite component of IMT; Res.225 applies. Paired with 1593-1594 MHz for aeronautical public correspondence

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
1 621.35-1 626.5 MHz MOBILE-SATELLITE (Earth-to-space) 5.351A AERONAUTICAL RADIONAVIGATION MARITIME MOBILE-SATELLITE (space-to-Earth) 5.373 5.373A Mobile-satellite (space-to-Earth) except maritime mobile-satellite (space-to-Earth) 5.208B 5.341 5.355 5.359 5.364 5.365 5.366 5.367 5.368 5.369 5.371 5.372	**1 621.35-1 626.5 MHz** MOBILE-SATELLITE (Earth-to-space) 5.351A AERONAUTICAL RADIONAVIGATION MARITIME MOBILE-SATELLITE (space-to-Earth) 5.373 5.373A Mobile-satellite (space-to-Earth) except maritime mobile-satellite (space-to-Earth) 5.365 Radiodetermination-satellite 5.371 5.208B 5.341 5.364 5.366 5.368 5.372	MSS (1 610 – 1 626.5 MHz) Airborne electronic aids to air navigation and any directly associated ground-based or satellite-borne facilities	Paired with 2 483.5 – 2 500 MHz for some systems The band 1610-1645.5 MHz is identified for satellite component of IMT; Res.225 applies. Recommendation ITU-R RA769-2 and ITU RRA.1513-2 and Recommendation ITU-R M.1583-1 and Recommendation ITU-R RA.1631-0 all apply to this band.
1 626.5-1 660 MHz MOBILE-SATELLITE (Earth-to-space) 5.351A	**1 626.5-1 645.5 MHz** MOBILE-SATELLITE (Earth-to-space) 5.351A	GMDSS Maritime satellite (1 525 – 1 544 MHz) Mobile satellite (1544 – 1545 MHz) Aeronautical Mobile satellite (1545 – 1555 MHz) Land Mobile satellite (1555 – 1559 MHz)	Paired with 1 626.5 – 1 660.5 MHz The bands 1610-1645.5 MHz and 1646.5-1660.5 MHz are identified for satellite component of IMT; Res.225 applies. In the band 1626.5-1645.5 MHz priority is given to maritime mobile distress, urgency and safety

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
	5.341 5.351 5.353A 5.354 5.357A 5.374 5.375 5.376		communications (GMDSS) ; Res.222 applies.
	1 645.5-1 646.5 MHz MOBILE-SATELLITE (Earth-to-space) 5.351A 5.341 5.351 5.353A 5.354 5.357A 5.374 5.375 5.376	GMDSS Maritime satellite (1 525 – 1 544 MHz) Mobile satellite (1544 – 1545 MHz) Aeronautical Mobile satellite (1545 – 1555 MHz) Land Mobile satellite (1555 – 1559 MHz) Distress and safety	Paired with 1 626.5 – 1 660.5 MHz The bands 1610-1645.5 MHz and 1646.5-1660.5 MHz are identified for satellite component of IMT; Res.225 applies. In the band 1626.5-1645.5 MHz priority is given to maritime mobile distress, urgency and safety communications (GMDSS) ; Res.222 applies.
	1 646.5-1 656.5 MHz AERONAUTICAL MOBILE (R) MOBILE-SATELLITE (Earth-to-space) 5.351A 5.341 5.351 5.353A 5.354 5.357A 5.374 5.375 5.376	GMDSS Maritime satellite (1 525 – 1 544 MHz) Mobile satellite (1544 – 1545 MHz) Aeronautical Mobile satellite (1545 – 1555 MHz) Land Mobile satellite (1555 – 1559 MHz) Air to air Air to ground	Paired with 1 626.5 – 1 660.5 MHz The bands 1610-1645.5 MHz and 1646.5-1660.5 MHz are identified for satellite component of IMT; Res.225 applies. In the band 1626.5-1645.5 MHz priority is given to maritime mobile distress, urgency and safety communications (GMDSS) ; Res.222 applies.

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
	1 656.5-1 660 MHz		
	MOBILE-SATELLITE (Earth-to-space) 5.351A	GMDSS Maritime satellite (1 525 – 1 544 MHz) Mobile satellite (1544 – 1545 MHz) Aeronautical Mobile satellite (1545 – 1555 MHz) Land Mobile satellite (1555 – 1559 MHz)	Paired with 1 626.5 – 1 660.5 MHz The bands 1610-1645.5 MHz and 1646.5-1660.5 MHz are identified for satellite component of IMT; Res.225 applies. In the band 1626.5-1645.5 MHz priority is given to maritime mobile distress, urgency and safety communications (GMDSS) ; Res.222 applies.
5.341 5.351 5.353A 5.354 5.355 5.357A 5.359 5.362A 5.374 5.375 5.376	5.341 5.351 5.353A 5.354 5.357A 5.374 5.375 5.376		
1 660-1 660.5 MHz	**1 660-1 660.5 MHz**		
MOBILE-SATELLITE (Earth-to-space) 5.351A	MOBILE-SATELLITE (Earth-to-space) 5.351A	GMDSS Maritime satellite (1 525 – 1 544 MHz) Mobile satellite (1544 – 1545 MHz) Aeronautical Mobile satellite (1545 – 1555 MHz) Land Mobile satellite (1555 – 1559 MHz)	Paired with 1 626.5 – 1 660.5 MHz The band 1610-1645.5 MHz and 1646.5-1660.5 MHz are identified for satellite component of IMT; Res.225 applies.
RADIO ASTRONOMY	RADIO ASTRONOMY	Radio Astronomy (Observation of OH radical and molecules)	See Section 5 for coordination with radio astronomy
5.149 5.341 5.351 5.354 5.362A 5.376A	5.149 5.341 5.351 5.354 5.376A		

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
1 660.5-1 668 MHz RADIO ASTRONOMY SPACE RESEARCH (passive) Fixed Mobile except aeronautical mobile 5.149 5.341 5.379 5.379A	**1 660.5-1 668 MHz** RADIO ASTRONOMY SPACE RESEARCH (passive) Fixed Mobile except aeronautical mobile 5.149 5.341 5.379A	Radio Astronomy (Observation of OH radical and molecules) Fixed Applications	See Section 5 for coordination with radio astronomy
1 668-1 668.4 MHz MOBILE-SATELLITE (Earth-to-space) 5.351A 5.379B 5.379C RADIO ASTRONOMY SPACE RESEARCH (passive) Fixed Mobile except aeronautical mobile 5.149 5.341 5.379 5.379A	**1 668-1 668.4 MHz** MOBILE-SATELLITE (Earth-to-space) 5.351A 5.379B 5.379C RADIO ASTRONOMY SPACE RESEARCH (passive) Fixed Mobile except aeronautical mobile 5.149 5.341 5.379A	IMT satellite component (1 668 – 1 675 MHz) Radio Astronomy (Observation of OH radical and molecules)	The band 1668-1675 MHz is identified for satellite component of IMT; Res.225 applies. See Section 5 for coordination with radio astronomy
1 668.4-1 670 MHz METEOROLOGICAL AIDS FIXED MOBILE except aeronautical mobile	**1 668.4-1 670 MHz** METEOROLOGICAL AIDS FIXED MOBILE except aeronautical mobile	Radiosonde (1 668 – 1 700 MHz)	

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
MOBILE-SATELLITE (Earth-to-space) 5.351A 5.379B 5.379C RADIO ASTRONOMY 5.149 5.341 5.379D 5.379E	MOBILE-SATELLITE (Earth-to-space) 5.351A 5.379B 5.379C RADIO ASTRONOMY 5.149 5.341 5.379D 5.379E	IMT satellite component (1 668 – 1 675 MHz) Radio Astronomy (Observation of OH radical and molecules)	The band 1668-1675 MHz is identified for satellite component of IMT; Res.225 applies. See Section 5 for coordination with radio astronomy Final Frequency Migration Plan 2019 (GG No.42337 Notice 36 of 2019)
1 670-1 675 MHz METEOROLOGICAL AIDS FIXED METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE MOBILE-SATELLITE (Earth-to-space) 5.351A 5.379B 5.341 5.379D 5.379E 5.380A	**1 670-1 675 MHz** METEOROLOGICAL AIDS FIXED METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE MOBILE-SATELLITE (Earth-to-space) 5.351A 5.379B 5.341 5.379D 5.379E 5.380A	Radiosonde (1 668 – 1 700 MHz) IMT satellite component (1 668 – 1 675 MHz)	Final Frequency Migration Plan 2019 (GG No.42337 Notice 36 of 2019) The band 1668-1675 MHz is identified for satellite component of IMT; Res.225 applies.
1 675-1 690 MHz METEOROLOGICAL AIDS FIXED METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile 5.341	**1 675-1 690 MHz** METEOROLOGICAL AIDS FIXED METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile 5.341	Radiosonde (1 668 – 1 700 MHz) Fixed Applications	

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
1 690-1 700 MHz METEOROLOGICAL AIDS METEOROLOGICAL-SATELLITE (space-to-Earth) Fixed Mobile except aeronautical mobile 5.289 5.341 5.382	**1 690-1 700 MHz** METEOROLOGICAL AIDS METEOROLOGICAL-SATELLITE (space-to-Earth) Fixed Mobile except aeronautical mobile Earth exploration-satellite (space-to-Earth) 5.289 5.341	Radiosonde (1 668 – 1 700 MHz)	Channels 1695.6938 MHz; 1695.7250 MHz; 1695.7562 MHz; 1695.7874 MHz; 1691 MHz and 1694.5 MHz
1 700-1 710 MHz FIXED METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile 5.289 5.341	**1 700-1 710 MHz** FIXED METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile Earth exploration-satellite (space-to-Earth) 5.289 5.341	Fixed links (single frequency)	

This gazette is also available free online at www.gpwonline.co.za

1 710-1 930 MHz	**1 710-1 930 MHz**		
FIXED	FIXED	FWA (1880 – 1900 MHz) FWA TDD (1900 – 1920 MHz) Fixed Broadband data applications (1 785 – 1 805 MHz)	
MOBILE 5.384A 5.388A 5.388B	MOBILE 5.384A 5.388A NF9	IMT1800 MTX (1710 – 1785 MHz) DECT Cordless telephones (1880 – 1900 MHz) IMT1900 TDD (1900 – 1920 MHz) IMT2100 MTX (1920 – 1980 MHz) IMT 1800 BTX (1 805-1 880 MHz) IMT (terrestrial)	Paired with IMT 1800 BTX (1805 – 1880 MHz) IMT TDD applications Paired withIMT2100 BTX 2110 – 2170 MHz See NF8 for IMT frequency band – terrestrial (International Mobile Telecommunications (IMT)) Radio Frequency Spectrum Regulations as amended (Annex B) (GG. No. 38641, 30 March 2015). RFSAP's to be developed to address compatibility between TDD IMT in the band 1900-1920 MHz with FDD IMT systems deployed in the IMT2100 b
	Radio astronomy	Radio astronomy (1718.8-1722.2 MHz) Radio astronomy (OH radical and molecules)	See Section 5 for coordination with radio astronomy
5.149 5.341 5.385 5.386 5.387 5.388	5.149 5.341 5.385 5.388		

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
1 930-1 970 MHz FIXED MOBILE 5.388A 5.388B 5.388	**1 930-1 970 MHz** FIXED MOBILE 5.388A NF9 5.388	IMT2100 MTX (1920 – 1980 MHz)	Paired with BTX(2110 – 2170 MHz) [FIXED (HAPS) (base stations for IMT)] Resolution 221 (Rev. WRC-07) (International Mobile Telecommunications (IMT))
1 970-1 980 MHz FIXED MOBILE 5.388A 5.388B 5.388	**1 970-1 980 MHz** FIXED MOBILE 5.388A NF9 5.388 5.388B	IMT2100 MTX (1920 – 1980 MHz)	Paired with BTX(2110 – 2170 MHz) [FIXED (HAPS) (base stations for IMT)] Resolution 221 (Rev. WRC-07) (International Mobile Telecommunications (IMT))
1 980-2 010 MHz FIXED MOBILE MOBILE-SATELLITE (Earth-to-space) 5.351A 5.388 5.389A 5.389B 5.389F	**1 980-2 010 MHz** FIXED MOBILE MOBILE-SATELLITE (Earth-to-space) 5.351A 5.388 5.389A NF13	Fixed links (1980 – 2010 MHz) CGC/ATC fixed systems (1980 – 2010 MHz) IMT (satellite) (1980-2010 MHz)	Paired with 2170 – 2200 MHz (International Mobile Telecommunications (IMT)) The development of satellites for IMT services to be monitored. Final Frequency Migration Plan 2019 (GG No.42337 Notice 36 of 2019)

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
2 010-2 025 MHz FIXED MOBILE 5.388A 5.388B 5.388	**2 010-2 025 MHz** FIXED MOBILE 5.388A NF9 5.388	 IMT (2010 – 2025 MHz)	 [FIXED (HAPS) (base stations for IMT)] IMT TDD applications Recommendation ITU-R M.1036 Resolution 221 (Rev. WRC-07) (International Mobile Telecommunications (IMT))
2 025-2 110 MHz SPACE OPERATION (Earth-to-space) (space-to-space) EARTH EXPLORATION-SATELLITE (Earth-to-space) (space-to-space) FIXED MOBILE 5.391 SPACE RESEARCH (Earth-to-space) (space-to-space) 5.392	**2 025-2 110 MHz** SPACE OPERATION (Earth-to-space) (space-to-space) EARTH EXPLORATION-SATELLITE (Earth-to-space) (space-to-space) FIXED NF14 MOBILE 5.391 SPACE RESEARCH (Earth-to-space) (space-to-space) 5.392	 Earth exploration satellite applications Fixed Links (2025 – 2110 MHz)	 Final Frequency Migration Plan 2019 (GG No.42337 Notice 36 of 2019) Paired with 2200 – 2285 MHz RFSAP GG 42230 Notice 75 of 2019.
2 110-2 120 MHz FIXED	**2 110-2 120 MHz** FIXED		 FIXED (HAPS) (base stations for IMT)]

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
MOBILE 5.388A 5.388B SPACE RESEARCH (deep space) (Earth-to-space) 5.388	MOBILE 5.388A NF9 SPACE RESEARCH (deep space) (Earth-to-space) 5.388 5.388B	IMT2100 BTX (2110 – 2170 MHz)	Paired with MTX(1920 – 1980 MHz) Recommendation ITU-R M.1036 [Resolution 221 (Rev. WRC-07) (International Mobile Telecommunications (IMT))
2 120-2 160 MHz FIXED MOBILE 5.388A 5.388B 5.388	**2 120-2 160 MHz** FIXED MOBILE 5.388A NF9 5.388 5.388B	IMT-2100 BTX (2110 – 2170 MHz)	[FIXED (HAPS) (base stations for IMT)] Paired with MTX(1920 – 1980 MHz) Recommendation ITU-R M.1036 Resolution 221 (Rev. WRC-07) (International Mobile Telecommunications (IMT))
2 160-2 170 MHz FIXED MOBILE 5.388A 5.388B 5.388	**2 160-2 170 MHz** FIXED MOBILE 5.388A NF9 5.388 5.388B	IMT2100 BTX (2110 – 2170 MHz)	[FIXED (HAPS) (base stations for IMT)] Paired with MTX(1920 – 1980 MHz) Recommendation ITU-R M.1036 Resolution 221 (Rev. WRC-07) (International Mobile Telecommunications (IMT))

This gazette is also available free online at www.gpwonline.co.za

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
2 170-2 200 MHz FIXED MOBILE MOBILE-SATELLITE (space-to-Earth) 5.351A 5.388 5.389A 5.389F	**2 170-2 200 MHz** FIXED MOBILE MOBILE-SATELLITE (space-to-Earth) 5.351A 5.388 5.389A 5.389F NF13	Fixed Links (2170 – 2200 MHz) CGC/ATC fixed systems (1980 – 2010 MHz) IMT (satellite) (2170-2200 MHz)	Final Frequency Migration Plan 2019 (GG No.42337 Notice 36 of 2019) Paired with 1980 – 2010 MHz IMT (satellite)
2 200-2 290 MHz SPACE OPERATION (space-to-Earth) (space-to-space) EARTH EXPLORATION-SATELLITE (space-to-Earth) (space-to-space) FIXED MOBILE 5.391 SPACE RESEARCH (space-to-Earth) (space-to-space) 5.392	**2 200-2 290 MHz** SPACE OPERATION (space-to-Earth) (space-to-space) EARTH EXPLORATION-SATELLITE (space-to-Earth) (space-to-space) FIXED NF14 MOBILE 5.391 SPACE RESEARCH (space-to-Earth) (space-to-space) 5.392	TT&C received from space Earth exploration satellite applications Fixed Links (2200 – 2285 MHz) BFWA (2 285-2 300 MHz)	Final Frequency Migration Plan 2019 (GG No.42337 Notice 36 of 2019) Paired with 2025 – 2110 Radio Frequency Spectrum Assignment Plan GG 42230 Notice 75 of 2019.
2 290-2 300 MHz FIXED MOBILE except aeronautical mobile	**2 290-2 300 MHz** FIXED MOBILE except aeronautical mobile	Fixed Links, BFWA (2 285-2 300 MHz)	Radio Frequency Spectrum Assignment Plan GG 41512 Notice 145 of 2018

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
SPACE RESEARCH (deep space) (space-to-Earth)	SPACE RESEARCH (deep space) (space-to-Earth)	(Coordination is expected prior to the implementation of these services)	
2 300-2 450 MHz FIXED MOBILE 5.384A Amateur Radiolocation 5.150 5.282 5.395	**2 300-2 450 MHz** FIXED MOBILE 5.384A NF9 Amateur Radiolocation Amateur-satellite 5.150 5.282 5.395	IMT2300 TDD (2300 – 2400 MHz) WLAN, FDDA and model ctrl. (2400 – 2483.5 MHz) Non-Specific SRDs and low power video surveillance (2400 – 2483.5 MHz) RFID (2 400 – 2 483.5 MHz) ISM applications (2400 – 2483.5 MHz) Amateur-satellite (2400 – 2450 MHz)	International Mobile Telecommunication Roadmap (GG No.42829 Notice 600 of 2019) as amended. Common international SRD band; see ITU-R Rec. SM.1896 latest version (above 2400 MHz) Radio Frequency Spectrum Assignment Plan (GG N. 38640) as amended 30 March 2015. Radio Frequency Spectrum Regulations as amended (Annex B) (GG. No. 38641, 30 March 2015). Recommendation ITU-R M.1036 (International Mobile Telecommunications (IMT)) Radio Frequency Spectrum Assignment Plan to be amended to incorporate capabilities and requirements for IMT2020. Final Frequency Migration Plan 2019 (GG No.42337 Notice 36 of 2019)

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
2 450-2 483.5 MHz FIXED MOBILE Radiolocation 5.150	**2 450-2 483.5 MHz** FIXED MOBILE Radiolocation 5.150	 WLAN, FDDA and model ctrl. (2400 – 2483.5 MHz) RFID (2400 – 2483.5 MHz) Non-Specific SRDs and low power video surveillance (2400 – 2483.5 MHz) ISM applications (2400 – 2483.5 MHz)	 Radio Frequency Spectrum Regulations as amended (Annex B) (GG. No. 38641, 30 March 2015). Common international SRD band; see ITU-R Rec. SM.1896 latest version
2 483.5-2 500 MHz FIXED MOBILE MOBILE-SATELLITE (space-to-Earth) 5.351A RADIODETERMINATION-SATELLITE (space-to-Earth) 5.398 Radiolocation 5.398A 5.150 5.399 5.401 5.402	**2 483.5-2 500 MHz** FIXED MOBILE MOBILE-SATELLITE (space-to-Earth) 5.351A RADIODETERMINATION-SATELLITE (space-to-Earth) 5.398 Radiolocation 5.150 5.399 5.401 5.402	 Fixed links PTP/PTMP(2400-2500 MHz Aeronautical Mobile Video surveillance MSS (2483.5 – 2500 MHz) The band 2 400-2 500 MHz is designated for ISM applications (5.150). SRD's	 FS paired with 2300-2400 MHz Unmanned aerial vehicles only Some systems are paired with 1610 – 1626.5 MHz The band 2483.5-2500 MHz is identified for satellite component of IMT; Res.225 applies. Common international SRD band; see ITU-R Rec. SM.1896 latest version

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
2 500-2 520 MHz FIXED 5.410 MOBILE except aeronautical mobile 5.384A 5.412	**2 500-2 520 MHz** MOBILE except aeronautical mobile 5.384A NF9	IMT2600 MTX (2500 – 2570 MHz)	Paired with 2620 – 2690 MHz International Mobile Telecommunication Roadmap (GG No.42829 Notice 600 of 2019). Radio Frequency Spectrum Assignment Plan on 22 May 2020 (Government Gazette 43341, Notice 285 of 2020). Radio Frequency Spectrum Assignment Plan GG 43341 Notice 285 of 2020 Recommendation ITU-R M.1036 (International Mobile Telecommunications (IMT)) Radio Frequency Spectrum Assignment Plan to be amended to incorporate capabilities and requirements for IMT2020.
2 520-2 655 MHz FIXED 5.410 MOBILE except aeronautical mobile 5.384A	**2 520-2 655 MHz** MOBILE except aeronautical mobile 5.384A NF9	IMT2600 MTX (2500 – 2570 MHz) IMT2600 TDD (2570 – 2620 MHz) IMT2600 BTX (2620 – 2690 MHz)	Paired with BTX (2620 – 2690 MHz) Paired with 2500 – 2570 MHz International Mobile Telecommunication Roadmap (GG No.42829 Notice 600 of 2019).

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
BROADCASTING-SATELLITE 5.413 5.416 5.339 5.412 5.418B 5.418C	Earth exploration-satellite (passive) Space research (passive) 5.339 5.418B 5.418C	IMT (2500-2690 MHz) Earth exploration-satellite (passive)(2 640-2 655 MHz) Space research (passive) (2 640-2 655 MHz)	Radio Frequency Spectrum Assignment Plan on 22 May 2020 (Government Gazette 43341, Notice 285 of 2020). Recommendation ITU-R M.1036 The band 2 500-2 690 MHz is also used for BFWA in some SADC countries. Radio Frequency Spectrum Assignment Plan GG 43341 Notice 285 of 202 (International Mobile Telecommunications (IMT)) Radio Frequency Spectrum Assignment Plan to be amended to incorporate capabilities and requirements for IMT2020.
2 655-2 670 MHz FIXED 5.410 MOBILE except aeronautical mobile 5.384A BROADCASTING-SATELLITE 5.208B 5.413 5.416 Earth exploration-satellite (passive) Radio astronomy	**2 655-2 670 MHz** MOBILE except aeronautical mobile 5.384A NF9 Earth exploration-satellite (passive) Radio astronomy	IMT2600 BTX (2620 – 2690 MHz); IMT2600 MTX (2500-2570 MHz) Radio Astronomy (Continuum measurement and galactic studies)	Paired with MTX (2500 – 2570 MHz) Radio Astronomy (2655 – 2690 MHz). See section 5 for coordination with radio astronomy

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
Space research (passive) 5.149 5.412	Space research (passive) 5.149		International Mobile Telecommunication Roadmap (GG No.42829 Notice 600 of 2019). Radio Frequency Spectrum Assignment Plan on 22 May 2020 (Government Gazette 43341, Notice 285 of 2020).. Recommendation ITU-R M.1036 Radio Frequency Spectrum Assignment Plan GG 43341 Notice 285 of 2020 (International Mobile Telecommunications (IMT))
2 670-2 690 MHz FIXED 5.410 MOBILE except aeronautical mobile 5.384A Earth exploration-satellite (passive) Radio astronomy Space research (passive)	**2 670-2 690 MHz** MOBILE except aeronautical mobile 5.384A Earth exploration-satellite (passive) Radio astronomy Space research (passive)	IMT2600 BTX (2620 – 2690 MHz) IMT2600 MTX (2500-2570 MHz) Radio Astronomy (Continuum measurement and galactic studies)	Paired with 2500 – 2570 MHz International Mobile See section 5 for coordination with radio astronomy Telecommunication Roadmap (GG No.42829 Notice 600 of 2019). Radio Frequency Spectrum Assignment Plan on 22 May 2020

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
5.149 5.412	5.149		(Government Gazette 43341, Notice 285 of 2020). Recommendation ITU-R M.1036 (International Mobile Telecommunications (IMT)) Radio Frequency Spectrum Assignment Plan to be amended to incorporate capabilities and requirements for IMT2020.
2 690-2 700 MHz EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340 5.422	**2 690-2 700 MHz** EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340	Passive sensing Radio Astronomy (Continuum measurement and galactic studies)	
2 700-2 900 MHz AERONAUTICAL RADIONAVIGATION 5.337 Radiolocation	**2 700-2 900 MHz** AERONAUTICAL RADIONAVIGATION 5.337 METEOROLOGICAL AIDS Radiolocation	Aeronautical radionavigation radars : • Primary surveillance radar • Meteorological radar Government Services Ground-based radars and associated airborne transponders	

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
5.423 5.424	5.423		
2 900-3 100 MHz RADIOLOCATION 5.424A RADIONAVIGATION 5.426 5.425 5.427	**2 900-3 100 MHz** RADIOLOCATION 5.424A AERONAUTICAL RADIONAVIGATION 5.337 5.425 5.427	Aeronautical radionavigation radars : • Primary surveillance radar • Meteorological radar	
3 100-3 300 MHz RADIOLOCATION Earth exploration-satellite (active) Space research (active) 5.149 5.428	**3 100-3 300 MHz** RADIOLOCATION Earth exploration-satellite (active) Space research (active) 5.149		
3 300-3 400 MHz RADIOLOCATION 5.149 5.429 5.429A 5.429B 5.430	**3 300-3 400 MHz** RADIOLOCATION MOBILE except aeronautical mobile 5.149 5.429A 5.429B	Radio astronomy (CH Molecules) IMT Res. 223 (Rev.WRC-15)	See section 5 for coordination with radio astronomy Recommendation ITU-R M.1036-6 (International Mobile Telecommunications (IMT)) Develop a RFSAP for the band

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
3 400-3 600 MHz FIXED FIXED-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile 5.430A Radiolocation 5.431	**3 400-3 600 MHz** FIXED MOBILE except aeronautical mobile 5.430A NF9 Radiolocation	BFWA IMT3500 TDD (3400 – 3600 MHz)	The band 3400 -3600 MHz is also used for BFWA in some SADC countries International Mobile Telecommunication (GG No.42829 Notice 600 of 2019). Radio Frequency Spectrum Assignment Plan (GG N. 38640) as amended 30 March 2015. Recommendation ITU-R M.1036-6 (International Mobile Telecommunications (IMT))
3 600-4 200 MHz FIXED FIXED-SATELLITE (space-to-Earth) Mobile	**3 600-4 200 MHz** FIXED FIXED-SATELLITE (space-to-Earth) NF14	Fixed links (4 GHz) (3600 – 4200 MHz) C-band downlink (VSAT/SNG/PTP links)(3600 – 4200 MHz) BFWA (3600 – 3800 MHz)	The sub-band 3 600-3 800 MHz could be used for BFWA where frequency sharing with FS PTP and/or FSS is feasible. The channelling arrangement for PTP links in this band is based on ITU-R Recommendation F.635 latest versionAnnex 1. The sub-band 3 600-4 200 MHz is used for medium and high capacity PTP links and FSS.

This gazette is also available free online at www.gpwonline.co.za

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
			In the band 3 600-3 800 MHz, FS PTP and FSS applications will have to operate on coordinated basis. Operators are encouraged to apply for spectrum licenses including registering all C-Band Earth stations on the ICASA online database
4 200-4 400 MHz AERONAUTICAL MOBILE (R) 5.436 AERONAUTICAL RADIONAVIGATION 5.438	**4 200-4 204 MHz** AERONAUTICAL MOBILE (R) 5.436 AERONAUTICAL RADIONAVIGATION 5.438 STANDARD FREQUENCY AND TIME SIGNAL-SATELLITE (4 202 MHz) (space-to-Earth) Earth exploration-satellite (passive) Space research (passive) 5.437 5.440	Wireless avionics intra-communication systems Radio altimeters on board aircraft and associated ground transponders) Radars	
5.437 5.439 5.440	**4 204-4 400 MHz** AERONAUTICAL MOBILE (R) 5.436 AERONAUTICAL RADIONAVIGATION 5.438 Earth exploration-satellite (passive) Space research (passive) 5.437 5.440	Wireless avionics intra-communication systems Radio altimeters on board aircraft and associated ground transponders)	

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
4 400-4 500 MHz FIXED MOBILE 5.440A	**4 400-4 500 MHz** FIXED NF14 NF15 MOBILE	Fixed links (4.8 GHz) (4400 – 5000 MHz) Government services Outside Broadcast links Electronic News Gathering	
4 500-4 800 MHz FIXED FIXED-SATELLITE (space-to-Earth) 5.441 MOBILE 5.440A	**4 500-4 800 MHz** FIXED NF14 FIXED-SATELLITE (space-to-Earth) 5.441 MOBILE NF15	Fixed links (4.8 GHz) (4400 – 5000 MHz) Government services Outside Broadcast links Electronic News Gathering SRD(reservoir level probing radar)	The band 4 500-4 800 MHz is part of the APP30B Plan (FSS space-to-Earth). Refer to Annex B.Ultra wideband applications (UWB) see ITU-R Recommendation SN.1896-1. Rec SM.1755 and Rep SM.2153-7 (latest versions)
4 800-4 990 MHz FIXED MOBILE 5.440A 5.441A 5.441B 5.442 Radio astronomy	**4 800-4 825 MHz** FIXED NF14 MOBILE 5.441B Radio astronomy NF15	Fixed links (4.8 GHz) (4400 – 5000 MHz) Government services Outside Broadcast Links Electronic News Gathering Radio astronomy (Observations of formaldehyde (H2CO) interstellar clouds)	Recommendation ITU-R M.1036-6 (International Mobile Telecommunications (IMT)) RFSAP to be developed See section 5 for coordination with radio astronomy

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
	4 825-4 835 MHz FIXED NF14 NF15 MOBILE except aeronautical mobile 5.441B Radio astronomy 5.149	 Outside Broadcast Links Electronic News Gathering Government services Radio astronomy (Observations of formaldehyde (H2CO) interstellar clouds)	 Recommendation ITU-R M.1036-6 (International Mobile Telecommunications (IMT)) RFSAP to be developed See section 5 for coordination with radio astronomy
	4 835-4 950 MHz FIXED NF14 NF15 MOBILE 5.441B Radio astronomy	 Fixed links (4.8 GHz) (4400 – 5000 MHz) Government services Outside Broadcast Links Electronic News Gathering Radio astronomy (Observations of formaldehyde (H2CO) interstellar clouds)	 Recommendation ITU-R M.1036-6 (International Mobile Telecommunications (IMT)) RFSAP to be developed See section 5 for coordination with radio astronomy
	4 950-4 990 MHz FIXED NF14 NF15 MOBILE except aeronautical mobile5.441B Earth exploration-satellite (passive)	 Fixed links (4.8 GHz) (4400 – 5000 MHz) Government services Outside Broadcast Links Electronic News Gathering	 Recommendation ITU-R M.1036-6 (International Mobile Telecommunications (IMT)) RFSAP to be developed

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
	Radio astronomy Space research (passive)	Radio astronomy (Observations of formaldehyde (H2CO) interstellar clouds)	See section 5 for coordination with radio astronomy
5.149 5.339 5.443	5.149 5.339		
4 990-5 000 MHz FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY Space research (passive) 5.149	**4 990-5 000 MHz** FIXED NF14 MOBILE except aeronautical mobile RADIO ASTRONOMY Space research (passive) 5.149 NF15	 Fixed links (4.8 GHz) (4400 – 5000 MHz) Outside Broadcast links Electronic News Gathering Government services Radio astronomy (Observations of formaldehyde (H2CO) interstellar clouds)	 See section 5 for coordination with radio astronomy
5 000-5 010 MHz AERONAUTICAL MOBILE-SATELLITE (R) 5.443AA AERONAUTICAL RADIONAVIGATION RADIONAVIGATION-SATELLITE (Earth-to-space)	**5 000-5 010 MHz** AERONAUTICAL MOBILE-SATELLITE (R) 5.443AA AERONAUTICAL RADIONAVIGATION RADIONAVIGATION-SATELLITE (Earth-to-space)		
5 010-5 030 MHz AERONAUTICAL MOBILE-SATELLITE (R) 5.443AA	**5 010-5 030 MHz** AERONAUTICAL MOBILE-SATELLITE (R) 5.443AA		

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
AERONAUTICAL RADIONAVIGATION RADIONAVIGATION-SATELLITE (space-to-Earth) (space-to-space) 5.328B 5.443B	AERONAUTICAL RADIONAVIGATION RADIONAVIGATION-SATELLITE (space-to-Earth) (space-to-space) 5.443B 5.328B		
5 030-5 091 MHz AERONAUTICAL MOBILE (R) 5.443C AERONAUTICAL MOBILE-SATELLITE (R) 5.443D AERONAUTICAL RADIONAVIGATION 5.444	**5 030-5 091 MHz** AERONAUTICAL MOBILE (R) 5.443C AERONAUTICAL MOBILE-SATELLITE (R) 5.443D AERONAUTICAL RADIONAVIGATION 5.444	Microwave Landing System AERONAUTICAL RADIONAVIGATION (MLS) (precision approach and landing)]	
5 091-5 150 MHz FIXED-SATELLITE (Earth-to-space) 5.444A AERONAUTICAL MOBILE 5.444B AERONAUTICAL MOBILE-SATELLITE (R) 5.443AA	**5 091-5 150 MHz** FIXED-SATELLITE (Earth-to-space) 5.444A AERONAUTICAL MOBILE 5.444B AERONAUTICAL MOBILE (telemetry) AERONAUTICAL MOBILE-SATELLITE (R) 5.443AA	Feeder links of non-GSO-satellite systems in the MSS NGSO MSS feeder links (5091 – 5150 MHz) Surface applications at airports Air to ground	Resolution 114 (Rev.WRC-15)

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
AERONAUTICAL RADIONAVIGATION 5.444	AERONAUTICAL RADIONAVIGATION	AERONAUTICAL RADIONAVIGATION (MLS) (precision approach and landing)	
5 150-5 250 MHz AERONAUTICAL RADIONAVIGATION FIXED-SATELLITE (Earth-to-space) 5.447A MOBILE except aeronautical mobile 5.446A 5.446B	**5 150-5 216 MHz** AERONAUTICAL RADIONAVIGATION FIXED-SATELLITE (Earth-to-space) 5.447A FIXED-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile 5.446A 5.446B AERONAUTICAL MOBILE (telemetry) Radiodetermination-satellite (space-to-Earth) 5.446 5.446C 5.447B 5.447C	Feeder links of non-GSO-satellite systems in the MSS NGSO MSS feeder links (5091 – 5150 MHz) WAS / RLAN (5150 – 5350 MHz) Air-to-ground	Radio Frequency Spectrum Regulations as amended (Annex B) (GG. No. 38641, 30 March 2015). ITU Resolution 229 revised WRC-19
	5 216-5 250 MHz AERONAUTICAL MOBILE (telemetry) (air to ground) AERONAUTICAL RADIONAVIGATION FIXED-SATELLITE (Earth-to-space) 5.447A	WAS / RLAN (5150 – 5350 MHz) (indoor use only – ITU Res229 WRC-19) Air-to-ground Feeder links of non-GSO-satellite systems in the MSS	Radio Frequency Spectrum Regulations as amended (Annex B) (GG. No. 38641, 30 March 2015). ITU Resolution 229 revised WRC-19

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
5.446 5.446C 5.446D 5.447 5.447B 5.447C	MOBILE except aeronautical mobile 5.446A 5.446B 5.446 5.446C 5.447B 5.447C		
5 250-5 255 MHz EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH 5.447D MOBILE except aeronautical mobile 5.446A 5.447F 5.447E 5.448 5.448A	**5 250-5 255 MHz** EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH 5.447D MOBILE except aeronautical mobile 5.446A 5.447F Space research 5.448A	WAS / RLAN (5150 – 5350 MHz) (indoor use only) Active spaceborne sensors Other than active spaceborne sensors	Radio Frequency Spectrum Regulations as amended (Annex B) (GG. No. 38641, 30 March 2015). ITU Resolution 229 revised WRC-19
5 255-5 350 MHz EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active) MOBILE except aeronautical mobile 5.446A 5.447F 5.447E 5.448 5.448A	**5 255-5 350 MHz** EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active) MOBILE except aeronautical mobile 5.446A 5.447F 5.448A	WAS / RLAN (5150 – 5350 MHz) (Power limitation ITU Resolution 229 WRC-19))	Radio Frequency Spectrum Regulations as amended (Annex B) (GG. No. 38641, 30 March 2015). ITU Resolution 229 revised WRC-19

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
5 350-5 460 MHz EARTH EXPLORATION-SATELLITE (active) 5.448B SPACE RESEARCH (active) 5.448C AERONAUTICAL RADIONAVIGATION 5.449 RADIOLOCATION 5.448D	**5 350-5 460 MHz** EARTH EXPLORATION-SATELLITE (active) 5.448B SPACE RESEARCH (active) 5.448C AERONAUTICAL RADIONAVIGATION 5.449 RADIOLOCATION 5.448D	Ground based airborne weather radars and associated airborne beacons	
5 460-5 470 MHz RADIONAVIGATION 5.449 EARTH EXPLORATION-SATELLITE (active) SPACE RESEARCH (active) RADIOLOCATION 5.448D 5.448B	**5 460-5 470 MHz** AERONAUTICAL RADIONAVIGATION 5.449 EARTH EXPLORATION-SATELLITE (active) SPACE RESEARCH (active) RADIOLOCATION 5.448D RADIONAVIGATION except aeronautical radionavigation 5.448B	Ground based airborne weather radars and associated airborne beacons	ITU Resolution 229 revised WRC-19
5 470-5 570 MHz MARITIME RADIONAVIGATION MOBILE except aeronautical mobile 5.446A 5.450A EARTH EXPLORATION-SATELLITE (active)	**5 470-5 570 MHz** MARITIME RADIONAVIGATION MOBILE except aeronautical mobile 5.446A 5.450A EARTH EXPLORATION-SATELLITE (active)	WAS / RLAN (5470 – 5725 MHz)	Radio Frequency Spectrum Regulations as amended (Annex B) (GG. No. 38641, 30 March 2015). ITU Resolution 229 revised WRC-19

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
SPACE RESEARCH (active) RADIOLOCATION 5.450B 5.448B 5.450 5.451	SPACE RESEARCH (active) RADIOLOCATION 5.450B 5.448B		
5 570-5 650 MHz MARITIME RADIONAVIGATION MOBILE except aeronautical mobile 5.446A 5.450A RADIOLOCATION 5.450B 5.450 5.451 5.452	**5 570-5 600MHz** MARITIME RADIONAVIGATION MOBILE except aeronautical mobile 5.446A 5.450A RADIOLOCATION 5.450B 5.452	Location Radar WAS / RLAN (5470 – 5725 MHz) Weather Radars (5600 – 5650 MHz)	ITU Resolution 229 revised WRC-19 Radio Frequency Spectrum Regulations as amended (Annex B) (GG. No. 38641, 30 March 2015).
	5 600-5 650MHz MARITIME RADIONAVIGATION METEOROLOGICAL AIDS MOBILE except aeronautical mobile 5.446A 5.450A RADIOLOCATION 5.450B 5.452	Ground based meteorological radars (5600 – 5650 MHz) WAS / RLAN (5470 – 5725 MHz) Weather Radars (5600 – 5650 MHz)	Radio Frequency Spectrum Regulations as amended (Annex B) (GG. No. 38641, 30 March 2015). ITU Resolution 229 revised WRC-19

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
5 650-5 725 MHz RADIOLOCATION MOBILE except aeronautical mobile 5.446A 5.450A Amateur Space research (deep space) 5.282 5.451 5.453 5.454 5.455	**5 650-5 670 MHz** RADIOLOCATION MOBILE except aeronautical mobile 5.446A 5.450A Amateur Amateur-satellite (Earth-to-space) Space research (deep space) 5.282 5.453	WAS / RLAN (5470 – 5725 MHz) (Power limitation ITU Resolution 229 WRC-19))	Radio Frequency Spectrum Regulations as amended (Annex B) (GG. No. 38641, 30 March 2015). ITU Resolution 229 revised WRC-19
	5 670-5 725 MHz RADIOLOCATION MOBILE except aeronautical mobile 5.446A 5.450A Amateur Space research (deep space) 5.282 5.453	WAS / RLAN (5470 – 5725 MHz) (indoor use only)	Radio Frequency Spectrum Regulations as amended (Annex B) (GG. No. 38641, 30 March 2015).
5 725-5 830 MHz FIXED-SATELLITE (Earth-to-space) RADIOLOCATION Amateur	**5 725-5 830 MHz** FIXED-SATELLITE (Earth-to-space) RADIOLOCATION Amateur Fixed NF16	Fixed links (5725 – 5850 MHz) RTT data (5795 – 5815 MHz) ISM applications (5725 – 5875 MHz) BFWA (5725-5850 MHz) ISM (5725-5875 MHz) RTTT (Road Transport and Traffic Telematics) (5795-5815 MHz)	Radio Frequency Spectrum Regulations as amended (Annex B) (GG. No. 38641, 30 March 2015). . BFWA in some SADC countries is limited to below 5850 MHz in order to protect FSS in the band 5850-6425 MHz

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
5.150 5.451 5.453 5.455	5.150 5.453	SRD applications (5 725-5 875 MHz) SRD - Transport and information control systems (5 805-5 815 MHz)	Common international SRD band; see ITU-R Rec. SM.1896 latest version Transport information and control systems Recommendation ITU-R M.1453
5 830-5 850 MHz FIXED-SATELLITE (Earth-to-space) RADIOLOCATION Amateur Amateur-satellite (space-to-Earth) 5.150 5.451 5.453 5.455	**5 830-5 850 MHz** FIXED-SATELLITE (Earth-to-space) RADIOLOCATION Amateur Amateur-satellite (space-to-Earth) Fixed NF16 5.150 5.453	Fixed links BFWA (5725 – 5850 MHz) ISM applications (5725 – 5875 MHz) SRD's – Reservoir Level Probing Radars	BFWA in some SADC countries is limited to below 5850 MHz in order to protect FSS in the band 5850-6425 MHz Radio Frequency Spectrum Regulations as amended (Annex B) (GG. No. 3417238641, 3130 March 2015).
5 850-5 925 MHz FIXED FIXED-SATELLITE (Earth-to-space) MOBILE	**5 850-5 925 MHz** FIXED FIXED-SATELLITE (Earth-to-space) MOBILE	PTP C-band uplink (VSAT/SNG links) ISM applications (5725 – 5875 MHz) Fixed-satellite uplinks (PTP/VSAT/SNG) (5850-6425 MHz) FIXED links (5850-5925 MHz) ISM (5725-5875 MHz)	FS could be used for temporary OB links.

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
5.150	5.150		
5 925-6 700 MHz FIXED 5.457 FIXED-SATELLITE (Earth-to-space) 5.457A 5.457B MOBILE 5.457C	**5 925-6 425 MHz** FIXED 5.457 NF14 FIXED-SATELLITE (Earth-to-space) 5.457A 5.457B MOBILE 5.149 5.440 5.458	Fixed links - Lower 6 GHz (5925-6425 MHz) BFWA Fixed-satellite uplinks (PTP/VSAT/SNG) (5850-6425 MHz) ESVs (5925 – 6425 MHz) Radio astronomy (observation of Methanol)	Channelling plan for L6 GHz band in accordance with ITU-R Rec. F.383 latest version. Earth Station onboard vessels (ESV) also allowed under FSS. Resolution 902 (WRC-03) Consideration may be made for future License exempt provided it is feasible for the protection of incumbent service.
	6 425-6 429 MHz FIXED 5.457 NF14 FIXED-SATELLITE (Earth-to-space) MOBILE STANDARD FREQUENCY AND TIME SIGNAL-SATELLITE (6 427 MHz) (space-to-Earth)	Upper 6 GHz (6425-7110 MHz), BFWA Fixed-satellite uplinks (PTP/VSAT/SNG) (5850-6425 MHz) Radio astronomy (observation of Methanol)	Channelling plan for U6 GHz band in accordance with ITU-R Rec. F.384 latest version. Resolution 150 (WRC-12)

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
5.149 5.440 5.458	5.149 5.440 5.458		
5.149 5.440 5.458	**6 429-6700 MHz** FIXED 5.457 MOBILE 5.458	Upper 6 GHz (6425-7110 MHz), BFWA Radio astronomy (observation of Methanol)	Channelling plan for U6 GHz band in accordance with ITU-R Rec. F.384 latest version. Resolution 150 (WRC-12)
6 700-7 075 MHz FIXED FIXED-SATELLITE (Earth-to-space) (space-to-Earth) 5.441 MOBILE 5.458 5.458A 5.458B	**6 700-7 075 MHz** FIXED NF14 FIXED-SATELLITE (Earth-to-space) (space-to-Earth) 5.441 MOBILE 5.458 5.458A 5.458B	Fixed Links (U6) (6425 – 7110 MHz)	Channelling plan for U6 GHz band in accordance with ITU-R Rec. F.384 latest version. The band 6 725-7 025 MHz is part of the APP30B Plan (FSS Earth-to-space); refer to Annex B.
7 075-7 145 MHz FIXED	**7 075-7 145 MHz** FIXED NF14	Fixed Links (U6) (6425 – 7110 MHz)	Channelling plan for U6 band in accordance with ITU-R Rec. F.384 latest version.

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
MOBILE 5.458 5.459	MOBILE 5.458	Fixed Links (L7) (7110 – 7425 MHz)	Channelling plan for L7 band is in accordance with ITU-R Rec. F.385 latest version Annex 3.
7 145-7 190 MHz FIXED MOBILE SPACE RESEARCH (deep space) (Earth-to-space) 5.458 5.459	**7 145-7 190 MHz** FIXED MOBILE SPACE RESEARCH (deep space) (Earth-to-space) 5.458	Fixed links - Lower 7 GHz (7110-7425 MHz)	Channelling plan for L7 band in accordance with ITU-R Rec. F.385 latest version Annex 3.
7 190-7 235 MHz EARTH EXPLORATION-SATELLITE (Earth-to-space) 5.460A 5.460B FIXED MOBILE SPACE RESEARCH (Earth-to-space) 5.460 5.458 5.459	**7 190-7 235 MHz** EARTH EXPLORATION-SATELLITE (Earth-to-space) 5.460A 5.460B FIXED NF14 MOBILE SPACE RESEARCH (except deep space) (Earth-to-space) 5.460 5.458	Tracking, telemetry and command for spacecraft operation Fixed Links (L7) (7110 – 7425 MHz)	SANAS to erected a facility near Matjiesfontein
7 235-7 250 MHz	**7 235-7 250 MHz**	Tracking, telemetry and command for spacecraft operation	

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
EARTH EXPLORATION-SATELLITE (Earth-to-space) 5.460A FIXED MOBILE 5.458	EARTH EXPLORATION-SATELLITE (Earth-to-space) 5.460A FIXED NF14 MOBILE 5.458	Fixed links - Lower 7 GHz (7110-7425 MHz)	Channelling plan for L7 band in accordance with ITU-R Rec. F.385 latest version Annex 3.
7 250-7 300 MHz FIXED FIXED-SATELLITE (space-to-Earth) MOBILE 5.461	**7 250-7 300 MHz** FIXED NF14 FIXED-SATELLITE (space-to-Earth) MOBILE MOBILE-SATELLITE (space-to-Earth) 5.461	Fixed links - Lower 7 GHz (7110-7425 MHz)	Channelling plan for L7 band in accordance with ITU-R Rec. F.385 latest version Annex 3. RFSAP to be developed.
7 300-7 375 MHz FIXED FIXED-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile	**7 300-7 375 MHz** FIXED FIXED-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile MOBILE-SATELLITE (space-to-Earth)	Fixed links - Lower 7 GHz (7110-7425 MHz) and Upper 7 GHz (7425-7750 MHz)	Channelling plan for L7 band in accordance with ITU-R Rec. F.385 latest version Annex 3. Channelling plan for U7 band in accordance with ITU-R Rec. F.385 latest version Annex 3. RFSAP to be developed.

CONTINUES ON PAGE 386 OF BOOK 4

Printed by and obtainable from the Government Printer, Bosman Street, Private Bag X85, Pretoria, 0001
Contact Centre Tel: 012-748 6200. eMail: info.egazette@gpw.gov.za
Publications: Tel: (012) 748 6053, 748 6061, 748 6065

This gazette is also available free online at **www.gpwonline.co.za**



Government Gazette
Staatskoerant

REPUBLIC OF SOUTH AFRICA
REPUBLIEK VAN SUID AFRIKA

Vol. 681 25 March Maart 2022 No. 46088

PART 4 OF 6

N.B. The Government Printing Works will not be held responsible for the quality of "Hard Copies" or "Electronic Files" submitted for publication purposes

ISSN 1682-5845



AIDS HELPLINE: 0800-0123-22 Prevention is the cure

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
5.461	5.461		
7 375-7 450 MHz FIXED FIXED-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile MARITIME MOBILE SATELLITE (space-to-Earth) 5.461AA 5.461AB	**7 375-7 450 MHz** FIXED NF14 FIXED-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile MARITIME MOBILE SATELLITE (space-to-Earth) (GSO) 5.461AA 5.461AB	Fixed links - Lower 7 GHz (7110-7425 MHz) and Upper 7 GHz (7425-7750 MHz)	Channelling plan for L7 band in accordance with ITU-R Rec. F.385 Annex 3. Channelling plan for U7 band in accordance with ITU-R Rec. F.385 latest verssion Annex 3.
7 450-7 550 MHz FIXED FIXED-SATELLITE (space-to-Earth) METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile MARITIME MOBILE-SATELLITE (space-to-Earth) 5.461AA 5.461AB	**7 450-7 550 MHz** FIXED NF14 F IXED-SATELLITE (space-to-Earth) METEOROLOGICAL-SATELLITE (GSO) (space-to-Earth) MOBILE except aeronautical mobile MARITIME MOBILE-SATELLITE (space-to-Earth) (GSO) 5.461AA 5.461AB	Fixed links - Upper 7 GHz (7425-7750 MHz)	Channelling plan for U7 band in accordance with ITU-R Rec. F.385 latest version Annex 3.

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
5.461A	5.461A		
7 550-7 750 MHz FIXED FIXED-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile MARITIME MOBILE-SATELLITE (space-to-Earth) 5.461AA 5.461AB	**7 550-7 750 MHz** FIXED NF14 FIXED-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile MARITIME MOBILE-SATELLITE (space-to-Earth)	Fixed links - Upper 7 GHz (7425-7750 MHz)	Channelling plan for U7 band in accordance with ITU-R Rec. F.385 latest version Annex 3.
7 750-7 900 MHz FIXED METEOROLOGICAL-SATELLITE (space-to-Earth) 5.461B MOBILE except aeronautical mobile	**7 750-7 900 MHz** FIXED NF14 METEOROLOGICAL-SATELLITE(non-GSO) (space-to-Earth) 5.461B MOBILE except aeronautical mobile	Fixed links - Lower 8 GHz (7725-8275 MHz)	Channelling plan for L8 band in accordance with ITU-R Rec. F.386 latest version Annex 1.
7 900-8 025 MHz FIXED FIXED-SATELLITE (Earth-to-space) MOBILE	**7 900-8 025 MHz** FIXED NF14 FIXED-SATELLITE (Earth-to-space) MOBILE MOBILE-SATELLITE (Earth-to-space)	Fixed links - Lower 8 GHz (7725-8275 MHz)	Channelling plan for L8 band in accordance with ITU-R Rec. F.386 latest version Annex 1.

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
5.461	5.461		
8 025-8 175 MHz EARTH EXPLORATION-SATELLITE (space-to-Earth) FIXED FIXED-SATELLITE (Earth-to-space) MOBILE 5.463 5.462A	**8 025-8 175 MHz** EARTH EXPLORATION-SATELLITE (space-to-Earth) FIXED NF14 FIXED-SATELLITE (Earth-to-space) MOBILE 5.463 5.462A 5.463	Earth exploration satellite systems Fixed links - Lower 8 GHz (7725-8275 MHz)	Channelling plan for L8 band in accordance with ITU-R Rec. F.386 latest version Annex 1.
8 175-8 215 MHz EARTH EXPLORATION-SATELLITE (space-to-Earth) FIXED FIXED-SATELLITE (Earth-to-space) METEOROLOGICAL-SATELLITE (Earth-to-space) MOBILE 5.463 5.462A	**8 175-8 215 MHz** EARTH EXPLORATION-SATELLITE (space-to-Earth) FIXED NF14 FIXED-SATELLITE (Earth-to-space) METEOROLOGICAL-SATELLITE (Earth-to-space) MOBILE 5.463 5.462A 5.463	Earth exploration satellite systems Fixed links - Lower 8 GHz (7725-8275 MHz) Ground to air	Channelling plan for L8 band in accordance with ITU-R Rec. F.386 latest version Annex 1.
8 215-8 400 MHz EARTH EXPLORATION-SATELLITE (space-to-Earth) FIXED	**8 215-8 400 MHz** EARTH EXPLORATION-SATELLITE (space-to-Earth) FIXED NF14	Ground to air	

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
FIXED-SATELLITE (Earth-to-space) MOBILE 5.463 5.462A	FIXED-SATELLITE (Earth-to-space) MOBILE 5.463 5.462A 5.463	Fixed links - Lower 8 GHz (7725-8275 MHz) and Upper 8 GHz (8275-8500 MHz)	Channelling plan for L8 band in accordance with ITU-R Rec. F.386 Annex 1. Channelling plan for U8 band in accordance with ITU-R Rec. F.386 latesst version Annex 1.
8 400-8 500 MHz FIXED MOBILE except aeronautical mobile SPACE RESEARCH (space-to-Earth) 5.465 5.466	**8 400-8 450 MHz** FIXED NF14 MOBILE except aeronautical mobile SPACE RESEARCH(deep space) (space-to-Earth) 5.465	Fixed links - Upper 8 GHz (8275-8500 MHz)	Channelling plan for U8 band in accordance with ITU-R Rec. F.386 latest version Annex 1.
	8 450-8 500 MHz FIXED NF14 MOBILE except aeronautical mobile SPACE RESEARCH (space-to-Earth)	Fixed links - Upper 8 GHz (8275-8500 MHz)	Channelling plan for U8 band in accordance with ITU-R Rec. F.386 latest version Annex 1.
8 500-8 550 MHz RADIOLOCATION 5.468 5.469	**8 500-8 550 MHz** RADIOLOCATION	RADARS. aeronautical radio navigation e.g. precision airfield approach radars.	
8 550-8 650 MHz	**8 550-8 650 MHz**		

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active) 5.468 5.469 5.469A	EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active) 5.469A	RADARS. aeronautical radionavigation e.g. precision airfield approach radars	
8 650-8 750 MHz RADIOLOCATION 5.468 5.469	**8 650-8 750 MHz** RADIOLOCATION	RADARS. aeronautical radio navigation e.g. precision airfield approach radars	
8 750-8 850 MHz RADIOLOCATION AERONAUTICAL RADIONAVIGATION 5.470 5.471	**8 750-8 850 MHz** RADIOLOCATION AERONAUTICAL RADIONAVIGATION 5.470	RADARS. aeronautical radionavigation e.g. precision airfield approach radars Airborne Doppler navigation aids (8 800 MHz)	
8 850-9 000 MHz RADIOLOCATION MARITIME RADIONAVIGATION 5.472 5.473	**8 850-9 000 MHz** RADIOLOCATION MARITIME RADIONAVIGATION 5.472	RADARS. aeronautical radionavigation e.g. precision airfield approach radars Shore-based radars	
9 000-9 200 MHz	**9 000-9 200 MHz**		

This gazette is also available free online at www.gpwonline.co.za

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
AERONAUTICAL RADIONAVIGATION 5.337 RADIOLOCATION 5.471 5.473A	AERONAUTICAL RADIONAVIGATION 5.337 RADIOLOCATION 5.473A	Approach radars RADARS. aeronautical radionavigation e.g. precision airfield approach radars Ground-based radars and associated airborne transponders	
9 200-9 300 MHz EARTH EXPLORATION-SATELLITE (active) 5.474A 5.474B 5.474C RADIOLOCATION MARITIME RADIONAVIGATION 5.472	**9 200-9 225 MHz** EARTH EXPLORATION-SATELLITE (active) 5.474A 5.474B 5.474C RADIOLOCATION MARITIME RADIONAVIGATION 5.472 5.474 5.474D	Field Disturbance and Doppler Apparatus (9200 – 9975 MHz) Harbour radars RADARS. aeronautical radionavigation e.g. precision airfield approach radars Shore-based radars	Radio Frequency Spectrum Regulations as amended (Annex B) (GG. No. 38641, 30 March 2015).
	9 225-9 300 MHz EARTH EXPLORATION-SATELLITE (active) 5.474A 5.474B 5.474C RADIOLOCATION MARITIME RADIONAVIGATION 5.474 5.474D	Field Disturbance and Doppler Apparatus (9200 – 9975 MHz) Harbour radars RADARS. aeronautical radionavigation e.g. precision airfield approach radars	Radio Frequency Spectrum Regulations as amended (Annex B) (GG. No. 38641, 30 March 2015).

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
5.473 5.474 5.474D		Shore-based radars	
9 300-9 500 MHz RADIONAVIGATION 5.475 EARTH EXPLORATION-SATELLITE (active) SPACE RESEARCH (active) RADIOLOCATION	**9 300-9 320 MHz** RADIONAVIGATION except aeronautical radionavigation EARTH EXPLORATION-SATELLITE (active) SPACE RESEARCH (active) RADIOLOCATION AERONAUTICAL RADIONAVIGATION 5.427 5.474 5.475 5.475A 5.475B 5.476A	Shore based radars (9380 – 9440 MHz) Field Disturbance and Doppler Apparatus (9200 – 9975 MHz) RADARS. aeronautical radionavigation e.g. precision airfield approach radars Airborne weather radars Ground-based radar beacons Ground-based radars	Radio Frequency Spectrum Regulations as amended (Annex B) (GG. No. 38641, 30 March 2015).
	9 320-9 500 MHz		

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
5.427 5.474 5.475A 5.475B 5.476A	RADIONAVIGATION except aeronautical radionavigation EARTH EXPLORATION-SATELLITE (active) SPACE RESEARCH (active) RADIOLOCATION AERONAUTICAL RADIONAVIGATION 5.427 5.474 5.475 5.475A 5.475B 5.476A	Shore based radars (9380 – 9440 MHz) Field Disturbance and Doppler Apparatus (9200 – 9975 MHz) RADARS. aeronautical radionavigation e.g. precision airfield approach radars Airborne weather radars Ground-based radar beacons Ground-based radars Airborne weather radars	Radio Frequency Spectrum Regulations as amended (Annex B) (GG. No. 38641, 30 March 2015).
9 500-9 800 MHz EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION RADIONAVIGATION SPACE RESEARCH (active)	**9 500-9 800 MHz** EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION RADIONAVIGATION SPACE RESEARCH (active)	Field Disturbance and Doppler Apparatus (9200 – 9975 MHz) RADARS. aeronautical radionavigation e.g. precision airfield approach radars	Radio Frequency Spectrum Regulations as amended (Annex B) (GG. No. 38641, 30 March 2015).

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
5.476A	5.476A		
9 800-9 900 MHz RADIOLOCATION Earth exploration-satellite (active) Space research (active) Fixed 5.477 5.478 5.478A 5.478B	**9 800-9 900 MHz** RADIOLOCATION Earth exploration-satellite (active) Space research (active) Fixed 5.478A 5.478B	Field Disturbance and Doppler Apparatus (9200 – 9975 MHz)	Radio Frequency Spectrum Regulations as amended (Annex B) (GG. No. 38641, 30 March 2015).
9 900-10 000 MHz EARTH EXPLORATION-SATELLITE (active) 5.474A 5.474B 5.474C RADIOLOCATION Fixed	**9 900-9 975 MHz** EARTH EXPLORATION-SATELLITE (active) 5.474A 5.474B 5.474C RADIOLOCATION Fixed 5.474D 5.479	Field Disturbance and Doppler Apparatus (9200 – 9975 MHz) RADARS. aeronautical radionavigation e.g. precision airfield approach radars	Radio Frequency Spectrum Regulations as amended (Annex B) (GG. No. 38641, 30 March 2015).
	9 975-10 000 MHz EARTH EXPLORATION-SATELLITE (active) 5.474A 5.474B 5.474C RADIOLOCATION	Field Disturbance and Doppler Apparatus (9200 – 9975 MHz)	Radio Frequency Spectrum Regulations as amended (Annex B) (GG. No. 38641, 30 March 2015).

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
5.474D 5.477 5.478 5.479	Fixed Meteorological-satellite 5.474D 5.479	RADARS. aeronautical radionavigation e.g. precision airfield approach radars Weather radars	
10-10.4 GHz EARTH EXPLORATION-SATELLITE (active) 5.474A 5.474B 5.474C FIXED MOBILE RADIOLOCATION Amateur	**10-10.025 GHz** EARTH EXPLORATION-SATELLITE (active) 5.474A 5.474B 5.474C FIXED NF14 MOBILE RADIOLOCATION Amateur Meteorological-satellite 5.474D 5.479	Fixed PtP Links	
	10.025-10.4 GHz EARTH EXPLORATION-SATELLITE (active) 5.474A 5.474B 5.474C FIXED NF14 MOBILE RADIOLOCATION Amateur	Fixed PtP Links	

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
5.474D 5.479	5.474D 5.479		
10.4-10.45 GHz FIXED MOBILE RADIOLOCATION Amateur	**10.4-10.45 GHz** FIXED NF14 MOBILE RADIOLOCATION Amateur	Low power video links (10.0 – 10.15 GHz) BFWA (10.15 – 10.3 GHz) Motion sensors	Paired with 10.50-10.65 GHz Channelling plan for 10.5 GHz band in accordance with ITU-R Rec. F.1568 latest version Annex 1.
10.45-10.5 GHz RADIOLOCATION Amateur Amateur-satellite 5.481	**10.45-10.5 GHz** RADIOLOCATION Amateur Amateur-satellite	Radiolocation Radars Motion Sensors	
10.5-10.55 GHz FIXED MOBILE Radiolocation	**10.5-10.55 GHz** FIXED NF14 MOBILE Radiolocation	BFWA (10.5 – 10.65 GHz) SAP/SAB Applications (Video connections) (10.5 – 10.68 GHz) FDDA (10.5 – 10.6 GHz)	Radio Frequency Spectrum Regulations as amended (Annex B) (GG. No. 38641, 30 March 2015). Paired with 10.15-10.30 GHz Channelling plan for 10.5 GHz band in accordance with ITU-R Rec. F.1568 latest version Annex 1.

This gazette is also available free online at www.gpwonline.co.za

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
10.55-10.6 GHz FIXED MOBILE except aeronautical mobile Radiolocation	**10.55-10.6 GHz** FIXED NF14 MOBILE except aeronautical mobile Radiolocation	BFWA (10.5 – 10.65 GHz) SAP/SAB Applications (video connections) (10.5 – 10.68 GHz) FDDA (10.5 – 10.6 GHz)	Paired with 10.15 – 10.3 GHz Radio Frequency Spectrum Regulations as amended (Annex B) (GG. No. 38641, 30 March 2015). Paired with 10.15-10.30 GHz Channelling plan for 10.5 GHz band in accordance with ITU-R Rec. F.1568 latest version Annex 1
10.6-10.68 GHz EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY RESEARCH (passive) Radiolocation 5.149 5.482 5.482A	**10.6-10.68 GHz** EARTH EXPLORATION-SATELLITE (passive) FIXED NF14 MOBILE except aeronautical mobile RADIO ASTRONOMY RESEARCH (passive) Radiolocation 5.149 5.482 5.482A	BFWA (10.5 – 10.65 GHz) SAP/SAB Applications (video connections) (10.5 – 10.68 GHz) Radio astronomy (Non thermal synchrotron and enigmatic quasars) Motion sensors	Paired with 10.15 – 10.3 GHz Channelling plan for 10.5 GHz band in accordance with ITU-R Rec. F.1568 latest version Annex 1. For sharing between EESS (passive) and the fixed and mobile service Res.751 applies. See section 5 for coordination with radio astronomy
10.68-10.7 GHz	**10.68-10.7 GHz**		

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340 5.483	EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340	Radio astronomy (Non thermal synchrotron and enigmatic quasars)	See section 5 for coordination with radio astronomy
10.7-10.95 GHz FIXED FIXED-SATELLITE (space-to-Earth) 5.441 (Earth-to-space) 5.484 MOBILE except aeronautical mobile	**10.7-10.95 GHz** FIXED FIXED-SATELLITE (space-to-Earth) 5.441 (Earth-to-space) 5.484 MOBILE except aeronautical mobile	Feeder links in the BSS Fixed Links (11 GHz) (10.7 – 11.7 GHz) DTH Applications under the FSS	This band is used for Fixed links (11 GHz) (10.7-11.7 GHz). The channeling plan for FS Links are in accordance with ITU-R Rec.F387.latest version The band is also available for FSS Planned services (see Appendix 30B). The use of the band 10.7-11.7 GHz by the fixed-satellite service (Earth-to-space) is limited, can also be used for BSS feeder links (see 5.484).
10.95-11.2 GHz FIXED	**10.95-11.2 GHz** FIXED	Feeder links in the BSS Fixed Links (11 GHz) (10.7 – 11.7 GHz) DTH Applications under the FSS Ku-band downlink (VSAT/SNG)	This band is used for Fixed links (11 GHz) (10.7-11.7 GHz). The channeling plan for FS Links are in accordance with ITU-R Rec.F387 latest version..

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
FIXED-SATELLITE (space-to-Earth) 5.484A 5.484B (Earth-to-space) 5.484 MOBILE except aeronautical mobile	FIXED-SATELLITE (space-to-Earth) 5.484A 5.484B (Earth-to-space) 5.484 MOBILE except aeronautical mobile		This band is also used for FSS (downlink) (VSAT/SNG/BSS feeder links). The use of the band 10.7-11.7 GHz by the fixed-satellite service (Earth-to-space) is limited to can also be used for BSS feeder links (see 5.484).
11.2-11.45 GHz FIXED FIXED-SATELLITE (space-to-Earth) 5.441 (Earth-to-space) 5.484 MOBILE except aeronautical mobile	**11.2-11.45 GHz** FIXED FIXED-SATELLITE (space-to-Earth) 5.441 (Earth-to-space) 5.484 MOBILE except aeronautical mobile	Feeder links in the BSS Fixed Links (11 GHz) (10.7 – 11.7 GHz) DTH Applications under the FSS	This band is used for Fixed links (11 GHz) (10.7-11.7 GHz). The channeling plan for FS Links are in accordance with ITU-R Rec.F387 latest version. The band is also available for FSS Planned services (see Appendix 30B). The use of the band 10.7-11.7 GHz by the fixed-satellite service (Earth-to-space) is limited to can also be used for BSS feeder links (see 5.484).
11.45-11.7 GHz FIXED	**11.45-11.7 GHz** FIXED NF14	Fixed Links (11 GHz) (10.7 – 11.7 GHz)	This band is used for Fixed links (11 GHz) (10.7-11.7 GHz). The channeling plan for FS Links are in

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
FIXED-SATELLITE (space-to-Earth) 5.484A 5.484B (Earth-to-space) 5.484 MOBILE except aeronautical mobile	FIXED-SATELLITE (space-to-Earth) 5.484A 5.484B (Earth-to-space) 5.484 MOBILE except aeronautical mobile	Fixed-satellite downlinks (PTP/VSAT/SNG), Feeder links in the BSS DTH Applications under the FSS	accordance with ITU-R Rec.F387 latest version. This band is also used for FSS (downlink) (VSAT/SNG/BSS feeder links). The use of the band 10.7-11.7 GHz by the fixed-satellite service (Earth-to-space) is limited to can also be used for BSS feeder links (see 5.484).
11.7-12.5 GHz FIXED MOBILE except aeronautical mobile BROADCASTING BROADCASTING-SATELLITE 5.492 5.487 5.487A	**11.7-12.5 GHz** FIXED MOBILE except aeronautical mobile BROADCASTING BROADCASTING-SATELLITE 5.492 FIXED-SATELLITE (non-GSO) (space-to-Earth) 5.487 5.487A	Fixed links OB links ENG Broadcast satellite systems BSS feeder links	This band is available for BSS in accordance with Appendix 30 of ITU RR. Refer to Annex B.
12.5-12.75 GHz FIXED-SATELLITE (space-to-Earth) 5.484A 5.484B (Earth-to-space)	**12.5-12.75 GHz** FIXED-SATELLITE (space-to-Earth) 5.484A 5.484B (Earth-to-space)	FSS uplinks (VSAT/SNG) 12.5 – 12.75 GHz Aeronautical Earth Stations/ESV/ESIM Applications	Article 9.12 applies Res. 155 (WRC-195) applies

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
5.494 5.495 5.496		NGSO FSS Fixed Links	
12.75-13.25 GHz FIXED FIXED-SATELLITE (Earth-to-space) 5.441 MOBILE Space research (deep space) (space-to-Earth)	**12.75-13.25 GHz** FIXED NF14 FIXED-SATELLITE (Earth-to-space) 5.441 MOBILE Space research (deep space) (space-to-Earth)	Fixed Links (13 GHz) (12.75 – 13.25 GHz)	Channelling plan for 13 GHz band in accordance with ITU-R Rec. F.497 latest version. The band 12.75-13.25 GHz is part of the APP30B Plan (FSS Earth-to-space); refer to Annex B. Article 9.12 applies Res. 172 (WRC-19) applies
13.25-13.4 GHz EARTH EXPLORATION-SATELLITE (active) AERONAUTICAL RADIONAVIGATION 5.497 SPACE RESEARCH (active) 5.498A 5.499	**13.25-13.4 GHz** EARTH EXPLORATION-SATELLITE (active) AERONAUTICAL RADIONAVIGATION 5.497 SPACE RESEARCH (active) 5.498A	Airborne Doppler Radar Doppler navigation aids	
13.4-13.65 GHz	**13.4-13.65 GHz**	SRD:	ITU-R Rec SM 1896-1 and

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
EARTH EXPLORATION-SATELLITE (active) FIXED SATELLITE (space-to-Earth) 5.499A 5.499B RADIOLOCATION SPACE RESEARCH 5.499C 5.499D Standard frequency and time signal-satellite (Earth-to-space) 5.499E 5.500 5.501 5.501B	EARTH EXPLORATION-SATELLITE (active) FIXED SATELLITE (GSO) (space-to-Earth) 5.499A 5.499B RADIOLOCATION SPACE RESEARCH 5.499C 5.499D SPACE RESEARCH (space-to-Earth) SPACE RESEARCH (space-to-space) Standard frequency and time signal-satellite (Earth-to-space) 5.499E 5.501B 5.499 5.499E 5.500 5.501 5.501B	Radio Determination Allications Active spaceborne sensors Relay data from GSO space stations to associated Earth stations Relay data from GSO space stations to associated non-GSO space stations Space research	Report ITU-R SM.2153-7 latest versions
13.65-13.75 GHz EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH 5.501A Standard frequency and time signal-satellite (Earth-to-space) 5.499 5.500 5.501 5.501B	**13.65-13.75 GHz** EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH 5.501A Standard frequency and time signal-satellite (Earth-to-space) 5.501B	FDDA (13.4 – 14 GHz) RADIOLOCATION Active spaceborne sensors Other than active spaceborne sensors	Radio Frequency Spectrum Regulations as amended (Annex B) (GG. No. 38641, 30 March 2015).

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
13.75-14 GHz FIXED-SATELLITE (Earth-to-space) 5.484A RADIOLOCATION Earth exploration-satellite Standard frequency and time signal-satellite (Earth-to-space) Space research 5.499 5.500 5.501 5.502 5.503	**13.75-14 GHz** FIXED-SATELLITE (Earth-to-space) 5.484A RADIOLOCATION Earth exploration-satellite Standard frequency and time signal-satellite (Earth-to-space) Space research 5.502 5.503	FSS uplinks (PTP/VSAT/SNG) (13.75-14.5 GHz) FDDA (13.4 – 14 GHz)	Radio Frequency Spectrum Regulations as amended (Annex B) (GG. No. 38641, 30 March 2015).
14-14.25 GHz FIXED-SATELLITE (Earth-to-space) 5.457A 5.457B 5.484A 5.484B 5.506 5.506B RADIONAVIGATION 5.504 Mobile-satellite (Earth-to-space) 5.504B 5.504C 5.506A Space research 5.504A 5.505	**14-14.25 GHz** FIXED-SATELLITE (Earth-to-space) 5.457A 5.457B 5.484A 5.484B 5.506 5.506B NF17 RADIONAVIGATION 5.504 Mobile-satellite (Earth-to-space) 5.504B 5.504C 5.506A Space research 5.504A	FSS uplinks (PTP/VSAT/SNG) (13.75-14.5 GHz) ESVs (14 -14.5 GHz) Feeder links in the BSS	Earth Station onboard vessels (ESV) also allowed under FSS; Res. 902 applies. The band 14.0-14.5 GHz may also be used for AES (aircraft-to-space station).
14.25-14.3 GHz FIXED-SATELLITE (Earth-to-space) 5.457A 5.457B 5.484A 5.484B 5.506 5.506B	**14.25-14.3 GHz** FIXED-SATELLITE (Earth-to-space) 5.457A 5.457B 5.484A 5.484B 5.506 5.506B NF17	FSS uplinks (PTP/VSAT/SNG) (13.75-14.5 GHz) ESVs (14 -14.5 GHz)	Earth Station onboard vessels (ESV) also allowed under FSS; Res. 902 applies.

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
RADIONAVIGATION 5.504 Mobile-satellite (Earth-to-space) 5.504B 5.506A 5.508A Space research 5.504A 5.505 5.508	RADIONAVIGATION 5.504 Mobile-satellite (Earth-to-space) 5.504B 5.506A Space research 5.504A 5.508A	Feeder links in the BSS Aeronautical earth stations/ESV/ESIM Applications Fixed links	The band 14.0-14.5 GHz may also be used for AES (aircraft-to-space station). Recommendation ITU-R M.1643-0 (WRC-15)
14.3-14.4 GHz FIXED FIXED-SATELLITE (Earth-to-space) 5.457A 5.457B 5.484A 5.484B 5.506 5.506B MOBILE except aeronautical mobile Mobile-satellite (Earth-to-space) 5.504B 5.506A 5.509A Radionavigation-satellite 5.504A	**14.3-14.4 GHz** FIXED FIXED-SATELLITE (Earth-to-space) 5.457A 5.457B 5.484A 5.484B 5.506 5.506B NF17 MOBILE except aeronautical mobile Mobile-satellite (Earth-to-space) 5.504B 5.506A 5.509A Radionavigation-satellite 5.504A	FSS uplinks (PTP/VSAT/SNG) (13.75-14.5 GHz) ESVs (14 -14.5 GHz) Feeder links in the BSS Aeronautical earth stations/ESV/ESIM Applications Fixed links	Earth Station on board vessels (ESV) also allowed under FSS; Res. 902 applies. The band 14.0-14.5 GHz may also be used for AES (aircraft-to-space station). Recommendation ITU-R M.1643-0 (WRC-15)

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
14.4-14.47 GHz FIXED FIXED-SATELLITE (Earth-to-space) 5.457A 5.457B 5.484A 5.484B 5.506 5.506B MOBILE except aeronautical mobile Mobile-satellite (Earth-to-space) 5.504B 5.506A 5.509A Space research (space-to-Earth) 5.504A	**14.4-14.47 GHz** FIXED FIXED-SATELLITE (Earth-to-space) 5.457A 5.457B 5.484A 5.484B 5.506 5.506B NF17 MOBILE except aeronautical mobile Mobile-satellite (Earth-to-space) 5.504B 5.506A 5.509A Space research (space-to-Earth) 5.504A	FSS uplinks (PTP/VSAT/SNG) (13.75-14.5 GHz) ESVs (14 -14.5 GHz) Feeder links in the BSS Aeronautical earth stations/ESV/ESIM Applications Fixed links	Earth Station onboard vessels (ESV) also allowed under FSS; Res. 902 applies. The band 14.0-14.5 GHz may also be used for AES (aircraft-to-space station). Recommendation ITU-R M.1643-0 (WRC-15)
14.47-14.5 GHz FIXED FIXED-SATELLITE (Earth-to-space) 5.457A 5.457B 5.484A 5.506 5.506B MOBILE except aeronautical mobile Mobile-satellite (Earth-to-space) 5.504B 5.506A 5.509A Radio astronomy 5.149 5.504A	**14.47-14.5 GHz** FIXED FIXED-SATELLITE (Earth-to-space) 5.457A 5.457B 5.484A 5.506 5.506B NF17 MOBILE except aeronautical mobile Mobile-satellite (Earth-to-space) 5.504B 5.506A Radio astronomy 5.149 5.504A	FSS uplinks (PTP/VSAT/SNG) (13.75-14.5 GHz) ESVs (14 -14.5 GHz) Feeder links in the BSS Aeronautical earth stations/ESV/ESIM Applications Fixed links Radio Astronomy (non-thermal synchrotron and enigmatic quasars	Earth Station onboard vessels (ESV) also allowed under FSS; Res. 902 applies. The band 14.0-14.5 GHz may also be used for AES (aircraft-to-space station). See section 5 for coordination with radio astronomy
14.5-14.75 GHz FIXED	**14.5-14.75 GHz** FIXED		

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
FIXED-SATELLITE (Earth-to-space) 5.509B 5.509C 5.509D 5.509E 5.509F 5.510 MOBILE Space research 5.509G	FIXED-SATELLITE (Earth-to-space) 5.509B 5.509C 5.509D 5.509E 5.509F 5.510 MOBILE SPACE RESEARCH (Earth-to-space) 5.509G	Fixed links - 15 GHz (14.5-15.35 GHz) Feeder links in the BSS Relay data to GSO space stations from associated Earth stations Other than relay data to GSO space stations from associated Earth stations	Channelling plan for 15 GHz band in accordance with ITU-R Rec. F.636.latest version The band 14.5-14.8 GHz is part of the APP30A Plan (Feeder Links for BSS) for some SADC countries. Refer to Annex B.
14.75-14.8 GHz FIXED FIXED-SATELLITE (Earth-to-space) 5.510 MOBILE Space research 5.509G	**14.75-14.8 GHz** FIXED NF14 FIXED-SATELLITE (Earth-to-space) 5.510 MOBILE SPACE RESEARCH (Earth-to-space) 5.509G	Fixed Links (15 GHz) (14.5 – 15.35 GHz) BSS feeder links Relay data to GSO space stations from associated Earth stations Other than relay data to GSO space stations from associated Earth stations	Channelling plan for 15 GHz band in accordance with ITU-R Rec. F.636 latest version. The band 14.5-14.8 GHz is part of the APP30A Plan (Feeder Links for BSS) for some SADC countries. Refer to Annex B.
14.8-15.35 GHz	**14.8-15.2 GHz**		

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
FIXED MOBILE Space research 5.339	FIXED NF14 MOBILE Space research 5.339	Fixed Links (15 GHz) (14.5 – 15.35 GHz)	Channelling plan for 15 GHz band in accordance with ITU-R Rec. F.636 latest version. .
	15.2-15.35 GHz FIXED MOBILE Earth exploration-satellite (passive) Space research Space research (passive) 5.339	Fixed Links (15 GHz) (14.5 – 15.35 GHz)	Channelling plan for 15 GHz band in accordance with ITU-R Rec. F.636 latest version.
15.35-15.4 GHz EARTH EXPLORATION- SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340 5.511	**15.35-15.4 GHz** EARTH EXPLORATION- SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340	Very long base inferometry Observations Radio Astronomy (non-thermal synchrotron and enigmatic quasars Passive sensing	
15.4-15.43 GHz RADIOLOCATION 5.511E 5.511F AERONAUTICAL RADIONAVIGATION	**15.4-15.43 GHz** RADIOLOCATION 5.511E 5.511F AERONAUTICAL RADIONAVIGATION	Radio Altimeters/Dopler Radars	ICAO: Guidelines on Radiocommunication (Annex 10)

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
15.43-15.63 GHz FIXED-SATELLITE (Earth-to-space) 5.511A RADIOLOCATION 5.511E 5.511F AERONAUTICAL RADIONAVIGATION 5.511C	**15.43-15.63 GHz** FIXED-SATELLITE (Earth-to-space) 5.511A RADIOLOCATION 5.511E 5.511F AERONAUTICAL RADIONAVIGATION 5.511C	Feeder links of non-GSO-satellite systems in the MSS Radio Altimeters Dopler Radars	ICAO: Guidelines on Radiocommunication (Annex 10)
15.63-15.7 GHz RADIOLOCATION 5.511E 5.511F AERONAUTICAL RADIONAVIGATION	**15.63-15.7 GHz** RADIOLOCATION 5.511E 5.511F AERONAUTICAL RADIONAVIGATION	Radio Altimeters Dopler Radars	ICAO: Guidelines on Radiocommunication (Annex 10)
15.7-16.6 GHz RADIOLOCATION 5.512 5.513	**15.7-16.6 GHz** RADIOLOCATION	Dopler Radars Government Services	Altimeters / Distance measuring equipment
16.6-17.1 GHz RADIOLOCATION Space research (deep space) (Earth-to-space)	**16.6-17.1 GHz** RADIOLOCATION Space research (deep space) (Earth-to-space)		

This gazette is also available free online at www.gpwonline.co.za

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
5.512 5.513			
17.1-17.2 GHz RADIOLOCATION 5.512 5.513	**17.1-17.2 GHz** RADIOLOCATION	WAS / RLAN (17.1 – 17.3 GHz)	Radio Frequency Spectrum Regulations as amended (Annex B) (GG. No. 38641, 30 March 2015).
17.2-17.3 GHz EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active) 5.512 5.513 5.513A	**17.2-17.3 GHz** EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active) 5.513A	WAS / RLAN (17.1 – 17.3 GHz)	Radio Frequency Spectrum Regulations as amended (Annex B) (GG. No. 38641, 30 March 2015).
17.3-17.7 GHz FIXED-SATELLITE (Earth-to-space) 5.516 (space-to-Earth) 5.516A 5.516B Radiolocation	**17.3-17.7 GHz** FIXED-SATELLITE (Earth-to-space) 5.516 (space-to-Earth) 5.516A 5.516B (non-GSO) (Earth-to-space) Radiolocation	Feeder links of GSO-satellite systems in the BSS [HIGH-DENSITYAPPLICATIONS IN THE FSS (space-to-Earth)]	The band 17.3-17.7 GHz is part of the APP30A Plan (Feeder Links for BSS) for many SADC countries; refer to Annex B. The band 17.3-17.7 GHz is identified for HDFSS; Res.143 applies.

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
5.514			
17.7-18.1 GHz FIXED FIXED-SATELLITE (space-to-Earth) 5.484A 5.517A (Earth-to-space) 5.516 MOBILE	**17.7-18.1 GHz** FIXED NF14 FIXED-SATELLITE (space-to-Earth) 5.484A 5.517A (Earth-to-space) 5.516 (non-GSO) (Earth-to-space) MOBILE	Fixed Links (18 GHz) (17.7 – 19.7 GHz) BSS Feeder Links Feeder links of GSO-satellite systems in the BSS	Channelling plan for 18 GHz band in accordance with ITU-R Rec. F.595 latest version Annex 1. Resolution 169 (WRC-19)
18.1-18.4 GHz FIXED FIXED-SATELLITE (space-to-Earth) 5.484A 5.516B 5.517A (Earth-to-space) 5.520 MOBILE 5.519 5.521	**18.1-18.4 GHz** FIXED NF14 FIXED-SATELLITE (space-to-Earth) 5.484A 5.516B 5.517A (Earth-to-space) 5.520 MOBILE METEOROLOGICAL-SATELLITE (GSO) (space-to-Earth) 5.519	Fixed Links (18 GHz) (17.7 – 19.7 GHz) BSS Feeder Links ESIMS (under the FSS) Feeder links of GSO-satellite systems in the BSS	Channelling plan for 18 GHz band in accordance with ITU-R Rec. F.595 latest version Annex 1. Resolution 169 (WRC-19)
18.4-18.6 GHz FIXED FIXED-SATELLITE (space-to-Earth) 5.484A 5.516B 5.517A	**18.4-18.6 GHz** FIXED NF14 FIXED-SATELLITE (space-to-Earth) 5.484A 5.516B 5.517A	Fixed Links (18 GHz) (17.7 – 19.7 GHz) ESIMS (under the FSS)	Channelling plan for 18 GHz band in accordance with ITU-R Rec. F.595 latest version Annex 1. Resolution 169 (WRC-19)

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
MOBILE	MOBILE		
18.6-18.8 GHz EARTH EXPLORATION-SATELLITE (passive) FIXED FIXED-SATELLITE (space-to-Earth) 5.517A 5.522B MOBILE except aeronautical mobile Space research (passive) 5.522A 5.522C	**18.6-18.8 GHz** EARTH EXPLORATION-SATELLITE (passive) FIXED NF14 FIXED-SATELLITE (space-to-Earth) 5.517A 5.522B MOBILE except aeronautical mobile Space research (passive) 5.522A 5.522C	 Fixed Links (18 GHz) (17.7 – 19.7 GHz) System with orbit apogee greater than 20 000 km ESIMS (under the FSS) Passive Sensing	 Channelling plan for 18 GHz band in accordance with ITU-R Rec. F.595 latest version Annex 1 Resolution 169 (WRC-19)
18.8-19.3 GHz FIXED FIXED-SATELLITE (space-to-Earth) 5.517A 5.523A MOBILE	**18.8-19.3 GHz** FIXED NF14 FIXED-SATELLITE (space-to-Earth) 5.517A 5.523A MOBILE	 Fixed Links (18 GHz) (17.7 – 19.7 GHz) ESIMS (under the FSS)	 Channelling plan for 18 GHz band in accordance with ITU-R Rec. F.595 latest version Annex 1 Resolution 169 (WRC-19)
19.3-19.7 GHz FIXED	**19.3-19.6 GHz** FIXED NF14		

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
FIXED-SATELLITE (space-to-Earth) 5.517A 5.523B 5.523C 5.523D 5.523E (Earth-to-space) 5.523B 5.523C 5.523D 5.523E MOBILE	FIXED-SATELLITE (space-to-Earth) 5.517A 5.523B 5.523C 5.523D 5.523E (Earth-to-space) 5.523B 5.523C 5.523D 5.523E MOBILE	Fixed Links (18 GHz) (17.7 – 19.7 GHz) Feeder links of non-GSO-satellite systems in the MSS ESIMS (under the FSS)	Channelling plan for 18 GHz band in accordance with ITU-R Rec. F.595 latest version Annex 1. Resolution 169 (WRC-19)
	19.6-19.7 GHz FIXED NF14 FIXED-SATELLITE (space-to-Earth) 5.523C 5.523D 5.523E (Earth-to-space) 5.523C 5.523D 5.523E MOBILE	Fixed Links (18 GHz) (17.7 – 19.7 GHz) Feeder links of non-GSO-satellite systems in the MSS ESIMS (under the FSS)	Channelling plan for 18 GHz band in accordance with ITU-R Rec. F.595 latest version Annex 1. Resolution 169 (WRC-19)
19.7-20.1 GHz FIXED-SATELLITE (space-to-Earth) 5.484A 5.484B 5.516B 5.527A Mobile-satellite (space-to-Earth) 5.524	**19.7-20.1 GHz** FIXED-SATELLITE (space-to-Earth) 5.484A 5.484B 5.516B 5.527A Mobile-satellite (space-to-Earth)	ESIMS (under the FSS) GSO/FSS [HIGH-DENSITYAPPLICATIONS IN THE FSS (space-to-Earth)]	The band 19.7-20.2 GHz is identified for HDFSS; Res.143 applies. Resolution 156 (WRC-15) applies to ESIMS

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
20.1-20.2 GHz FIXED-SATELLITE (space-to-Earth) 5.484A 5.484B 5.516B 5.527A MOBILE-SATELLITE (space-to-Earth) 5.524 5.525 5.526 5.527 5.528	**20.1-20.2 GHz** FIXED-SATELLITE (space-to-Earth) 5.484A 5.484B 5.516B 5.527A MOBILE-SATELLITE (space-to-Earth) 5.525 5.526 5.527 5.528	ESIMS (under the FSS) [HIGH-DENSITYAPPLICATIONS IN THE FSS (space-to-Earth)]	The band 19.7-20.2 GHz is identified for HDFSS; Res.143 applies. Resolution 156 (WRC-15) applies to ESIMS
20.2-21.2 GHz FIXED-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) Standard frequency and time signal-satellite (space-to-Earth) 5.524	**20.2-21.2 GHz** FIXED-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) Standard frequency and time signal-satellite (space-to-Earth)	Fixed Satellite Systems(TVRO)	
21.2-21.4 GHz EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE SPACE RESEARCH (passive)	**21.2-21.4 GHz** EARTH EXPLORATION-SATELLITE (passive) FIXED NF14 MOBILE SPACE RESEARCH (passive)	Passive Sensing Fixed Links (23 GHz) (21.2 – 23.6 GHz)	Channelling plan for 23 GHz band in accordance with ITU-R Rec. F.637 latest version Annex 1.
21.4-22 GHz	**21.4-22 GHz**		

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
FIXED MOBILE BROADCASTING-SATELLITE 5.208B 5.530A 5.530B	FIXED NF14 MOBILE BROADCASTING-SATELLITE 5.208B 5.530A 5.530B	Fixed Links (23 GHz) (21.2 – 23.6 GHz) Broadcast satellite systems	Channelling plan for 23 GHz band in accordance with ITU-R Rec. F.637 latest version Annex 1. The use of BSS in this band is subject to the provisions of WRC - 15 Resolutions 552 (Rev.WRC-19), and 553 (Rev. WRC-15) and 555." Resolution 555 (Rev. WRC-15) was abrogated on 23 November 2019 (Resolution 99 (Rev. WRC-19))
22-22.21 GHz FIXED MOBILE except aeronautical mobile 5.149	**22-22.21 GHz** FIXED NF14 MOBILE except aeronautical mobile 5.149	Fixed Links (23 GHz) (21.2 – 23.6 GHz) Radio astronomy (red-shifted H_2O Passive Sensing	Channelling plan for 23 GHz band in accordance with ITU-R Rec. F.637 latest version Annex 1. See section 5 for coordination with radio astronomy
22.21-22.5 GHz EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY SPACE RESEARCH (passive)	**22.21-22.5 GHz** EARTH EXPLORATION-SATELLITE (passive) FIXED NF14 MOBILE except aeronautical mobile RADIO ASTRONOMY SPACE RESEARCH (passive)	Fixed Links (23 GHz) (21.2 – 23.6 GHz) Radio astronomy (red-shifted H_2O Passive Sensing	Channelling plan for 23 GHz band in accordance with ITU-R Rec. F.637 latest version Annex 1. See section 5 for coordination with radio astronomy

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
5.149 5.532	5.149 5.532		
22.5-22.55 GHz FIXED MOBILE	**22.5-22.55 GHz** FIXED NF14 MOBILE	Fixed Links (23 GHz) (21.2 – 23.6 GHz)	Channelling plan for 23 GHz band in accordance with ITU-R Rec. F.637 latest version Annex 1
22.55-23.15 GHz FIXED INTER-SATELLITE 5.338A MOBILE SPACE RESEARCH (Earth-to-space) 5.532A 5.149	**22.55-23.15 GHz** FIXED NF14 INTER-SATELLITE 5.338A MOBILE SPACE RESEARCH (Earth-to-space) 5.532A 5.149	Fixed Links (23 GHz) (21.2 – 23.6 GHz)	Channelling plan for 23 GHz band in accordance with ITU-R Rec. F.637 latest version Annex 1. See section 5 for coordination with radio astronomy
23.15-23.55 GHz FIXED INTER-SATELLITE 5.338A MOBILE	**23.15-23.55 GHz** FIXED NF14 INTER-SATELLITE 5.338A MOBILE	Fixed Links (23 GHz) (21.2 – 23.6 GHz)	
23.55-23.6 GHz FIXED	**23.55-23.6 GHz** FIXED NF14	Fixed Links (23 GHz) (21.2 – 23.6 GHz)	

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
MOBILE	MOBILE		Channelling plan for 23 GHz band in accordance with ITU-R Rec. F.637 latest version Annex 1
23.6-24 GHz EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340	**23.6-24 GHz** EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340	 Radio astronomy (observation of ammonia and continuum observations) Passive Sensing	 See section 5 for coordination with radio astronomy
24-24.05 GHz AMATEUR AMATEUR-SATELLITE 5.150	**24-24.05 GHz** AMATEUR AMATEUR-SATELLITE 5.150	 Non-specific SRDs (24-24.25 GHz) ISM (24.0-24.25 GHz) SRD applications (24-24.25 GHz)	 Radio Frequency Spectrum Regulations as amended (Annex B) (GG. No. 38641, 30 March 2015). Common international SRD band; see ITU-R Rec. SM.1896 latest version. The band 24.0-24.25 GHz is designated for ISM applications (5.150).
24.05-24.25 GHz RADIOLOCATION Amateur Earth exploration-satellite (active)	**24.05-24.25 GHz** RADIOLOCATION Amateur Earth exploration-satellite (active)	 FDDA (24.05 – 24.25 GHz) SRDs (24-24.25 GHz) (Reservoir Level Probing Radar)	 Radio Frequency Spectrum Regulations as amended (Annex B) (GG. No. 38641, 30 March 2015).

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
5.150	5.150		The band 24.0-24.25 GHz is designated for ISM applications (5.150). Common international SRD band; see ITU-R Rec. SM.1896 ITU-R Report SM.2153-7 latest version applies
24.25-24.45 GHz FIXED MOBILE except aeronautical mobile 5.338A 5.532AB	**24.25-24.45 GHz** FIXED MOBILE except aeronautical mobile 5.338A 5.532AB NF9	Fixed links – 26 GHz (24.25-26.5 GHz) IMT (24.25 – 27.5 GHz)	Channelling plan for 26 GHz band in accordance with ITU-R Rec. F.748 latest version Annex 1 Temporary fixed links for ENG/OB Resolution 242 **(WRC-19)** Recommendation ITU-R M.1036-6 currently being updated and revised within the ITU-R (International Mobile Telecommunications (IMT)) RFSAP to be developed
24.45-24.65 GHz FIXED INTER-SATELLITE	**24.45-24.65 GHz** FIXED NF14 INTER-SATELLITE	Fixed links – 26 GHz (24.5-26.5 GHz) BFWA (24.5-26.5 GHz) IMT (24.25 – 27.5 GHz)	Channelling plan for 26 GHz band in accordance with ITU-R Rec. F.748 latest version Annex 1. Resolution 242 **(WRC-19)** Recommendation ITU-R M.1036-6 currently being updated and revised within the ITU-R

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
MOBILE except aeronautical mobile 5.338A 5.532AB	MOBILE except aeronautical mobile 5.338A 5.532AB NF9		(International Mobile Telecommunications (IMT)) RFSAP to be developed
24.65-24.75 GHz FIXED FIXED-SATELLITE (Earth-to-space) 5.532B INTER-SATELLITE MOBILE except aeronautical mobile 5.338A 5.532AB	**24.65-24.75 GHz** FIXED NF14 FIXED-SATELLITE (Earth-to-space) 5.532B INTER-SATELLITE MOBILE except aeronautical mobile 5.338A 5.532AB NF9	Fixed links – 26 GHz (24.5-26.5 GHz) BFWA (24.5-26.5 GHz) IMT (24.25 – 27.5 GHz)	Channelling plan for 26 GHz band in accordance with ITU-R Rec. F.748 latest version Annex 1. Resolution 242 (WRC-19) Recommendation ITU-R M.1036-6 currently being updated and revised within the ITU-R (International Mobile Telecommunications (IMT)) RFSAP to be developed
24.75-25.25 GHz FIXED FIXED-SATELLITE (Earth-to-space) 5.532B MOBILE except aeronautical mobile 5.338A 5.532AB	**24.75-25.25 GHz** FIXED NF14 FIXED-SATELLITE (Earth-to-space) 5.532B MOBILE except aeronautical mobile 5.338A 5.532AB NF9	Fixed links - 26 GHz (24.5-26.5 GHz) BFWA (24.5-26.5 GHz) IMT (24.25 – 27.5 GHz)	Channelling plan for 26 GHz band in accordance with ITU-R Rec. F.748 latest version Annex 1. Resolution 242 **(WRC-19)** Recommendation ITU-R M.1036-6 currently being updated and revised within the ITU-R (International Mobile Telecommunications (IMT)) RFSAP to be developed
25.25-25.5 GHz	**25.25-25.5 GHz**		

This gazette is also available free online at www.gpwonline.co.za

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
FIXED 5.534A INTER-SATELLITE 5.536 MOBILE 5.338A 5.532AB Standard frequency and time signal-satellite (Earth-to-space)	FIXED NF14 INTER-SATELLITE (Earth exploration-satellite applications) 5.536 INTER-SATELLITE (space research applications) 5.536 INTER-SATELLITE (transmissions of data originating from industrial and medical activities in space) MOBILE 5.338A 5.532AB NF9 Standard frequency and time signal-satellite (Earth-to-space)	Fixed Links (26 GHz) (24.5 – 26.5 GHz) BFWA (24.5-26.5 GHz IMT (24.25 – 27.5 GHz)	Channelling plan for 26 GHz band in accordance with ITU-R Rec. F.748 latest version Annex 1. Resolution 242 **(WRC-19)** Recommendation ITU-R M.1036-6 currently being updated and revised within the ITU-R (International Mobile Telecommunications (IMT)) RFSAP to be developed
25.5-27 GHz EARTH EXPLORATION-SATELLITE (space-to Earth) 5.536B FIXED 5.534A INTER-SATELLITE 5.536	**25.5-27 GHz** EARTH EXPLORATION-SATELLITE (space-to Earth) 5.536B FIXED NF14 INTER-SATELLITE (Earth exploration-satellite applications) 5.536 INTER-SATELLITE (space research applications) 5.536	National Polar-Orbiting Operational Environment Satellite System (NPOESS) Fixed Links (26 GHz) (24.5 – 26.5 GHz) BFWA (24.5-26.5 GHz	Channelling plan for 26 GHz band in accordance with ITU-R Rec. F.748 latest version Annex 1. Resolution 242 **(WRC-19)** Recommendation ITU-R M.1036-6 currently being updated and revised within the ITU-R

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
MOBILE 5.338A 5.532AB SPACE RESEARCH (space-to-Earth) 5.536C Standard frequency and time signal-satellite (Earth-to-space) 5.536A	INTER-SATELLITE (transmissions of data originating from industrial and medical activities in space) MOBILE 5.338A 5.532AB NF9 SPACE RESEARCH (space-to-Earth) 5.536C Standard frequency and time signal-satellite (Earth-to-space) 5.536A	IMT (24.25 – 27.5 GHz)	(International Mobile Telecommunications (IMT)) RFSAP to be developed
27-27.5 GHz FIXED INTER-SATELLITE 5.536 MOBILE 5.338A 5.532AB	**27-27.5 GHz** FIXED INTER-SATELLITE (Earth exploration-satellite applications) 5.536 INTER-SATELLITE (space research applications) 5.536 INTER-SATELLITE (transmissions of data originating from industrial and medical activities in space) MOBILE 5.338A 5.532AB NF9	I IMT (24.25 – 27.5 GHz)	Recommendation ITU-R M.1036-6 currently being updated and revised within the ITU-R Resolution 242 (WRC-19) (International Mobile Telecommunications (IMT)) RFSAP to be developed
27.5-28.5 GHz FIXED 5.537A	**27.5-27.501 GHz** FIXED 5.537A NF14		

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
FIXED-SATELLITE (Earth-to-space) 5.484A 5.516B 5.517A 5.539 MOBILE	FIXED-SATELLITE (Earth-to-space) 5.484A 5.516B 5.517A 5.539 FIXED-SATELLITE (space-to-Earth) MOBILE 5.538 5.540	Fixed Links (28 GHz) (27.5 – 29.5 GHz), Beacon transmission for up-link power control [HIGH-DENSITYAPPLICATIONS IN THE FSS (space-to-Earth)] ESIMS (under the FSS)	Channelling plan for 28 GHz band in accordance with ITU-R Rec. F.748 latest version Annex 2. The band 27.5-27.82 GHz is identified for HDFSS; Res.143 applies. The band 27.5-30 GHz may be used by the FSS for BSS feeder links. Resolution 169 (WRC-19) RFSAP to be developed.
	27.501-27.82 GHz FIXED 5.537A NF14 NF18 FIXED-SATELLITE (Earth-to-space) 5.484A 5.516B 5.517 A 5.539 Fixed-satellite (space-to-Earth) MOBILE 5.538 5.540	Fixed Links (28 GHz) (27.5 – 29.5 GHz), Beacon transmission for up-link power control) HIGH-DENSITYAPPLICATIONS IN THE FSS (space-to-Earth)] ESIMS (under the FSS)	Channelling plan for 28 GHz band in accordance with ITU-R Rec. F.748 latest version Annex 2. The band 27.5-27.82 GHz is identified for HDFSS; Res.143 applies. The band 27.5-30 GHz may be used by the FSS for BSS feeder links. Resolution 169 (WRC-19) RFSAP to be developed.
	27.82-28.45 GHz FIXED 5.537A NF14	Fixed Links (28 GHz) (27.5 – 29.5 GHz),	Channelling plan for 28 GHz band in accordance with ITU-R Rec. F.748 latest version Annex 2.

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
	FIXED-SATELLITE (Earth-to-space) 5.484A 5.516B 5.517A 5.539 Fixed-satellite (space-to-Earth) MOBILE 5.538 5.540	Beacon transmission for up-link power control) ESIMS (under the FSS)	The band 27.5-27.82 GHz is identified for HDFSS; Res.143 applies. The band 27.5-30 GHz may be used by the FSS for BSS feeder links. RFSAP to be developed.
5.538 5.540	**28.45-28.5 GHz** FIXED 5.537A NF14 FIXED-SATELLITE (Earth-to-space) 5.484A 5.516B 5.517 5.539 Fixed-satellite (space-to-Earth) MOBILE 5.538 5.540	Fixed Links (28 GHz) (27.5 – 29.5 GHz) Beacon transmission for up-link power control) HIGH-DENSITYAPPLICATIONS IN THE FSS (space-to-Earth)] ESIMS (under the FSS)	Channelling plan for 28 GHz band in accordance with ITU-R Rec. F.748 latest version Annex 2. The band 27.5-27.82 GHz is identified for HDFSS; Res.143 applies. The band 27.5-30 GHz may be used by the FSS for BSS feeder links. RFSAP to be developed.
28.5-29.1 GHz FIXED FIXED-SATELLITE (Earth-to-space) 5.484A 5.516B 5.517A 5.523A 5.539 MOBILE Earth exploration-satellite (Earth-to-space) 5.541	**28.5-28.94 GHz** FIXED NF14 FIXED-SATELLITE (Earth-to-space) 5.484A 5.516B 5.517A 5.523A 5.539 MOBILE Earth exploration-satellite (Earth-to-space) 5.541 Fixed-satellite (space-to-Earth)	Fixed Links (28 GHz) (27.5 – 29.5 GHz) Transfer of data between stations Beacon transmission for up-link power control) HIGH-DENSITYAPPLICATIONS IN THE FSS (space-to-Earth)] ESIMS (under the FSS)	Channelling plan for 28 GHz band in accordance with ITU-R Rec. F.748 latest version Annex 2. Resolution 169 (WRC-19) The band 28.45-28.94 GHz is identified for HDFSS; Res.143 applies. The band 27.5-30 GHz may be used by the FSS for BSS feeder links.

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
	5.540		RFSAP to be developed.
5.540	**28.94-29.1 GHz** FIXED NF14 FIXED-SATELLITE (Earth-to-space) 5.484A 5.516B 5.517A 5.523A 5.539 MOBILE Earth exploration-satellite (Earth-to-space) 5.541 Fixed-satellite (space-to-Earth) 5.540	Transfer of data between stations Beacon transmission for up-link power control ESIMS (under the FSS)	Channelling plan for 28 GHz band in accordance with ITU-R Rec. F.748 latest version Annex 2. Resolution 169 (WRC-19) RFSAP to be developed.
29.1-29.5 GHz FIXED FIXED-SATELLITE (Earth-to-space) 5.516B 5.517A 5.523C 5.523E 5.535A 5.539 5.541A MOBILE Earth exploration-satellite (Earth-to-space) 5.541	**29.1-29.46 GHz** FIXED NF14 FIXED-SATELLITE (Earth-to-space) 5.516B 5.517A 5.523C 5.523E 5.535A 5.539 5.541A FIXED-SATELLITE (GSO) (Earth-to-space) MOBILE Earth exploration-satellite (Earth-to-space) 5.541	Fixed Links (28 GHz) (27.5 – 29.5 GHz) ESIMS (under the FSS) Feeder links of non-GSO-satellite systems in the MSS Transfer of data between stations Beacon transmission for up-link power control	Channelling plan for 28 GHz band in accordance with ITU-R Rec. F.748 latest version Annex 2. Resolution 169 (WRC-19) `RFSAP to be developed.

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
	Fixed-satellite (space-to-Earth) 5.540		
5.540	**29.46-29.5** FIXED NF14 FIXED-SATELLITE (Earth-to-space) 5.516B 5.517A 5.523C 5.523E 5.535A 5.539 5.541A FIXED-SATELLITE (GSO) (Earth-to-space) MOBILE Earth exploration-satellite (Earth-to-space) 5.541 Fixed-satellite (space-to-Earth) 5.540	ESIMS (under the FSS) Feeder links of non-GSO-satellite systems in the MSS Transfer of data between stations Beacon transmission for up-link power control HIGH-DENSITYAPPLICATIONS IN THE FSS (space-to-Earth)]	Channelling plan for 28 GHz band in accordance with ITU-R Rec. F.748 latest version Annex 2. Resolution 169 (WRC-19) RFSAP to be developed.
29.5-29.9 GHz FIXED-SATELLITE (Earth-to-space) 5.484A 5.484B 5.516B 5.527A 5.539 Earth exploration-satellite (Earth-to-space) 5.541	**29.5-29.9 GHz** FIXED-SATELLITE (Earth-to-space) 5.484A 5.484B 5.516B 5.527A 5.539 Earth exploration-satellite (Earth-to-space) 5.541 Fixed-satellite (space-to-Earth)	ESIMS (under the FSS) Transfer of data between stations Beacon transmission for up-link power control HIGH-DENSITYAPPLICATIONS IN THE FSS (space-to-Earth)]	The band 29.46-30.0 GHz is identified for HDFSS; Res.143 applies for HDFSS Res 156 (WRC-15) applies for ESIM

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
Mobile-satellite (Earth-to-space) 5.540 5.542	Mobile-satellite (Earth-to-space) 5.540		
29.9-30 GHz FIXED-SATELLITE (Earth-to-space) 5.484A 5.484B 5.516B 5.527A 5.539 MOBILE-SATELLITE (Earth-to-space) Earth exploration-satellite (Earth-to-space) 5.541 5.543	**29.9-29.95 GHz** FIXED-SATELLITE (Earth-to-space) 5.484A 5.484B 5.516B 5.527A 5.539 MOBILE-SATELLITE (Earth-to-space) Earth exploration-satellite (Earth-to-space) 5.541 5.543 Fixed-satellite (space-to-Earth) 5.525 5.526 5.527 5.538 5.540	ESIMS (under the FSS) Transfer of data between stations Beacon transmission for up-link power control HIGH-DENSITY APPLICATIONS IN THE FSS (space-to-Earth)]	The band 29.46-30.0 GHz is identified for HDFSS; Res.143 applies for HDFSS Res 156 (WRC-15) applies for ESIM
	29.95-29.999 GHz FIXED-SATELLITE (Earth-to-space) 5.484A 5.484B 5.516B 5.527A 5.539 MOBILE-SATELLITE (Earth-to-space) Earth exploration-satellite (Earth-to-space) 5.541 5.543 Earth exploration-satellite (space-to-space) Fixed-satellite (space-to-Earth)	ESIMS (under the FSS) Transfer of data between stations Telemetry, tracking and control Beacon transmission for up-link power control HIGH-DENSITY APPLICATIONS IN THE FSS (space-to-Earth)]	The band 29.46-30.0 GHz is identified for HDFSS; Res.143 applies for HDFSS Res 156 (WRC-15) applies for ESIM

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
	5.525 5.526 5.527 5.538 5.540		
5.525 5.526 5.527 5.538 5.540 5.542	**29.999-30 GHz** FIXED-SATELLITE (Earth-to-space) 5.484A 5.484B 5.516B 5.527A 5.539 FIXED-SATELLITE (space-to-Earth) MOBILE-SATELLITE (Earth-to-space) Earth exploration-satellite (Earth-to-space) 5.541 5.543 Earth exploration-satellite (space-to-space) 5.525 5.526 5.527 5.538 5.540	ESIMS (under the FSS) Beacon transmission for up-link power control Transfer of data between stations Telemetry, tracking and control HIGH-DENSITYAPPLICATIONS IN THE FSS (space-to-Earth)]	The band 29.46-30.0 GHz is identified for HDFSS; Res.143 applies for HDFSS Res 156 (WRC-15) applies for ESIM
30-31 GHz FIXED-SATELLITE (Earth-to-space) 5.338A MOBILE-SATELLITE (Earth-to-space) Standard frequency and time signal-satellite (space-to-Earth) 5.542	**30-31 GHz** FIXED-SATELLITE (Earth-to-space) 5.338A MOBILE-SATELLITE (Earth-to-space) Standard frequency and time signal-satellite (space-to-Earth)		
31-31.3 GHz	**31-31.3 GHz**		

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
FIXED 5.338A 5.543B MOBILE Standard frequency and time signal-satellite (space-to-Earth) Space research 5.544 5.545 5.149	FIXED 5.338A 5.543B MOBILE Standard frequency and time signal-satellite (space-to-Earth) Space research 5.544 5.149	[FIXED (HAPS)] Fixed Links Fixed satellite links Radio astronomy (Continuum Observations)	Paired with 27.5 – 28.35 GHz (base station to subscriber) Resolution 167 (WRC-19) See section 5 for coordination with radio astronomy
31.3-31.5 GHz EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340	**31.3-31.5 GHz** EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340	Radio astronomy (Continuum Observations)	Radio astronomy (Continuum Observations)
31.5-31.8 GHz EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) Fixed Mobile except aeronautical mobile	**31.5-31.8 GHz** EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) Fixed 5.546 Mobile except aeronautical mobile 5.546	Radio astronomy (Continuum Observations) Passive Sensing	Radio astronomy (Continuum Observations)

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
5.149 5.546	5.149		
31.8-32 GHz FIXED 5.547A RADIONAVIGATION SPACE RESEARCH (deep space) (space-to-Earth) 5.547 5.547B 5.548	**31.8-32 GHz** FIXED 5.547A NF14 RADIONAVIGATION SPACE RESEARCH (deep space) (space-to-Earth) 5.547 5.548	HDFS (31.8 – 33.4 GHz)	Channelling plan for 32 GHz band in accordance with ITU-R Rec. F.1520 latest version Annex 1. The band 31.8-33.4 GHz is identified for HDFS; Res.75 applies.
32-32.3 GHz FIXED 5.547A RADIONAVIGATION SPACE RESEARCH (deep space) (space-to-Earth) 5.547 5.547C 5.548	**32-32.3 GHz** FIXED 5.547A NF14 RADIONAVIGATION SPACE RESEARCH (deep space) (space-to-Earth) 5.547 5.548	HDFS (31.8 – 33.4 GHz)	Channelling plan for 32 GHz band in accordance with ITU-R Rec. F.1520 latest version Annex 1. The band 31.8-33.4 GHz is identified for HDFS; Res.75 applies.
32.3-33 GHz FIXED 5.547A INTER-SATELLITE RADIONAVIGATION 5.547 5.547D 5.548	**32.3-33 GHz** FIXED 5.547A NF14 INTER-SATELLITE RADIONAVIGATION 5.547 5.548	HDFS (31.8 – 33.4 GHz)	Channelling plan for 32 GHz band in accordance with ITU-R Rec. F.1520 latest version Annex 1. The band 31.8-33.4 GHz is identified for HDFS; Res.75 applies.
33-33.4 GHz FIXED 5.547A	**33-33.4 GHz** FIXED 5.547A NF14	HDFS (31.8 – 33.4 GHz)	

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
RADIONAVIGATION 5.547 5.547E	RADIONAVIGATION 5.547		Channelling plan for 32 GHz band in accordance with ITU-R Rec. F.1520 latest version Annex 1. The band 31.8-33.4 GHz is identified for HDFS; Res.75 applies.
33.4-34.2 GHz RADIOLOCATION 5.549	**33.4-34.2 GHz** RADIOLOCATION	Government Services	
34.2-34.7 GHz RADIOLOCATION SPACE RESEARCH (deep space) (Earth-to-space) 5.549	**34.2-34.7 GHz** RADIOLOCATION SPACE RESEARCH (deep space) (Earth-to-space)	Government Services	
34.7-35.2 GHz RADIOLOCATION Space research 5.550 5.549	**34.7-35.2 GHz** RADIOLOCATION Space research	Government Services	
35.2-35.5 GHz METEOROLOGICAL AIDS RADIOLOCATION 5.549	**35.2-35.5 GHz** METEOROLOGICAL AIDS RADIOLOCATION	Government Services	
35.5-36 GHz	**35.5-36 GHz**		

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
METEOROLOGICAL AIDS EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active) 5.549 5.549A	METEOROLOGICAL AIDS EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active) 5.549A	Government Services	
36-37 GHz EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE SPACE RESEARCH (passive) 5.149 5.550A	**36-37 GHz** EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE SPACE RESEARCH (passive) 5.149 5.550A	Government Services Passive Sensing Radio astronomy (HC3N and OH lines)	See section 5 for coordination with radio astronomy
37-37.5 GHz FIXED MOBILE except aeronautical mobile 5.550B SPACE RESEARCH (space-to-Earth) 5.547	**37-37.5 GHz** FIXED NF14 MOBILE except aeronautical mobile 5.550B SPACE RESEARCH (space-to-Earth) 5.547	Fixed Links (38 GHz) (37.0 – 39.5 GHz) IMT	Resolution **243 (WRC-19)** Recommendation ITU-R M.1036-6 currently being updated and revised within the ITU-R (International Mobile Telecommunications (IMT)) RFSAP to be developed
37.5-38 GHz FIXED	**37.5-38 GHz** FIXED NF14	Fixed Links (38 GHz) (37.0 – 39.5 GHz)	The band 37-40 GHz is identified for HDFS; Res.75 applies.

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
FIXED-SATELLITE (space-to-Earth) 5.550C MOBILE except aeronautical mobile 5.550B SPACE RESEARCH (space-to-Earth) Earth exploration-satellite (space-to-Earth) 5.547	FIXED-SATELLITE (space-to-Earth) 5.550C MOBILE except aeronautical mobile 5.550B SPACE RESEARCH (space-to-Earth) Earth exploration-satellite (space-to-Earth) 5.547	IMT	Resolution **770 (WRC-19)** Resolution **243 (WRC-19)** Channelling plan for 38 GHz band in accordance with ITU Rec. F.749 Annex 1. Recommendation ITU-R M.1036-6 currently being updated and revised within the ITU-R (International Mobile Telecommunications (IMT)) RFSAP to be developed
38-39.5 GHz FIXED 5.550D FIXED-SATELLITE (space-to-Earth) 5.550C MOBILE 5.550B Earth exploration-satellite (space-to-Earth)	**38-39.5 GHz** FIXED 5.550D NF14 FIXED-SATELLITE (space-to-Earth) 5.550C MOBILE 5.550B Earth exploration-satellite (space-to-Earth)	Fixed Links (38 GHz) (37.0 – 39.5 GHz) [FIXED (HAPS)] IMT (37-43.5 GHz)	Channelling plan for 38 GHz band in accordance with ITU Rec. F.749 Annex 1. The band 37-40 GHz is identified for HDFS; Res.75 applies. Resolution **770 (WRC-19)** Resolution **243 (WRC-19)** Recommendation ITU-R M.1036-6 currently being updated and revised within the ITU-R (International Mobile Telecommunications (IMT)) RFSAP to be developed

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
5.547	5.547		
39.5-40 GHz FIXED FIXED-SATELLITE (space-to-Earth) 5.516B 5.550C MOBILE 5.550B MOBILE-SATELLITE (space-to-Earth) Earth exploration-satellite (space-to-Earth) 5.547 5.550E	**39.5-40 GHz** FIXED FIXED-SATELLITE (space-to-Earth) 5.516B 5.550C MOBILE 5.550B MOBILE-SATELLITE (space-to-Earth) Earth exploration-satellite (space-to-Earth) 5.547 5.550E	HIGH-DENSITYAPPLICATIONS IN THE FSS (space-to-Earth)] IMT (37-43.5 GHz) Fixed links	Resolution **770 (WRC-19)** Resolution **243 (WRC-19)** The band 37-40 GHz is identified for HDFS; Res.75 applies. The band 39.5-40 GHz is identified for HDFSS; Res.143 applies. Recommendation ITU-R M.1036-6 currently being updated and revised within the ITU-R International Mobile Telecommunications (IMT)) RFSAP to be developed
40-40.5 GHz EARTH EXPLORATION-SATELLITE (Earth-to-space) FIXED FIXED-SATELLITE (space-to-Earth) 5.516B 5.550C MOBILE 5.550B MOBILE-SATELLITE (space-to-Earth) SPACE RESEARCH (Earth-to-space) Earth exploration-satellite (space-to-Earth)	**40-40.5 GHz** EARTH EXPLORATION-SATELLITE (Earth-to-space) FIXED FIXED-SATELLITE (space-to-Earth) 5.516B 5.550C MOBILE 5.550B MOBILE-SATELLITE (space-to-Earth) SPACE RESEARCH (Earth-to-space) Earth exploration-satellite (space-to-Earth)	Government Services HIGH-DENSITYAPPLICATIONS IN THE FSS (space-to-Earth)] IMT (37-43.5 GHz)	The band 40-40.5 GHz is identified for HDFSS; Res.143 applies. Resolution **770 (WRC-19)** Resolution **243 (WRC-19)** Recommendation ITU-R M.1036-6 currently being updated and revised within the ITU-R (International Mobile Telecommunications (IMT)) RFSAP to be developed

This gazette is also available free online at www.gpwonline.co.za

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
5.550E	5.550E		
40.5-41 GHz FIXED FIXED-SATELLITE (space-to-Earth) 5.550C BROADCASTING BROADCASTING-SATELLITE LAND MOBILE 5.550B Aeronautical mobile Maritime mobile 5.547	**40.5-41 GHz** FIXED NF14 FIXED-SATELLITE (space-to-Earth) 5.550C BROADCASTING BROADCASTING-SATELLITE LAND MOBILE 5.550B Aeronautical mobile Maritime mobile 5.547	Fixed links (40.5 – 43.5 GHz) IMT (37-43.5 GHz)	Resolution **770 (WRC-19** BFWA or MWS (40.5-43.5 GHz). The band 40.5-43.5 GHz is identified for HDFS; Res.75 applies. Resolution **243 (WRC-19)** Recommendation ITU-R M.1036-6 currently being updated and revised within the ITU-R (International Mobile Telecommunications (IMT)) RFSAP to be developed
41-42.5 GHz FIXED FIXED-SATELLITE (space-to-Earth) 5.516B 5.550C BROADCASTING BROADCASTING-SATELLITE LAND MOBILE 5.550B Aeronautical mobile Maritime mobile 5.547 5.551F 5.551H 5.551I	**41-42.5 GHz** FIXED NF14 FIXED-SATELLITE (space-to-Earth) 5.516B 5.550C BROADCASTING BROADCASTING-SATELLITE LAND MOBILE 5.550B Aeronautical mobile Maritime mobile 5.547 5.551H 5.551I	Fixed links (40.5 – 43.5 GHz) IMT (37-43.5 GHz)	Resolution **143 (WRC-19** Resolution **770 (WRC-19** BFWA or MWS (40.5-43.5 GHz). The band 40.5-43.5 GHz is identified for HDFS; Res.75 applies. Recommendation ITU-R M.1036-6 currently being updated and revised within the ITU-R (International Mobile Telecommunications (IMT)) RFSAP to be developed

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
42.5-43.5 GHz FIXED FIXED-SATELLITE (Earth-to-space) 5.552 MOBILE except aeronautical mobile 5.550B RADIO ASTRONOMY 5.149 5.547	**42.5-43.5 GHz** FIXED NF14 FIXED-SATELLITE (Earth-to-space) 5.552 MOBILE except aeronautical mobile 5.550B RADIO ASTRONOMY 5.149 5.547	Fixed links (40.5 – 43.5 GHz) IMT (37-43.5 GHz) Government Services (43.5-45.5 GHz) Radio astronomy (Observation of silicon monoxide)	BFWA or MWS (40.5-43.5 GHz). The band 40.5-43.5 GHz is identified for HDFS; Res.75 applies. Resolution **243 (WRC-19** Recommendation ITU-R M.1036-6 currently being updated and revised within the ITU-R (International Mobile Telecommunications (IMT)) RFSAP to be developed See section 5 for coordination with radio astronomy
43.5-47 GHz MOBILE 5.553 MOBILE-SATELLITE RADIONAVIGATION RADIONAVIGATION-SATELLITE	**43.5-45.5 GHz** **MOBILE 5.553** MOBILE-SATELLITE RADIONAVIGATION RADIONAVIGATION-SATELLITE 5.554		
	45.5-47 GHz		

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
5.554	**MOBILE 5.553** 5.553A MOBILE-SATELLITE RADIONAVIGATION RADIONAVIGATION-SATELLITE 5.554	IMT	Resolution **244 (WRC-19** Recommendation ITU-R M.1036-6 currently being updated and revised within the ITU-R (International Mobile Telecommunications (IMT)) RFSAP to be developed
47-47.2 GHz AMATEUR AMATEUR-SATELLITE	**47-47.2 GHz** AMATEUR AMATEUR-SATELLITE	Amateur Amateur satellite	
47.2-47.5 GHz FIXED FIXED-SATELLITE (Earth-to-space) 5.550C 5.552 MOBILE 5.553B 5.552A	**47.2-47.5 GHz** FIXED FIXED-SATELLITE (Earth-to-space) 5.550C 5.552 MOBILE 5.553B 5.552A	[FIXED (HAPS)] IMT	Resolution **770 (WRC-19)** Resolution **243 (WRC-19)** Recommendation ITU-R M.1036-6 currently being updated and revised within the ITU-R (International Mobile Telecommunications (IMT)) RFSAP to be developed
47.5-47.9 GHz FIXED FIXED-SATELLITE (Earth-to-space) 5.550C 5.552 (space-to-Earth) 5.516B 5.554A	**47.5-47.9 GHz** FIXED FIXED-SATELLITE (Earth-to-space) 5.550C 5.552	The band 47.5-47.9 GHz is identified for HDFSS; Res.143 applies.	Resolution **770 (WRC-19)** Resolution **243 (WRC-19)**

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
MOBILE 5.553B	(GSO) (space-to-Earth) 5.516B 5.554A MOBILE 5.553B	HIGH-DENSITYAPPLICATIONS IN THE FSS (space-to-Earth)] IMT	Recommendation ITU-R M.1036-6 currently being updated and revised within the ITU-R (International Mobile Telecommunications (IMT)) RFSAP to be developed
47.9-48.2 GHz FIXED FIXED-SATELLITE (Earth-to-space) 5.550C 5.552 MOBILE 5.553B 5.552A	**47.9-48.2 GHz** FIXED FIXED-SATELLITE (Earth-to-space) 5.550C 5.552 MOBILE 5.553B 5.552A	[FIXED (HAPS)] IMT	Resolution **770 (WRC-19)** Resolution **243 (WRC-19)** Recommendation ITU-R M.1036-6 currently being updated and revised within the ITU-R (International Mobile Telecommunications (IMT)) RFSAP to be developed
48.2-48.54 GHz FIXED FIXED-SATELLITE (Earth-to-space) 5.550C 5.552 (space-to-Earth) 5.516B 5.554A 5.555B MOBILE	**48.2-48.54 GHz** FIXED FIXED-SATELLITE (Earth-to-space) 5.550C 5.552 (GSO) (space-to-Earth) 5.516B 5.554A 5.555B MOBILE	HIGH-DENSITYAPPLICATIONS IN THE FSS (space-to-Earth)]	The band 48.2-48.54 GHz is identified for HDFSS; Res.143 applies. Resolution **770 (WRC-19** Recommendation ITU-R M.1036-6 currently being up dated and revised within the ITU-R
48.54-49.44 GHz	**48.54-48.94 GHz**		

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
FIXED FIXED-SATELLITE (Earth-to-space) 5.550C 5.552 MOBILE	FIXED FIXED-SATELLITE (Earth-to-space) 5.550C 5.552 MOBILE 5.149 5.340 5.555		Resolution 770 (WRC-19
	48.94-49.04 GHz FIXED FIXED-SATELLITE (Earth-to-space) 5.550C 5.552 MOBILE RADIO ASTRONOMY 5.149 5.340 5.555	Radio astronomy (diatomic molecules and other molecules)	See section 5 for coordination with radio astronomy
5.149 5.340 5.555	**49.04-49.44 GHz** FIXED FIXED-SATELLITE (Earth-to-space) 5.550C 5.552 MOBILE 5.149 5.340 5.555		Resolution **770 (WRC-19**
49.44-50.2 GHz FIXED FIXED-SATELLITE (Earth-to-space) 5.338A 5.550C 5.552	**49.44-50.2 GHz** FIXED FIXED-SATELLITE (Earth-to-space) 5.338A 5.550C 5.552	HIGH-DENSITYAPPLICATIONS IN THE FSS (space-to-Earth)]	Resolution **770 (WRC-19** The band 49.44-50.2 GHz is identified for HDFSS; Res.143 applies.

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
(space-to-Earth) 5.516B 5.554A 5.555B MOBILE	(GSO) (space-to-Earth) 5.516B 5.554A 5.555B MOBILE		
50.2-50.4 GHz EARTH EXPLORATION-SATELLITE (passive) SPACE RESEARCH (passive) 5.340	**50.2-50.4 GHz** EARTH EXPLORATION-SATELLITE (passive) SPACE RESEARCH (passive) 5.340		
50.4-51.4 GHz FIXED FIXED-SATELLITE (Earth-to-space) 5.338A 5.550C MOBILE Mobile-satellite (Earth-to-space)	**50.4-51.4 GHz** FIXED FIXED-SATELLITE (Earth-to-space) 5.338A 5.550C MOBILE Mobile-satellite (Earth-to-space)	Fixed links	Resolution **770 (WRC-19**
51.4-52.4 GHz FIXED FIXED-SATELLITE (Earth-to-space) 5.555C MOBILE 5.338A 5.547 5.556	**51.4-52.4 GHz** FIXED 5.338A FIXED-SATELLITE (GSO) (Earth-to-space) 5.555CMOBILE 5.547 5.556		The band 51.4-52.6 GHz is identified for HDFS; Res.75 applies.
52.4-52.6 GHz	**52.4-52.6 GHz**		

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
FIXED 5.338A MOBILE 5.547 5.556	FIXED 5.338A MOBILE 5.547 5.556		
52.6-54.25 GHz EARTH EXPLORATION-SATELLITE (passive) SPACE RESEARCH (passive) 5.340 5.556	**52.6-54.25 GHz** EARTH EXPLORATION-SATELLITE (passive) SPACE RESEARCH (passive) 5.340 5.556	Passive Sensing (53.6 – 59.3 GHz)	
54.25-55.78 GHz EARTH EXPLORATION-SATELLITE (passive) INTER-SATELLITE 5.556A SPACE RESEARCH (passive) 5.556B	**54.25-55.78 GHz** EARTH EXPLORATION-SATELLITE (passive) INTER-SATELLITE (GSO) 5.556A SPACE RESEARCH (passive)	Passive Sensing (53.6 – 59.3 GHz)	
55.78-56.9 GHz EARTH EXPLORATION-SATELLITE (passive) FIXED 5.557A INTER-SATELLITE 5.556A MOBILE 5.558 SPACE RESEARCH (passive)	**55.78-56.9 GHz** EARTH EXPLORATION-SATELLITE (passive) FIXED 5.557A NF14 INTER-SATELLITE (GSO) 5.556A MOBILE 5.558 SPACE RESEARCH (passive)	Passive Sensing (53.6 – 59.3 GHz)	The band 55.78-59 GHz is identified for HDFS; Res.75 applies.

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
5.547 5.557	5.547		
56.9-57 GHz EARTH EXPLORATION-SATELLITE (passive) FIXED INTER-SATELLITE 5.558A MOBILE 5.558 SPACE RESEARCH (passive) 5.547 5.557	**56.9-57 GHz** EARTH EXPLORATION-SATELLITE (passive) FIXED NF14 INTER-SATELLITE (GSO) 5.558A INTER-SATELLITE (non-GSO) MOBILE 5.558 SPACE RESEARCH (passive) 5.547	Passive Sensing (53.6 – 59.3 GHz) Transmission from HEO to LEO	The band 55.78-59 GHz is identified for HDFS; Res.75 applies.
57-58.2 GHz EARTH EXPLORATION-SATELLITE (passive) FIXED INTER-SATELLITE 5.556A MOBILE 5.558 SPACE RESEARCH (passive) 5.547 5.557	**57-58.2 GHz** EARTH EXPLORATION-SATELLITE (passive) FIXED NF14 INTER-SATELLITE (GSO) 5.556A MOBILE 5.558 SPACE RESEARCH (passive) 5.547	Passive Sensing (53.6 – 59.3 GHz) Fixed links Multiple GIGABIT wireless systems WAS/RLAN SRD applications (57 – 64 GHz)	The band 55.78-59 GHz is identified for HDFS; Res.75 applies. Radio Frequency Spectrum Regulations Amendments, (Government Gazette Number 40436, 22 November 2016). ITU-R Recommendation M.2003 latest version (“Multiple Gigabit Wireless Systems in frequencies around 60 GHz”) Amendment to the Radio Frequency Spectrum Regulations, 2015 Government Gazette 40436 (Notice 781 of 2016)

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
58.2-59 GHz EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE SPACE RESEARCH (passive) 5.547 5.556	**58.2-59 GHz** EARTH EXPLORATION-SATELLITE (passive) FIXED NF14 MOBILE SPACE RESEARCH (passive) 5.547 5.556	Multiple GIGABIT wireless systems WAS/RLAN Passive Sensing (53.6 – 59.3 GHz)	The band 55.78-59 GHz is identified for HDFS; Res.75 applies. Radio Frequency Spectrum Regulations Amendments, (Government Gazette Number 40436, 22 November 2016. ITU-R Recommendation M.2003 latest version ("Multiple Gigabit Wireless Systems in frequencies around 60 GHz") Amendment to the Radio Frequency Spectrum Regulations, 2015 Government Gazette 40436 (Notice 781 of 2016)
59-59.3 GHz EARTH EXPLORATION-SATELLITE (passive) FIXED INTER-SATELLITE 5.556A MOBILE 5.558 RADIOLOCATION 5.559 SPACE RESEARCH (passive)	**59-59.3 GHz** EARTH EXPLORATION-SATELLITE (passive) FIXED INTER-SATELLITE (GSO) 5.556A MOBILE 5.558 RADIOLOCATION 5.559 SPACE RESEARCH (passive)	Multiple GIGABIT wireless systems WAS/RLAN Passive Sensing (53.6 – 59.3 GHz)	Radio Frequency Spectrum Regulations Amendments, (Government Gazette Number 40436, 22 November 2016 ITU-R Recommendation M.2003 latest version ("Multiple Gigabit Wireless Systems in frequencies around 60 GHz") Amendment to the Radio Frequency Spectrum Regulations, 2015

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
			Government Gazette 40436 (Notice 781 of 2016)
59.3-64 GHz FIXED INTER-SATELLITE MOBILE 5.558 RADIOLOCATION 5.559 5.138	**59.3-64 GHz** FIXED INTER-SATELLITE MOBILE 5.558 RADIOLOCATION 5.559 5.138	Multiple GIGABIT wireless systems WAS/RLAN SRD applications (57 – 64 GHz) Government Services	Radio Frequency Spectrum Regulations Amendments (Government Gazette Number 40436, 22 November 2016 The band 61-61.5 GHz is designated for ISM applications (5.138). The band 59 - 61 GHz reserved for government use. Common international SRD band; see ITU-R RecSM. 1896 ITU-R Recommendation M.2003 latest version ("Multiple Gigabit Wireless Systems in frequencies around 60 GHz") Amendment to the Radio Frequency Spectrum Regulations, 2015 Government Gazette 40436 (Notice 781 of 2016)
64-65 GHz FIXED INTER-SATELLITE MOBILE except aeronautical mobile	**64-65 GHz** FIXED INTER-SATELLITE MOBILE except aeronautical mobile		The band 64-66 GHz is identified for HDFS; Res.75 applies. Radio Frequency Spectrum Regulations Amendments

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
5.547 5.556	5.547 5.556		(Government Gazette Number 40436, 22 November 2016. ITU-R Recommendation M.2003 latest version ("Multiple Gigabit Wireless Systems in frequencies around 60 GHz") Amendment to the Radio Frequency Spectrum Regulations, 2015 Government Gazette 40436 (Notice 781 of 2016)
65-66 GHz EARTH EXPLORATION-SATELLITE FIXED INTER-SATELLITE MOBILE except aeronautical mobile SPACE RESEARCH 5.547	**65-66 GHz** EARTH EXPLORATION-SATELLITE FIXED INTER-SATELLITE MOBILE except aeronautical mobile SPACE RESEARCH 5.547	Multiple GIGABIT wireless systems WAS/RLAN	The band 64-66 GHz is identified for HDFS; Res.75 applies. Radio Frequency Spectrum Regulations Amendments (Government Gazette Number 40436, 22 November 2016 ITU-R Recommendation M.2003 latest version ("Multiple Gigabit Wireless Systems in frequencies around 60 GHz") Amendment to the Radio Frequency Spectrum Regulations, 2015 Government Gazette 40436 (Notice 781 of 2016)
66-71 GHz **INTER-SATELLITE** MOBILE 5.553 5.558 5.559AA	**66-71 GHz** INTER-SATELLITE MOBILE 5.553 5.558 5.559AA	IMT	Resolution **241 (WRC-19**

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
MOBILE-SATELLITE RADIONAVIGATION RADIONAVIGATION-SATELLITE 5.554	MOBILE-SATELLITE RADIONAVIGATION RADIONAVIGATION-SATELLITE 5.554		Recommendation ITU-R M.1036-6 latest version currently being updated revied within the ITU-R (International Mobile Telecommunications (IMT)) RFSAP to be developed. Amendment to the Radio Frequency Spectrum Regulations, 2015 Government Gazette 40436 (Notice 781 of 2016)
71-74 GHz FIXED FIXED-SATELLITE (space-to-Earth) MOBILE MOBILE-SATELLITE (space-to-Earth)	**71-74 GHz** FIXED NF14 FIXED-SATELLITE (space-to-Earth) MOBILE MOBILE-SATELLITE (space-to-Earth)	Fixed Links (80 GHz) (71 – 76 GHz) Government use Fixed links (71-76 GHz)	Paired with 81 – 86 GHz. Radio Frequency Spectrum Regulations Amendments (Government Gazette Number 40436, 22 November 2016)
74-76 GHz FIXED FIXED-SATELLITE (space-to-Earth) MOBILE BROADCASTING BROADCASTING-SATELLITE Space research (space-to-Earth) 5.561	**74-76 GHz** FIXED NF14 FIXED-SATELLITE (space-to-Earth) MOBILE BROADCASTING BROADCASTING-SATELLITE Space research (space-to-Earth) 5.561	Fixed Links (80 GHz) (71 – 76 GHz)	Paired with 81 – 86 GHz. Radio Frequency Spectrum Regulations Amendments (Government Gazette Number 40436, 22 November 2016)

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
76-77.5 GHz RADIO ASTRONOMY RADIOLOCATION Amateur Amateur-satellite Space research (space-to-Earth) 5.149	**76-77.5 GHz** RADIO ASTRONOMY RADIOLOCATION Amateur Amateur-satellite Space research (space-to-Earth) 5.149	RTTT (76 – 77 GHz) SRD - Road Transport and Traffic Telematics Radar (76 – 77 GHz)	Radio Frequency Spectrum Regulations as amended (Annex B) (GG. No. 38641, 30 March 2015). Common international SRD band; see ITU-R Rec. SM.1896 and Rec. M.1452 latest version applies.
77.5-78 GHz AMATEUR AMATEUR-SATELLITE RADIOLOCATION 5.559B Radio astronomy Space research (space-to-Earth) 5.149	**77.5-78 GHz** AMATEUR AMATEUR-SATELLITE RADIOLOCATION 5.559B Radio astronomy Space research (space-to-Earth) 5.149	Short-range radars from ground-based applications, including automotive radars	
78-79 GHz RADIOLOCATION Amateur Amateur-satellite Radio astronomy Space research (space-to-Earth) 5.149 5.560	**78-79 GHz** RADIOLOCATION Amateur Amateur-satellite Radio astronomy Space research (space-to-Earth) 5.149 5.560		
79-81 GHz	**79-81 GHz**		

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
RADIO ASTRONOMY RADIOLOCATION Amateur Amateur-satellite Space research (space-to-Earth) 5.149	RADIO ASTRONOMY RADIOLOCATION Amateur Amateur-satellite Space research (space-to-Earth) 5.149		
81-84 GHz FIXED 5.338A FIXED-SATELLITE (Earth-to-space) MOBILE MOBILE-SATELLITE (Earth-to-space) RADIO ASTRONOMY Space research (space-to-Earth)	**81-81.5 GHz** FIXED 5.338A NF14 FIXED-SATELLITE (Earth-to-space) MOBILE MOBILE-SATELLITE (Earth-to-space) RADIO ASTRONOMY Amateur Amateur-satellite Space research (space-to-Earth) 5.149 5.561A	Fixed Links (80 GHz) (81 –86 GHz)	Paired with 71 – 76 GHz. Radio Frequency Spectrum Regulations Amendments (Government Gazette Number 40436, 22 November 2016)
	81.5-84 GHz FIXED 5.338A NF14 FIXED-SATELLITE (Earth-to-space) MOBILE	Fixed Links (80 GHz) (81 –86 GHz)	Paired with 71 – 76 GHz. Radio Frequency Spectrum Regulations Amendments (Government Gazette Number 40436, 22 November 2016)

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
5.149 5.561A	MOBILE-SATELLITE (Earth-to-space) RADIO ASTRONOMY Space research (space-to-Earth) 5.149 5.561A		
84-86 GHz FIXED 5.338A FIXED-SATELLITE (Earth-to-space) 5.561B MOBILE RADIO ASTRONOMY 5.149	**84-86 GHz** FIXED 5.338A NF14 FIXED-SATELLITE (Earth-to-space) 5.561B MOBILE RADIO ASTRONOMY 5.149	Fixed Links (80 GHz) (81 –86 GHz)	Radio Frequency Spectrum Regulations Amendments (Government Gazette Number 40436, 22 November 2016)
86-92 GHz EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340	**86-92 GHz** EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340		
92-94 GHz FIXED 5.338A MOBILE RADIO ASTRONOMY	**92-94 GHz** FIXED 5.338A NF14 MOBILE RADIO ASTRONOMY		

This gazette is also available free online at www.gpwonline.co.za

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
RADIOLOCATION 5.149	RADIOLOCATION 5.149		
94-94.1 GHz EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active) Radio astronomy 5.562 5.562A	**94-94.1 GHz** EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active) Radio astronomy 5.562 5.562A	 Spaceborne cloud radars Short Range Radar. Cloud profile radar. Spaceborne cloud radars	
94.1-95 GHz FIXED MOBILE RADIO ASTRONOMY RADIOLOCATION 5.149	**94.1-95 GHz** FIXED NF14 MOBILE RADIO ASTRONOMY RADIOLOCATION 5.149	 Short Range Radar	
95-100 GHz FIXED MOBILE RADIO ASTRONOMY RADIOLOCATION RADIONAVIGATION RADIONAVIGATION-SATELLITE 5.149 5.554	**95-100 GHz** FIXED MOBILE RADIO ASTRONOMY RADIOLOCATION RADIONAVIGATION RADIONAVIGATION-SATELLITE 5.149 5.554		

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
100-102 GHz EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340 5.341	**100-102 GHz** EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340 5.341	Passive sensing	
102-105 GHz FIXED MOBILE RADIO ASTRONOMY 5.149 5.341	**102-105 GHz** FIXED MOBILE RADIO ASTRONOMY 5.149 5.341		
105-109.5 GHz FIXED MOBILE RADIO ASTRONOMY SPACE RESEARCH (passive) 5.562B 5.149 5.341	**105-109.5 GHz** FIXED MOBILE RADIO ASTRONOMY SPACE RESEARCH (passive) 5.562B 5.149 5.341	Space-based radio astronomy	
109.5-111.8 GHz EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive)	**109.5-111.8 GHz** EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive)	Passive Sensing	

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
5.340 5.341	5.340 5.341		
111.8-114.25 GHz FIXED MOBILE RADIO ASTRONOMY SPACE RESEARCH (passive) 5.562B 5.149 5.341	**111.8-114.25 GHz** FIXED MOBILE RADIO ASTRONOMY SPACE RESEARCH (passive) 5.562B 5.149 5.341	Space-based radio astronomy	
114.25-116 GHz EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340 5.341	**114.25-116 GHz** EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340 5.341		
116-119.98 GHz EARTH EXPLORATION-SATELLITE (passive) INTER-SATELLITE 5.562C SPACE RESEARCH (passive) 5.341	**116-119.98 GHz** EARTH EXPLORATION-SATELLITE (passive) INTER-SATELLITE (GSO) 5.562C SPACE RESEARCH (passive) 5.341	Passive Sensing	
119.98-122.25 GHz	**119.98-122.25 GHz**		

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
EARTH EXPLORATION-SATELLITE (passive) INTER-SATELLITE 5.562C SPACE RESEARCH (passive) 5.138 5.341	EARTH EXPLORATION-SATELLITE (passive) INTER-SATELLITE 5.562C SPACE RESEARCH (passive) 5.138 5.341	Passive Sensing (114.25 – 122.25 GHz)	
122.25-123 GHz FIXED INTER-SATELLITE MOBILE 5.558 Amateur 5.138	**122.25-123 GHz** FIXED INTER-SATELLITE MOBILE 5.558 Amateur 5.138	Collision Avoidance Automation SRD's	
123-130 GHz FIXED-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) RADIONAVIGATION RADIONAVIGATION-SATELLITE Radio astronomy 5.562D 5.149 5.554	**123-130 GHz** FIXED-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) RADIONAVIGATION RADIONAVIGATION-SATELLITE Radio astronomy 5.149 5.554		
130-134 GHz EARTH EXPLORATION-SATELLITE (active) 5.562E FIXED INTER-SATELLITE	**130-133.5 GHz** FIXED INTER-SATELLITE		

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
MOBILE 5.558 RADIO ASTRONOMY 5.149 5.562A	MOBILE 5.558 RADIO ASTRONOMY 5.149 5.562A		
	133.5-134 GHz EARTH EXPLORATION-SATELLITE (active) 5.562E FIXED INTER-SATELLITE MOBILE 5.558 RADIO ASTRONOMY 5.149 5.562A		
134-136 GHz AMATEUR AMATEUR-SATELLITE Radio astronomy	**134-136 GHz** AMATEUR AMATEUR-SATELLITE Radio astronomy		
136-141 GHz RADIO ASTRONOMY RADIOLOCATION Amateur Amateur-satellite 5.149	**136-141 GHz** RADIO ASTRONOMY RADIOLOCATION Amateur Amateur-satellite 5.149		
141-148.5 GHz FIXED	**141-148.5 GHz** FIXED		

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
MOBILE RADIO ASTRONOMY RADIOLOCATION 5.149	MOBILE RADIO ASTRONOMY RADIOLOCATION 5.149		
148.5-151.5 GHz EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340	**148.5-151.5 GHz** EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340	Passive Sensing	
151.5-155.5 GHz FIXED MOBILE RADIO ASTRONOMY RADIOLOCATION 5.149	**151.5-155.5 GHz** FIXED MOBILE RADIO ASTRONOMY RADIOLOCATION 5.149		
155.5-158.5 GHz FIXED MOBILE RADIO ASTRONOMY SPACE RESEARCH (passive) 5.562B 5.149 5.562F 5.562G	**155.5-158.5 GHz** EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE RADIO ASTRONOMY	Passive Sensing	

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
	SPACE RESEARCH (passive) 5.562B 5.149 5.562F 5.562G		
158.5-164 GHz FIXED FIXED-SATELLITE (space-to-Earth) MOBILE MOBILE-SATELLITE (space-to-Earth)	**158.5-164 GHz** FIXED FIXED-SATELLITE (space-to-Earth) MOBILE MOBILE-SATELLITE (space-to-Earth)		
164-167 GHz EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340	**164-167 GHz** EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340	Passive Sensing	
167-174.5 GHz FIXED FIXED-SATELLITE (space-to-Earth) INTER-SATELLITE MOBILE 5.558 5.149 5.562D	**167-174.5 GHz** FIXED FIXED-SATELLITE (space-to-Earth) INTER-SATELLITE MOBILE 5.558 5.149		

This gazette is also available free online at www.gpwonline.co.za

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
174.5-174.8 GHz FIXED INTER-SATELLITE MOBILE 5.558	**174.5-174.8 GHz** FIXED INTER-SATELLITE MOBILE 5.558		
174.8-182 GHz EARTH EXPLORATION-SATELLITE (passive) INTER-SATELLITE 5.562H SPACE RESEARCH (passive)	**174.8-182 GHz** EARTH EXPLORATION-SATELLITE (passive) INTER-SATELLITE (GSO) 5.562H SPACE RESEARCH (passive)	Passive sensing (174.8 – 191.8 GHz)	
182-185 GHz EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340	**182-185 GHz** EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340	Passive sensing (174.8 – 191.8 GHz)	
185-190 GHz EARTH EXPLORATION-SATELLITE (passive) INTER-SATELLITE 5.562H SPACE RESEARCH (passive)	**185-190 GHz** EARTH EXPLORATION-SATELLITE (passive) INTER-SATELLITE (GSO) 5.562H SPACE RESEARCH (passive)	Passive sensing (174.8 – 191.8 GHz)	
190-191.8 GHz	**190-191.8 GHz**		

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
EARTH EXPLORATION-SATELLITE (passive) SPACE RESEARCH (passive) 5.340	EARTH EXPLORATION-SATELLITE (passive) SPACE RESEARCH (passive) 5.340	Passive sensing (174.8 – 191.8 GHz)	
191.8-200 GHz FIXED INTER-SATELLITE MOBILE 5.558 MOBILE-SATELLITE RADIONAVIGATION RADIONAVIGATION-SATELLITE 5.149 5.341 5.554	**191.8-200 GHz** FIXED INTER-SATELLITE MOBILE 5.558 MOBILE-SATELLITE RADIONAVIGATION RADIONAVIGATION-SATELLITE 5.149 5.341 5.554		
200-209 GHz EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340 5.341 5.563A	**200-209 GHz** EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340 5.341 5.563A	Passive sensing.	
209-217 GHz FIXED FIXED-SATELLITE (Earth-to-space) MOBILE RADIO ASTRONOMY	**209-217 GHz** FIXED FIXED-SATELLITE (Earth-to-space) MOBILE RADIO ASTRONOMY		

This gazette is also available free online at www.gpwonline.co.za

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
5.149 5.341	5.149 5.341		
217-226 GHz FIXED FIXED-SATELLITE (Earth-to-space) MOBILE RADIO ASTRONOMY SPACE RESEARCH (passive) 5.562B 5.149 5.341	**217-226 GHz** FIXED FIXED-SATELLITE (Earth-to-space) MOBILE RADIO ASTRONOMY SPACE RESEARCH (passive) 5.562B 5.149 5.341	Space-based radio astronomy	
226-231.5 GHz EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340	**226-231.5 GHz** EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340	Passive Sensing (226 – 232 GHz)	
231.5-232 GHz FIXED MOBILE Radiolocation	**231.5-232 GHz** FIXED MOBILE Radiolocation		
232-235 GHz FIXED FIXED-SATELLITE (space-to-Earth) MOBILE	**232-235 GHz** FIXED FIXED-SATELLITE (space-to-Earth) MOBILE		

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
Radiolocation	Radiolocation		
235-238 GHz EARTH EXPLORATION-SATELLITE (passive) FIXED-SATELLITE (space-to-Earth) SPACE RESEARCH (passive) 5.563A 5.563B	**235-237.9 GHz** EARTH EXPLORATION-SATELLITE (passive) FIXED-SATELLITE (space-to-Earth) SPACE RESEARCH (passive) 5.563A 5.563B	Passive Sensing	
	237.9-238 GHz EARTH EXPLORATION-SATELLITE (active) EARTH EXPLORATION-SATELLITE (passive) FIXED-SATELLITE (space-to-Earth) SPACE RESEARCH (active) SPACE RESEARCH (passive) 5.563A 5.563B		
238-240 GHz FIXED FIXED-SATELLITE (space-to-Earth) MOBILE RADIOLOCATION RADIONAVIGATION RADIONAVIGATION-SATELLITE	**238-240 GHz** FIXED FIXED-SATELLITE (space-to-Earth) MOBILE RADIOLOCATION RADIONAVIGATION RADIONAVIGATION-SATELLITE		

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
240-241 GHz FIXED MOBILE RADIOLOCATION	**240-241 GHz** FIXED MOBILE RADIOLOCATION		
241-248 GHz RADIO ASTRONOMY RADIOLOCATION Amateur Amateur-satellite 5.138 5.149	**241-248 GHz** RADIO ASTRONOMY RADIOLOCATION Amateur Amateur-satellite 5.138 5.149		
248-250 GHz AMATEUR AMATEUR-SATELLITE Radio astronomy 5.149	**248-250 GHz** AMATEUR AMATEUR-SATELLITE Radio astronomy 5.149		
250-252 GHz EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340 5.563A	**250-252 GHz** EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340 5.563A	Passive Sensing	
252-265 GHz	**252-265 GHz**		

This gazette is also available free online at www.gpwonline.co.za

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Notes and Comments
FIXED MOBILE MOBILE-SATELLITE (Earth-to-space) RADIO ASTRONOMY RADIONAVIGATION RADIONAVIGATION-SATELLITE 5.149 5.554	FIXED MOBILE MOBILE-SATELLITE (Earth-to-space) RADIO ASTRONOMY RADIONAVIGATION RADIONAVIGATION-SATELLITE 5.149 5.554		
265-275 GHz FIXED FIXED-SATELLITE (Earth-to-space) MOBILE RADIO ASTRONOMY 5.149 5.563A	**265-275 GHz** FIXED FIXED-SATELLITE (Earth-to-space) MOBILE RADIO ASTRONOMY 5.149 5.563A		
275-3 000 GHz (Not allocated) 5.565 5.564A 5.565	**275-1 000 GHz** (Not allocated) 5.565 5.564A	Radio astronomy service Earth exploration-satellite service (passive) Space research (passive)	
	1 000-3 000 GHz (Not allocated) 5.565 5.564A		Assignments may be considered for Amateur services on a secondary basis above 1000 GHz

5 RADIO ASTRONOMY

The Astronomy Geographic Act, 2007 (AGA Act No. 21 of 2007) provides the legal basis and framework for the declaration of astronomy advantage area and protection of such areas from harmful radio frequency interference that may hamper the cosmic observations by scientific instruments located within those areas. The authority develops the national spectrum allocation, assign frequencies to licensees, and monitor compliance with licence terms. The Astronomy Management Authority (AMA) within the Department of Science and Innovation was assigned to manage the declared Karoo Central Astronomy Advantage Areas (KCAAAs). The Authority gave notice to all radio frequency spectrum licensees operating within the KCAAAs to apply for a permit with the AMA in terms of KCAAAs Regulations; through GG No. 42080 under Notice No. 765 of 4 December 2018.

This section provides information on the regulatory framework established for the protection of radio astronomy in South Africa.

5.1 DECLARATION OF ASTRONOMY ADVANTAGE AREAS

The Minister responsible for science and technology may declare any area or part of an area in the Province of the Northern Cape as an astronomy advantage area to be protected, preserved and properly maintained in respect of radio frequency interference or interference in any other way.

i. The whole of the territory of the Northern Cape Province excluding Sol Plaatje Municipality is declared for radio astronomy purpose, as Declared in GG No. 32951 Notice No. 115 of 19 February 2010.

ii. The Karoo Core Astronomy Advantage Area (KCoreAAA) is used for the purposes of radio astronomy and related scientific endeavours, as declared in GG No. 33462 Notice No. 723 of 20 August 2010.

iii. The Karoo Central Astronomy Advantage Area (KCAAAs) is used for the purpose of radio astronomy and related scientific endeavours, as declared in GG No. 37434 Notice No. 198 of 12 March 2014.

The purpose of the declaration of areas as astronomy advantage areas is to ensure that the geographic area, which are suitable for astronomy and related scientific endeavours is protected, preserved and properly maintained in accordance with good national and international practices.

5.2 REGULATIONS OF ASTRONOMY ADVANTAGE AREAS

The Minister responsible for science and technology may make regulations for the management and protection of astronomy advantage areas.

i. Regulations on radio astronomy protection levels in astronomy advantage areas declared for the purpose of radio astronomy were published in Government Gazette No. 35007 under Notice No. R. 90 of 10 February 2012.

ii. Regulations to prohibit or restrict certain activities in the core astronomy advantage areas declared for the radio astronomy purposes were published in Government Gazette No.35450, under notice No. R. 465of 22 June 2012.

iii. Regulations on the protection of the Karoo central astronomy advantage areas declared for the purpose of radio astronomy were published in Government Gazette No. 41321, under Notice No. 1411 of 15 December 2017.

This gazette is also available free online at www.gpwonline.co.za

The Minister obtained concurrence of ICASA when making regulations for prohibiting or restricting activities that have an adverse effect on astronomy and related scientific endeavours.

5.3 ASTRONOMY DEVICES

The Minister may declare any existing or proposed scientific endeavour to be astronomy and related scientific endeavours for the purpose of the Astronomy Geographic Advantage Act.

i. The establishment and operation of MeerKAT telescope is declared a scientific endeavour in Government Gazette No. 33614, under Notice No. 897 of 15 October 2010.

ii. The establishment and operation of Square Kilometre Array (SKA) telescope is declared a scientific endeavour in Government Gazette No. 33614, under Notice No. 897 of 15 October 2010.

iii. The operation of C-BASS telescope within the spectrum between 4.5 GHz and 6.5 GHz is declared a scientific endeavour in Government Gazette No. 36826, under Notice No. 684 of 13 September 2013.

iv. The development and operation of PAPER telescope and HERA telescope within the spectrum between 100 MHz and 200 MHz is declared a scientific endeavour in Government Gazette No. 36826, under Notice No. 684 of 13 September 2013.

5.4 SPECTRUM LIST EXEMPTED FROM PROHIBITION

From one (1) year after the date that KCAAAs Regulations become operational, no licensee or licence exempted operator shall use, or continue to use the radio frequency spectrum from 100 MHz to 25.5 GHz to conduct radio transmissions within the declared KCAAAs, unless the spectrum is exempted from prohibition. The Minister published a list of the radio frequency spectrum and applications that are exempted from the prohibition of use for transmissions located within the KCAAAs in Government Gazette No. 45045, under Notice No. 753 of 26 August 2021.

5.5 ASTRONOMY FACILITIES WITHIN THE DECLARED AREAS

The use of radio frequency bands in the areas declared as Karoo Core and Central Astronomy Advantage Areas are regulated as follows:

Unless required for the purpose of radio astronomy and related scientific endeavours the use of the radio frequency spectrum in Table 2 is restricted within the declared as Karoo Core and Central Astronomy Advantage Areas.

Table 2: Restrictions on the use of radio frequency spectrum

Declared Area	Prohibited Band
KCoreAAA	9 kHz to 3 000 GHz
KCAAA 1	100 MHz to 2 170 MHz
KCAAA 2	100 MHz to 6 GHz
KCAAA 3	100 MHz to 25.5 GHz

ITU Footnotes

This gazette is also available free online at www.gpwonline.co.za

In terms of section 22(6) of the AGA Actread with section 30(1) and section 31 of the Electronic Communications Act, 2005 (Act No. 36 of 2005) ("ECA"), the Authority has an obligation not to issue Radio Frequency Spectrum Licences where frequency used could cause radio frequency interference ("RFI") in the KCAAA. As a result, the Authority has put measures in place to ensure that it fulfils its role of preventing RFI in the KCAAA when licensing radio communication and broadcasting spectrum licenses. The Authority shall apply the necessary enforcement steps in terms of section 31 of the ECA and relevant regulations pertaining to the failure by a Radio Frequency Spectrum Licensees to comply with the provisions of the ECA including Notice No. 765 in Government Gazette No. 42080 of 4 December 2018.

5.6 ASTRONOMY FACILITIES OUTSIDE THE DECLARED AREAS

The radio instruments located at Hartebeesthoek Radio Astronomy Observatory near Pretoria are registered in the ITU-R MIFR and they include HART15M, HARTRAO and HARTVGS. The observations undertaken by these instruments in RAS bands are globally recognised and internationally protected. The applications and services operating within a 15 km radius from the location; Latitude 25°53'24.06"S and Longitude 27°41'7.45"E; must coordinate with SARAO and give due consideration when operating stations in frequency bands listed under No. 5.149, also identified in the NRFP2021 table of frequency allocation.

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

6 NATIONAL FOOTNOTES TO THE TABLE OF FREQUENCY ALLOCATIONS

NF0 (5350 - 5450 KHz)

The band 5350 – 5450KHz and the channel 5290KHz is allocated on secondary basis to radio amateurs under the Article 4.4 of the ITU Radio Regulations.

NF1 (29.7 - 30 MHz)

This portion of the spectrum is allocated to the amateur service on a secondary basis for use during disaster exercises and emergency situations. This is in addition to the existing exclusive amateur band 28 - 29.7 MHz, which retains its primary status. The additional spectrum is used for single frequency mobile applications.

NF2 (70 - 70.3 MHz)
This sub-band is allocated to the amateur service on a secondary basis in order to undertake experimental work on propagation. The channels 70.025 – 70.150 MHz are used for civil defence purposes.

NF3 (148 - 150.05 MHz)

This frequency band was allocated internationally at WARC-92 for the mobile satellite service (MSS) in the Earth-to-space direction. The space-to-Earth link is provided at either 137 – 138 MHz or 400.15 - 401 MHz, depending on the satellite system.

NF4 (161.875 - 173.875 MHz)

The frequency band is used for sonobouy in the maritime service. Assignments were previously not allowed within a distance of 200 km from the coast. It is generally agreed that there is scope for increased sharing even near the coast. Proper care will be taken in making assignments near the coast in this frequency band and frequency coordination is to be performed with existing services on case by case basis.

NF5 (173.7 – 175.1 MHz)
This frequency band may be used for wireless microphones for services ancillary to Broadcasting (SAB) and services ancillary to programme (SAP) making. Use of wireless microphones must be co-ordinated and licensed.

NF6 (336 - 366 MHz)

The frequency band 336 – 346 MHz, paired with the frequency band 356 – 366 MHz, is allocated to fixed services on a primary basis and is applicable for use by Fixed Wireless Access (FWA) systems. Within this frequency band, the sub-band 337 – 344 MHz paired with 357 – 364 MHz is to be used for WAS whereas the sub-band 344 – 346 MHz paired with 364 – 366 MHz is to be used for alarm monitoring and tracking services using DSSS. The band is also considered for use by the Unmanned Aerial Vehicle (UAV) including Remotely Piloted Aircraft System (RPAS) within the sub band 336-346 paired with 356-366 MHz.This spectrum is potentially very useful for providing electronic communications services, in particular in rural areas considering its excellent propagation conditions.

This gazette is also available free online at **www.gpwonline.co.za**

NF7 (380 – 399.9 MHz)

The frequency band 380 –399.9 MHz is allocated through ITU Resolution 646 (Rev.WRC-15) to Public Protection and Disaster Relief (PPDR) applications in line with ITU-R M.2015.

NF8 (430 - 440 MHz)

This frequency band is allocated to the amateur service in South Africa in line with ITU Region 1. The sub-band 433.05 - 434.79 MHz, however, is also designated as an ISM band in Region 1, subject to the special authorisation of the administration concerned (see RR 5.138). Furthermore, the sub-band 433.05 - 434.79 MHz can be used for non-specific short range devices on an unlicensed basis in accordance with the prescribed Regulations. The consequence of this is that the amateur service may not claim protection from (in-band) emissions from ISM equipment operating in the band, nor can ISM equipment and low power devices claim protection from amateur users operating in the band.

NF9 (IMT Frequency Bands - Terrestrial)

The table below list all possible IMT frequency bands identified by the ITU, relevant ITU Radio Regulation footnote as well as the applicable ITU-R channel plan.

Band	Frequency band	Bandwidth (MHz)	RR FN	Channel Plan	WRC Resolution/s
450 MHz	450 – 470 MHz	20 MHz	5.286AA	Recommendation ITU-R M.1036-6	224 (Rev. WRC-15)
700 MHz	694 – 790 MHz	96 MHz	5.312A and 5.317A	Recommendation ITU-R M.1036-6	224 (Rev.WRC-15) and 760 (WRC-15)
800 MHz	790 — 862 MHz	72 MHz	5.316B and 5.317A	Recommendation ITU-R M.1036-6 (A3)	224 (Rev. WRC-15) and 749 (Rev. WRC-15)
850 MHz	825—830 MHz 870—875 MHz	10 MHz	NF10	Recommendation ITU-R M.1036-6	224 (Rev. WRC-19)
900 MHz	880 – 915 MHz // 925 – 960 MHz	35 MHz	5.317A	Recommendation ITU-R M.1036-6 (A2)	224 (Rev. WRC-15) and 749 (Rev. WRC-15)
1500 MHz	1 427-1 518 MHz	91 MHz	5.341A, 5.346, and 5.346A	Recommendation ITU-R M.1036-6[17]	223 (Rev. WRC-15), 750 (Rev. WRC-15), and 761 (WRC-15)
1800 MHz	1710 – 1785 MHz // 1805 – 1880 MHz	75 MHz	5.384A	Recommendation ITU-	223 (Rev. WRC-15)

[17] Channelling arrangement for 1 427-1 518 MHz is under study at the ITU-R Working Party 5D

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

				R M.1036-6 (B2)	
1900 MHz	1900 – 1920MHz	20 MHz	5.388	Recommendation ITU-R M.1036-6 (B4)	Resolution **212 (Rev.WRC-19)**
2100 MHz	1920 – 1980 MHz // 2110 – 2170 MHz	60 MHz	5.388	Recommendation ITU-R M.1036-6 (B1)	212 (Rev. WRC-07) and 223 (Rev. WRC-12)
2100 MHz (TDD)	1900 – 1920 MHz, 2010 – 2025 MHz	20 MHz	5.388	Recommendation ITU-R M.1036-6 (B1)	212 (Rev. WRC-07) and 223 (Rev. WRC-12)
2300 MHz	2300 – 2400 MHz	100 MHz	5.384A	Recommendation ITU-R M.1036-6 (E1)	223 (Rev. WRC-12)
2600 MHz	2500 – 2690 MHz	190 MHz	5.384A	Recommendation ITU-R M.1036-6 (C1)	223 (Rev. WRC-12)
3500 MHz	3300 – 3400 MHz	100 MHz	5.429B	Recommendation ITU-R M.1036-6[18]	223 (Rev. WRC-19),
3.5 GHz	3400 – 3600 MHz	200 MHz	5.430A	Recommendation ITU-R M.1036-6 (F1)	NA
4.9 GHz	4800 – 4990 MHz	190 MHz	5.441A	Recommendation ITU-R M.1036-6	223 (Rev. WRC-19)
26 GHz	24.25 – 27.5 GHz	3250 MHz	5.532AB	Recommendation ITU-R M.1036-6	242 (Rev. WRC-19)
40 GHz	37 – 43.5 GHz	6500 MHz	5.550B	Recommendation ITU-R M.1036-6	243 (Rev. WRC-19)
48 GHz	47.2 – 48.2 GHz	1000 MHz	5.553B	Recommendation ITU-R M.1036-6	243 (Rev. WRC-19)
66 GHz	66 – 71 GHz	5000 MHz	5.559B	Recommendation ITU-R M.1036-6	241 (Rev. WRC-19)

NF10 (876 - 880 // 921 - 925 MHz)

This frequency band is used by GSM-R systems.

[18] Channelling arrangement for 3300 – 3400 MHz is under study at the ITU-R Working Party 5D

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

NF11 (915 - 921 MHz) – Suppressed

NF12 (1452 - 1492 MHz) – Suppressed

NF13 (1980 – 2010 MHz paired with 2170 – 2200 MHz)

These frequency bands are allocated, amongst others, to both the mobile and mobile-satellite services and are also earmarked for the satellite component of IMT. Further, guidance on the implementation of technical and operational measures to facilitate coexistence between terrestrial and satellite components of International Mobile Telecommunications in the frequency bands 1 980- 2 010 MHz and 2 170-2 200 MHz is addressed within ITU-R in accordance with Resolution **212 (Rev. WRC-19)**,

NF14 (Channel arrangements for Fixed Services Systems)

The table below list the main fixed services frequency bands and the applicable ITU-R Recommendation specifying the applicable frequency channel arrangement. Different channel spacing for each frequency band will allowed in accordance with the relevant ITU-R Recommendation. Sub-division of channels will also be allowed to cater for smaller bandwidth systems. Hop distances will be determined, amongst others, by propagation conditions. Sharing with services other than fixed services is indicated in the comments column.

Band	Band limits	Channel Plan	Comments
1-2GHz	1350 - 1375 MHz // 1492 – 1517 MHz 1375 – 1400 MHz // 1427 – 1452 MHz	ITU-R F.1242	
2 GHz	2025-2110 MHz // 2200-2285 MHz	ITU-R F.1098	
4 GHz	3600 – 4200 MHz	ITU-R F.635, Annex 1	Shared with FSS (downlink) (Note 1)
4.8 GHz	4400 – 5000 MHz	ITU-R F.1099, Annex 1	Government Services
Lower 6 GHz	5925 – 6425 MHz	ITU-R F.383	Shared with FSS (uplink) (Note 2)
Upper 6 GHz	6425 – 7110 MHz	ITU-R F.384	Shared with FSS (Note 3)
7 GHz (L7 + U7)	7110 – 7750 MHz	ITU-R F385, Annex 3	
Lower 8 GHz	7725 – 8275 MHz	ITU-R F.386, Annex 6	
Upper 8 GHz	8275 – 8500 MHz	ITU-R F.386, Annex 1	
10.5 GHz	10.15-10.3 GHz// 10.5-10.65 GHz	ITU-R F.1568, Annex 1	
11 GHz	10.7 – 11.7 GHz	ITU-R F.387	Shared with FSS (Note 4)

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

13 GHz	12.75 – 13.25 GHz	ITU-R F.497	
15 GHz	14.5 – 15.35 GHz	ITU-R F.636	
18 GHz	17.7 – 19.7 GHz	ITU-R F.595, Annex 1	
23 GHz	21.2-23.6 GHz or	ITU-R F.637, Annex 1	Shared with BSS (Note 5)
26 GHz	24.5 – 26.5 GHz	ITU-R F.748, Annex 1	Shared with EESS (Note 6)
28 GHz	27.5 – 29.5 GHz	ITU-R F.748-4, Annex 2	
32 GHz	31.8 – 33.4 GHz	ITU-R F.1520, Annex 1	
38 GHz	37.0 – 39.5 GHz	ITU-R F.749 Annex 1	
42 GHz	40.5 – 43.5 GHz	ITU-R F. 2005	
57 GHz	55.78 – 59 GHz	ITU-R F 1497	
80 GHz	71 – 76 GHz // 81 – 86 GHz	ITU-R F.2006	(Note 7)
94 GHz	92 – 94 GHz 94.1 – 95 GHz	ITU –R F. 2004	

Note 1: The band 3600 – 4200 MHz is used on a national basis for high capacity, core network telecommunication services under the fixed service using (for fixed services links generally over long hop lengths. The band 3625 – 4200 MHz, part of the C-band, is used extensively for FSS (space-to-Earth) applications. This band is shared between FS and FSS.

Note 2: In addition to deployment of fixed services links under the fixed services, the band 5850 – 6425 MHz, part of the C-band, is also used for FSS (Earth-to-space) applications on a shared basis with FS. The C-band is also used for satellite news gathering (SNG) operations, which will require frequency co-ordination with fixed links on a case-by-case basis. Users are encouraged to, as far as possible, use the Ku-band for SNG operations in South Africa in order to avoid the need for frequency coordination and the interference problems associated with C-band SNG operations. The band 5850 – 5926 MHz may also be used for temporary deployment for ENG and OB links under the mobile and fixed services respectively on a strictly coordinated basis.

Note 3: This band is used on a national basis for fixed services links under the fixed service. Fixed links are shared with NGSO MSS (space-to-Earth) feeder links and geo-stationary satellite orbit (GSO) FSS (Earth-to-space) systems on a strictly controlled and co-ordinated basis.

Note 4: This band is used on a national basis for fixed services links under the fixed service. The bands 10.95 – 11.2 GHz and 11.45 – 11.7 GHz are also shared with FSS (space-to-Earth) systems (typically VSAT/SNG and PTP links). The sub-bands 10.95 – 11.2 GHz and 11.45 – 11.7 GHz is also used DTH satellite broadcasting services on a secondary basis to the FS and FSS services.

Note 5: In addition to the fixed services, the band 21.2 – 23 GHz is also allocated to the BSS on a co-primary basis. In accordance with 5.530A, all fixed links must comply to the prescribed pfd limits at national borders, unless otherwise agreed with the administration concerned. In

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

line with 5.530B, the band 21.2 – 23 GHz will not be used for mobile services in South Africa and fixed service deployments will be restricted to for fixed services links.

Note 6: An unmanned receive only earth station, forming part of the National Polar-Orbiting Operational Environmental Satellite System (NPOESS) is located in South Africa, and this system operates within the frequency band 25.5 to 27 GHz in the Earth Exploration Satellite (space-to-earth) service.

Note 7: The frequency bands 71 – 76 GHz paired with 81 – 86 GHz are allocated to the fixed services and is earmarked for very high capacity Broadband Fixed Wireless Systems over very short hop lengths. Radio frequency channel arrangements for fixed service systems operating in the bands 71-76 GHz and81-86 GHz are according to the Radio Frequency Spectrum Regulations (GG. No.38641, 30 March 2015).

NF15 (4400 – 5000 MHz)

The frequency band 4400 – 5000 MHz is allocated to electronic news gathering (ENG) and outside broadcasting (OB) services under the mobile and fixed services respectively, and is shared with Government Services.
NF16 (5725 – 5850 MHz)
The band 5725 – 5875 MHz is designated as an ISM band through ITU-R footnote 5.150. In addition to ISM applications, the band 5725 – 5850 MHz is also available for fixed links on a license-exempt basis, provided adherence to the provisions indicated below. Type Approval of these systems is mandatory. See also Radio Frequency Spectrum Regulations (Annex B) (GG. No.38641, 30 March 2015).
(for additional requirements in using this band.

Frequency Range	Maximum Power	Modulation	Restrictions
5.725 – 5.850 GHz	1 watt peak e.i.r.p	Any modulation	No other restriction other than those related to the maximum power and the modulation scheme.
5.725 – 5.850 GHz	4 watt peak e.i.r.p	Frequency hopping or digital modulation only	No other restriction other than those related to the maximum power and the modulation scheme.
5.725 – 5.850 GHz	200 watt peak e.i.r.p with a max 1 watt peak transmitter power	Digital modulation only	- Fixed Radio Link devices only - Peak power spectral density must not exceed 17dBm /MHz

The Authority reserves the right to require users to change the frequency, reduce the power, or cease operations, where harmful interference is caused.

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

NF17 (14.0 – 14.5 GHz)

The frequency band 14.0 – 14.5 GHz, part of the Ku-band is used extensively for FSS (Earth-to-space) applications (VSAT/SNG/PTP links).

NF18 (27.5 – 28.35 GHz)

The frequency bands 27.5 – 28.35 GHz (base station to subscriber) and 31.000 – 31.300 MHz (subscriber to base station) are allocated to broadband service - local multipoint distribution services (LMDS) under the fixed service using a PTMP topology.

7 ITU RADIO REGULATIONS FOOTNOTES

The ITU Radio Regulations footnote listed are those that are applicable to Region 1.

5.53	Administrations authorising the use of frequencies below 8.3 kHz shall ensure that no harmful interference is caused thereby to the services to which the bands above 8.3 kHz are allocated.
5.54	Administrations conducting scientific research using frequencies below 8.3 kHz are urged to advise other administrations that may be concerned in order that such research may be afforded all practicable protection from harmful interference.
5.54A	Use of the 8.3-11.3 kHz frequency band by stations in the meteorological aids service is limited to passive use only. In the band 9-11.3 kHz, meteorological aids stations shall not claim protection from stations of the radionavigation service submitted for notification to the Bureau prior to 1 January 2013. For sharing between stations of the meteorological aids service and stations in the radionavigation service submitted for notification after this date, the most recent version of Recommendation ITU-R RS.1881 should be applied.
5.54B	*Additional allocation:* in Algeria, Saudi Arabia, Bahrain, Egypt, the United Arab Emirates, the Russian Federation, Iran (Islamic Republic of), Iraq, Kuwait, Lebanon, Morocco, Qatar, the Syrian Arab Republic, Sudan and Tunisia, the frequency band 8.3-9 kHz is also allocated to the radionavigation, fixed and mobile services on a primary basis. (WRC-15)
5.54C	Additional allocation: in China, the frequency band 8.3-9 kHz is also allocated to the maritime radionavigation and maritime mobile services on a primary basis.
5.55	*Additional allocation:* in Armenia, the Russian Federation, Georgia, Kyrgyzstan, Tajikistan and Turkmenistan, the frequency band 14-17 kHz is also allocated to the radionavigation service on a primary basis. (WRC-15)
5.56	The stations of services to which the bands 14-19.95 kHz and 20.05-70 kHz and in Region 1 also the bands 72-84 kHz and 86-90 kHz are allocated may transmit standard frequency and time signals. Such stations shall be afforded protection from harmful interference. In Armenia, Azerbaijan, Belarus, Bulgaria, the Russian Federation, Georgia, Kazakhstan, Kyrgyzstan, , Tajikistan and Turkmenistan, the frequencies 25 kHz and 50 kHz will be used for this purpose under the same conditions. (WRC-12)
5.57	The use of the bands 14-19.95 kHz, 20.05-70 kHz and 70-90 kHz (72-84 kHz and 86-90 kHz in Region 1) by the maritime mobile service is limited to coast radiotelegraph stations (A1A and F1B only). Exceptionally, the use of class J2B or J7B emissions is authorized subject to the necessary bandwidth not exceeding that normally used for class A1A or F1B emissions in the band concerned.
5.58	*Additional allocation:* in Armenia, Azerbaijan, the Russian Federation, Georgia, Kazakhstan, Kyrgyzstan, Tajikistan and Turkmenistan, the band 67-70 kHz is also allocated to the radionavigation service on a primary basis. (WRC-2000)
5.59	*Different category of service:* in Bangladesh and Pakistan, the allocation of the bands 70-72 kHz and 84-86 kHz to the fixed and maritime mobile services is on a primary basis (see No. **5.33**). (WRC-2000)
5.60	In the bands 70-90 kHz (70-86 kHz in Region 1) and 110-130 kHz (112-130 kHz in Region 1), pulsed radionavigation systems may be used on condition that they do not cause harmful interference to other services to which these bands are allocated.

This gazette is also available free online at **www.gpwonline.co.za**

5.61	In Region 2, the establishment and operation of stations in the maritime radionavigation service in the bands 70-90 kHz and 110-130 kHz shall be subject to agreement obtained under No. **9.21** with administrations whose services, operating in accordance with the Table, may be affected. However, stations of the fixed, maritime mobile and radiolocation services shall not cause harmful interference to stations in the maritime radionavigation service established under such agreements.
5.62	Administrations which operate stations in the radionavigation service in the band 90-110 kHz are urged to coordinate technical and operating characteristics in such a way as to avoid harmful interference to the services provided by these stations.
5.63	SUP (WRC-97)
5.64	Only classes A1A or F1B, A2C, A3C, F1C or F3C emissions are authorized for stations of the fixed service in the bands allocated to this service between 90 kHz and 160 kHz (148.5 kHz in Region 1) and for stations of the maritime mobile service in the bands allocated to this service between 110 kHz and 160 kHz (148.5 kHz in Region 1). Exceptionally, class J2B or J7B emissions are also authorized in the bands between 110 kHz and 160 kHz (148.5 kHz in Region 1) for stations of the maritime mobile service.
5.65	Different category of service: in Bangladesh, the allocation of the bands 112-117.6 kHz and 126-129 kHz to the fixed and maritime mobile services is on a primary basis (see No. 5.33). (WRC-2000)
5.66	*Different category of service:* in Germany, the allocation of the band 115-117.6 kHz to the fixed and maritime mobile services is on a primary basis (see No. **5.33**) and to the radionavigation service on a secondary basis (see No. **5.32**).
5.67	*Additional allocation:* in Kyrgyzstan and Turkmenistan, the frequency band 130-148.5 kHz is also allocated to the radionavigation service on a secondary basis. Within and between these countries this service shall have an equal right to operate. (WRC-19)
5.67A	Stations in the amateur service using frequencies in the band 135.7-137.8 kHz shall not exceed a maximum radiated power of 1 W (e.i.r.p.) and shall not cause harmful interference to stations of the radionavigation service operating in countries listed in No. **5.67**. (WRC-07)
5.67B	The use of the frequency band 135.7-137.8 kHz in Algeria, Egypt, Iraq, Lebanon, Syrian Arab Republic, Sudan, South Sudan and Tunisia is limited to the fixed and maritime mobile services. The amateur service shall not be used in the above-mentioned countries in the frequency band 135.7-137.8 kHz, and this should be taken into account by the countries authorizing such use. (WRC-19)
5.68	*Alternative allocation:* in Congo (Rep. of the), the Dem. Rep. of the Congo and South Africa, the frequency band 160- 200 kHz is allocated to the fixed service on a primary basis. (WRC-15)
5.69	*Additional allocation:* in Somalia, the band 200-255 kHz is also allocated to the aeronautical radionavigation service on a primary basis.
5.70	*Alternative allocation:* in Angola, Botswana, Burundi, the Central African Rep., Congo (Rep. of the), Eswatini, Ethiopia, Kenya, Lesotho, Madagascar, Malawi, Mozambique, Namibia, Nigeria, Oman, the Dem. Rep. of the Congo, South Africa, Tanzania, Chad, Zambia and Zimbabwe, the frequency band 200-283.5 kHz is allocated to the aeronautical radionavigation service on a primary basis. (WRC-19)
5.71	SUP (WRC-19)
5.72	SUP (WRC-12)

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

5.73	The band 285-325 kHz (283.5-325 kHz in Region 1) in the maritime radionavigation service may be used to transmit supplementary navigational information using narrow-band techniques, on condition that no harmful interference is caused to radiobeacon stations operating in the radionavigation service. (WRC-97)
5.74	*Additional Allocation:* in Region 1, the frequency band 285.3-285.7 kHz is also allocated to the maritime radionavigation service (other than radiobeacons) on a primary basis.
5.75	*Different category of service:* in Armenia, Azerbaijan, Belarus, the Russian Federation, Georgia, Moldova, Kyrgyzstan, Tajikistan, Turkmenistan, Ukraine and the Black Sea areas of Romania, the allocation of the band 315-325 kHz to the maritime radionavigation service is on a primary basis under the condition that in the Baltic Sea area, the assignment of frequencies in this band to new stations in the maritime or aeronautical radionavigation services shall be subject to prior consultation between the administrations concerned. (WRC-07)
5.76	The frequency 410 kHz is designated for radio direction-finding in the maritime radionavigation service. The other radionavigation services to which the band 405-415 kHz is allocated shall not cause harmful interference to radio direction-finding in the band 406.5-413.5 kHz.
5.77	*Different category of service:* in Australia, China, the French overseas communities of Region 3, Korea (Rep. of), India, Iran (Islamic Republic of), Japan, Pakistan, Papua New Guinea, the Dem. People's Rep. of Korea and Sri Lanka, the allocation of the frequency band 415-495 kHz to the aeronautical radionavigation service is on a primary basis. In Armenia, Azerbaijan, Belarus, the Russian Federation, Kazakhstan, Latvia, Uzbekistan and Kyrgyzstan, the allocation of the frequency band 435-495 kHz to the aeronautical radionavigation service is on a primary basis. Administrations in all the aforementioned countries shall take all practical steps necessary to ensure that aeronautical radionavigation stations in the frequency band 435-495 kHz do not cause interference to reception by coast stations of transmissions from ship stations on frequencies designated for ship stations on a worldwide basis. (WRC-19)
5.78	*Different category of service:* in Cuba, the United States of America and Mexico, the allocation of the band 415-435 kHz to the aeronautical radionavigation service is on a primary basis.
5.79	In the maritime mobile service, the frequency bands 415-495 kHz and 505-526.5 kHz are limited to radiotelegraphy and may also be used for the NAVDAT system in accordance with the most recent version of Recommendation ITU-R. M.2010, subject to agreement between interested and affected administrations. NAVDAT transmitting stations are limited to coast stations. (WRC-19).
5.79A	When establishing coast stations in the NAVTEX service on the frequencies 490 kHz, 518 kHz and 4 209.5 kHz, administrations are strongly recommended to coordinate the operating characteristics in accordance with the procedures of the International Maritime Organization (IMO) (see Resolution **339 (Rev.WRC-07)**). (WRC-07)
5.80	In Region 2, the use of the band 435-495 kHz by the aeronautical radionavigation service is limited to non-directional beacons not employing voice transmission.

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

5.80A	The maximum equivalent isotropically radiated power (e.i.r.p.) of stations in the amateur service using frequencies in the band 472-479 kHz shall not exceed 1 W. Administrations may increase this limit of e.i.r.p. to 5 W in portions of their territory which are at a distance of over 800 km from the borders of Algeria, Saudi Arabia, Azerbaijan, Bahrain, Belarus, China, Comoros, Djibouti, Egypt, United Arab Emirates, the Russian Federation, Iran (Islamic Republic of), Iraq, Jordan, Kazakhstan, Kuwait, Lebanon, Libya, Morocco, Mauritania, Oman, Uzbekistan, Qatar, Syrian Arab Republic, Kyrgyzstan, Somalia, Sudan, Tunisia, Ukraine and Yemen. In this frequency band, stations in the amateur service shall not cause harmful interference to, or claim protection from, stations of the aeronautical radionavigation service.
5.80B	The use of the frequency band 472-479 kHz in Algeria, Saudi Arabia, Azerbaijan, Bahrain, Belarus, China, Comoros, Djibouti, Egypt, United Arab Emirates, the Russian Federation, Iraq, Jordan, Kazakhstan, Kuwait, Lebanon, Libya, Mauritania, Oman, Uzbekistan, Qatar, Syrian Arab Republic, Kyrgyzstan, Somalia, Sudan, Tunisia and Yemen is limited to the maritime mobile and aeronautical radionavigation services. The amateur service shall not be used in the abovementioned countries in this frequency band, and this should be taken into account by the countries authorizing such use.
5.81	SUP (WRC-2000)
5.82	In the maritime mobile service, the frequency 490 kHz is to be used exclusively for the transmission by coast stations of navigational and meteorological warnings and urgent information to ships, by means of narrow-band direct-printing telegraphy. The conditions for use of the frequency 490 kHz are prescribed in Articles 31 and 52. In using the frequency band 415-495 kHz for the aeronautical radionavigation service, administrations are requested to ensure that no harmful interference is caused to the frequency 490 kHz. In using the frequency band 472-479 kHz for the amateur service, administrations shall ensure that no harmful interference is caused to the frequency 490 kHz. (WRC-12)
5.82A	SUP (WRC-12)
5.82B	Administrations authorizing the use of frequencies in the band 495-505 kHz by services other than the maritime mobile service shall ensure that no harmful interference is caused to the maritime mobile service in this band or to the services having allocations in the adjacent bands, noting in particular the conditions of use of the frequencies 490 kHz and 518 kHz, as prescribed in Articles **31** and **52**. (WRC-07)
5.82C	The frequency band 495-505 kHz is used for the international NAVDAT system as described in the most recent version of Recommendation ITU-R M.2010. NAVDAT transmitting stations are limited to coast stations. (WRC-19)
5.83	SUP (WRC-07)
5.84	The conditions for the use of the frequency 518 kHz by the maritime mobile service are prescribed in Articles **31** and **52**. (WRC-07)
5.85	Not used.
5.86	In Region 2, in the band 525-535 kHz the carrier power of broadcasting stations shall not exceed 1 kW during the day and 250 W at night.
5.87	*Additional allocation:* in Angola, Botswana, Eswatini, Lesotho, Malawi, Mozambique, Namibia and Niger, the frequency band 526.5-535 kHz is also allocated to the mobile service on a secondary basis. (WRC-19)
5.87A	*Additional allocation:* in Uzbekistan, the band 526.5-1 606.5 kHz is also allocated to the radionavigation service on a primary basis. Such use is subject to agreement obtained under No. **9.21** with administrations concerned and

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

	limited to ground-based radiobeacons in operation on 27 October 1997 until the end of their lifetime. (WRC-97)
5.88	*Additional allocation:* in China, the band 526.5-535 kHz is also allocated to the aeronautical radionavigation service on a secondary basis.
5.89	In Region 2, the use of the band 1 605-1 705 kHz by stations of the broadcasting service is subject to the Plan established by the Regional Administrative Radio Conference (Rio de Janeiro, 1988). The examination of frequency assignments to stations of the fixed and mobile services in the band 1 625-1 705 kHz shall take account of the allotments appearing in the Plan established by the Regional Administrative Radio Conference (Rio de Janeiro, 1988).
5.90	In the band 1 605-1 705 kHz, in cases where a broadcasting station of Region 2 is concerned, the service area of the maritime mobile stations in Region 1 shall be limited to that provided by ground-wave propagation.
5.91	*Additional allocation:* in the Philippines and Sri Lanka, the band 1 606.5-1 705 kHz is also allocated to the broadcasting service on a secondary basis. (WRC-97)
5.92	Some countries of Region 1 use radiodetermination systems in the bands 1 606.5-1 625 kHz, 1 635-1 800 kHz, 1 850- 2 160 kHz, 2 194-2 300 kHz, 2 502-2 850 kHz and 3 500-3 800 kHz, subject to agreement obtained under No. **9.21**. The radiated mean power of these stations shall not exceed 50 W.
5.93	*Additional allocation:* in Armenia, Azerbaijan, Belarus, the Russian Federation, Georgia, Hungary, Kazakhstan, Latvia, Lithuania, Mongolia, Nigeria, Uzbekistan, Poland, Kyrgyzstan, Slovakia, Tajikistan, Chad, Turkmenistan and Ukraine, the frequency bands 1 625-1 635 kHz, 1 800-1 810 kHz and 2 160-2 170 kHz are also allocated to the fixed and land mobile services on a primary basis, subject to agreement obtained under No. **9.21**. (WRC-15)
5.94	Not used
5.95	Not used.
5.96	In Germany, Armenia, Austria, Azerbaijan, Belarus, Croatia, Denmark, Estonia, the Russian Federation, Finland, Georgia, Hungary, Ireland, Iceland, Israel, Kazakhstan, Latvia, Liechtenstein, Lithuania, Malta, Moldova, Norway, Uzbekistan, Poland, Kyrgyzstan, Slovakia, the Czech Rep., the United Kingdom, Sweden, Switzerland, Tajikistan, Turkmenistan and Ukraine, administrations may allocate up to 200 kHz to their amateur service in the frequency bands 1 715-1 800 kHz and 1 850-2 000 kHz. However, when allocating the frequency bands within this range to their amateur service, administrations shall, after prior consultation with administrations of neighbouring countries, take such steps as may be necessary to prevent harmful interference from their amateur service to the fixed and mobile services of other countries. The mean power of any amateur station shall not exceed 10 W. (WRC-15)
5.97	In Region 3, the Loran system operates either on 1 850 kHz or 1 950 kHz, the bands occupied being 1 825-1 875 kHz and 1 925-1 975 kHz respectively. Other services to which the band 1 800-2 000 kHz is allocated may use any frequency therein on condition that no harmful interference is caused to the Loran system operating on 1 850 kHz or 1 950 kHz.
5.98	*Alternative allocation*: in Armenia, Azerbaijan, Belarus, Belgium, Cameroon, Congo (Rep. of the), Denmark, Egypt, Eritrea, Spain, Ethiopia, the Russian Federation, Georgia, Greece, Italy, Kazakhstan, Lebanon, Lithuania, the Syrian Arab Republic, Kyrgyzstan, Somalia, Tajikistan, Tunisia, Turkmenistan and Turkey, the frequency band 1 810-1 830 kHz is allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis. (WRC-15)

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

5.99	*Additional allocation:* in Saudi Arabia, Austria, Iraq, Libya, Uzbekistan, Slovakia, Romania, Serbia, Slovenia, Chad, and Togo, the band 1 810-1 830 kHz is also allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis. (WRC-12)
5.100	In Region 1, the authorization to use the band 1 810-1 830 kHz by the amateur service in countries situated totally or partially north of 40° N shall be given only after consultation with the countries mentioned in Nos. **5.98** and **5.99** to define the necessary steps to be taken to prevent harmful interference between amateur stations and stations of other services operating in accordance with Nos. **5.98** and **5.99**.
5.101	SUP (WRC12)
5.102	*Alternative allocation:* in Bolivia, Chile, Paraguay and Peru, the frequency band 1 850-2 000 kHz is allocated to the fixed, mobile except aeronautical mobile, radiolocation and radionavigation services on a primary basis. (WRC-15)
5.103	In Region 1, in making assignments to stations in the fixed and mobile services in the bands 1 850-2 045 kHz, 2 194-2 498 kHz, 2 502-2 625 kHz and 2 650-2 850 kHz, administrations should bear in mind the special requirements of the maritime mobile service.
5.104	In Region 1, the use of the band 2 025-2 045 kHz by the meteorological aids service is limited to oceanographic buoy stations.
5.105	In Region 2, except in Greenland, coast stations and ship stations using radiotelephony in the band 2 065-2 107 kHz shall be limited to class J3E emissions and to a peak envelope power not exceeding 1 kW. Preferably, the following carrier frequencies should be used: 2 065.0 kHz, 2 079.0 kHz, 2 082.5 kHz, 2 086.0 kHz, 2 093.0 kHz, 2 096.5 kHz, 2 100.0 kHz and 2 103.5 kHz. In Argentina and Uruguay, the carrier frequencies 2 068.5 kHz and 2 075.5 kHz are also used for this purpose, while the frequencies within the band 2 072-2 075.5 kHz are used as provided in No. **52.165**.
5.106	In Regions 2 and 3, provided no harmful interference is caused to the maritime mobile service, the frequencies between 2 065 kHz and 2 107 kHz may be used by stations of the fixed service communicating only within national borders and whose mean power does not exceed 50 W. In notifying the frequencies, the attention of the Bureau should be drawn to these provisions.
5.107	*Additional allocation:* in Saudi Arabia, Eritrea, Eswatini, Ethiopia, Iraq, Libya and Somalia, the frequency band 2 160-2 170 kHz is also allocated to the fixed and mobile, except aeronautical mobile (R), services on a primary basis. The mean power of stations in these services shall not exceed 50 W. (WRC-19)
5.108	The carrier frequency 2 182 kHz is an international distress and calling frequency for radiotelephony. The conditions for the use of the band 2 173.5-2 190.5 kHz are prescribed in Articles **31** and **52**. (WRC-07)
5.109	The frequencies 2 187.5 kHz, 4 207.5 kHz, 6 312 kHz, 8 414.5 kHz, 12 577 kHz and 16 804.5 kHz are international distress frequencies for digital selective calling. The conditions for the use of these frequencies are prescribed in Article **31**.
5.110	The frequencies 2 174.5 kHz, 4 177.5 kHz, 6 268 kHz, 8 376.5 kHz, 12 520 kHz and 16 695 kHz are international distress frequencies for narrow-band direct-printing telegraphy. The conditions for the use of these frequencies are prescribed in Article **31**.

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

5.111	The carrier frequencies 2 182 kHz, 3 023 kHz, 5 680 kHz, 8 364 kHz and the frequencies 121.5 MHz, 156.525 MHz, 156.8 MHz and 243 MHz may also be used, in accordance with the procedures in force for terrestrial radiocommunication services, for search and rescue operations concerning manned space vehicles. The conditions for the use of the frequencies are prescribed in Article **31**. The same applies to the frequencies 10 003 kHz, 14 993 kHz and 19 993 kHz, but in each of these cases emissions must be confined in a band of ±3 kHz about the frequency. (WRC-07)
5.112	*Alternative allocation:* in Sri Lanka, the frequency band 2 194-2 300 kHz is allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis. (WRC-19)
5.113	For the conditions for the use of the bands 2 300-2 495 kHz (2 498 kHz in Region 1), 3 200-3 400 kHz, 4 750-4 995 kHz and 5 005-5 060 kHz by the broadcasting service, see Nos. **5.16** to **5.20**, **5.21** and **23.3** to **23.10**.
5.114	*Alternative allocation*: in Iraq, the frequency band 2 502-2 625 kHz is allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis. (WRC-19)
5.115	The carrier (reference) frequencies 3 023 kHz and 5 680 kHz may also be used, in accordance with Article **31**, by stations of the maritime mobile service engaged in coordinated search and rescue operations. (WRC-07)
5.116	Administrations are urged to authorize the use of the band 3 155-3 195 kHz to provide a common worldwide channel for low power wireless hearing aids. Additional channels for these devices may be assigned by administrations in the bands between 3 155 kHz and 3 400 kHz to suit local needs. It should be noted that frequencies in the range 3 000 kHz to 4 000 kHz are suitable for hearing aid devices which are designed to operate over short distances within the induction field.
5.117	*Alternative allocation*: in Côte d'Ivoire, Egypt, Liberia, Sri Lanka and Togo, the frequency band 3 155-3 200 kHz is allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis. (WRC-19)
5.118	*Additional allocation:* in the United States, Mexico and Peru, the frequency band 3 230-3 400 kHz is also allocated to the radiolocation service on a secondary basis. (WRC-19)
5.119	*Additional allocation:* in Peru, the frequency band 3 500-3 750 kHz is also allocated to the fixed and mobile services on a primary basis. (WRC-15)
5.120	SUP (WRC-2000)
5.121	Not used.
5.122	*Alternative allocation:* in Bolivia, Chile, Ecuador, Paraguay and Peru, the frequency band 3 750-4 000 kHz is allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis. (WRC-15)
5.123	*Additional allocation:* in Botswana, Eswatini, Lesotho, Malawi, Mozambique, Namibia, South Africa, Zambia and Zimbabwe, the frequency band 3 900-3 950 kHz is also allocated to the broadcasting service on a primary basis, subject to agreement obtained under No. **9.21**. (WRC-19)
5.124	SUP (WRC-2000)
5.125	*Additional allocation:* in Greenland, the band 3 950-4 000 kHz is also allocated to the broadcasting service on a primary basis. The power of the broadcasting stations operating in this band shall not exceed that necessary for a national service and shall in no case exceed 5 kW.
5.126	In Region 3, the stations of those services to which the band 3 995-4 005 kHz is allocated may transmit standard frequency and time signals.

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

5.127	The use of the band 4 000-4 063 kHz by the maritime mobile service is limited to ship stations using radiotelephony (see No. **52.220** and Appendix **17**).
5.128	Frequencies in the bands 4 063-4 123 kHz and 4 130-4 438 kHz may be used exceptionally by stations in the fixed service, communicating only within the boundary of the country in which they are located, with a mean power not exceeding 50 W, on condition that harmful interference is not caused to the maritime mobile service. In addition, in Afghanistan, Argentina, Armenia, Belarus, Botswana, Burkina Faso, the Central African Rep., China, the Russian Federation, Georgia, India, Kazakhstan, Mali, Niger, Pakistan, Kyrgyzstan, Tajikistan, Chad, Turkmenistan and Ukraine, in the frequency bands 4 063-4 123 kHz, 4 130-4 133 kHz and 4 408-4 438 kHz, stations in the fixed service, with a mean power not exceeding 1 kW, can be operated on condition that they are situated at least 600 km from the coast and that harmful interference is not caused to the maritime mobile service. (WRC-19)
5.129	SUP (WRC-07)
5.130	The conditions for the use of the carrier frequencies 4 125 kHz and 6 215 kHz are prescribed in Articles **31** and **52**. (WRC-07)
5.131	The frequency 4 209.5 kHz is used exclusively for the transmission by coast stations of meteorological and navigational warnings and urgent information to ships by means of narrow-band direct-printing techniques. (WRC-97)
5.132	The frequencies 4 210 kHz, 6 314 kHz, 8 416.5 kHz, 12 579 kHz, 16 806.5 kHz, 19 680.5 kHz, 22 376 kHz and 26 100.5 kHz are the international frequencies for the transmission of maritime safety information (MSI) (see Appendix **17**).
5. 132A	Stations in the radiolocation service shall not cause harmful interference to, or claim protection from, stations operating in the fixed or mobile services. Applications of the radiolocation service are limited to oceanographic radars operating in accordance with Resolution **612 (**WRC-12).
5. 132B	*Alternative allocation:* in Armenia, Belarus, Moldova and Kyrgyzstan, the frequency band 4 438-4 488 kHz is allocated to the fixed and mobile, except aeronautical mobile (R), services on a primary basis. (WRC-19)
5.133	*Different category of service:* in Armenia, Azerbaijan, Belarus, the Russian Federation, Georgia, Kazakhstan, Latvia, Lithuania, Niger,Uzbekistan, Kyrgyzstan, Tajikistan, Turkmenistan and Ukraine, the allocation of the band 5 130-5 250 kHz to the mobile, except aeronautical mobile, service is on a primary basis (see No. **5.33**). (WRC-12)
5. 133A	*Alternative allocation:* in Armenia, Belarus, Moldova and Kyrgyzstan, the frequency bands 5 250-5 275 kHz and 26 200- 26 350 kHz are allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis. (WRC-19)
5.133B	Stations in the amateur service using the frequency band 5 351.5-5 366.5 kHz shall not exceed a maximum radiated power of 15 W (e.i.r.p.). However, in Region 2 in Mexico, stations in the amateur service using the frequency band 5 351.5-5 366.5 kHz shall not exceed a maximum radiated power of 20 W (e.i.r.p.). In the following Region 2 countries: Antigua and Barbuda, Argentina, Bahamas, Barbados, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Dominica, El Salvador, Ecuador, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Nicaragua, Panama, Paraguay, Peru, Saint Lucia, Saint Kitts and Nevis, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago, Uruguay, Venezuela, as well as the overseas countries and territories of the Netherlands in Region 2, stations in the amateur service using the frequency band 5 351.5-5 366.5 kHz shall not exceed a maximum radiated power of 25 W (e.i.r.p.). (WRC-19)

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

5.134	The use of the frequency bands 5 900-5 950 kHz, 7 300-7 350 kHz, 9 400-9 500 kHz, 11 600-11 650 kHz, 12 050-12 100 kHz, 13 570-13 600 kHz, 13 800-13 870 kHz, 15 600 15 800 kHz, 17 480-17 550 kHz and 18 900-19 020 kHz by the broadcasting service is subject to the application of the procedure of Article **12**. Administrations are encouraged to use these frequency bands to facilitate the introduction of digitally modulated emissions in accordance with the provisions of Resolution **517 (Rev.WRC-19)**. (WRC-19)
5.135	SUP (WRC-97)
5.136	*Additional allocation:* frequencies in the band 5 900-5 950 kHz may be used by stations in the following services, communicating only within the boundary of the country in which they are located: fixed service (in all three Regions), land mobile service (in Region 1), mobile except aeronautical mobile (R) service (in Regions 2 and 3), on condition that harmful interference is not caused to the broadcasting service. When using frequencies for these services, administrations are urged to use the minimum power required and to take account of the seasonal use of frequencies by the broadcasting service published in accordance with the Radio Regulations. (WRC-07)
5.137	On condition that harmful interference is not caused to the maritime mobile service, the bands 6 200-6 213.5 kHz and 6 220.5-6 525 kHz may be used exceptionally by stations in the fixed service, communicating only within the boundary of the country in which they are located, with a mean power not exceeding 50 W. At the time of notification of these frequencies, the attention of the Bureau will be drawn to the above conditions.
5.138	The following bands: 6 765-6 795 kHz (centre frequency 6 780 kHz), 433.05-434.79 MHz (centre frequency 433.92 MHz) in Region 1 except in the countries mentioned in No. **5.280**, 61-61.5 GHz (centre frequency 61.25 GHz), 122-123 GHz (centre frequency 122.5 GHz), and 244-246 GHz (centre frequency 245 GHz) are designated for industrial, scientific and medical (ISM) applications. The use of these frequency bands for ISM applications shall be subject to special authorization by the administration concerned, in agreement with other administrations whose radiocommunication services might be affected. In applying this provision, administrations shall have due regard to the latest relevant ITU-R Recommendations.
5.138A	Until 29 March 2009, the band 6 765-7 000 kHz is allocated to the fixed service on a primary basis and to the land mobile service on a secondary basis. After this date, this band is allocated to the fixed and the mobile except aeronautical mobile (R) services on a primary basis. (WRC-03)
5.139	*Different category of service:* until 29 March 2009, in Armenia, Azerbaijan, Belarus, the Russian Federation, Georgia, Kazakhstan, Latvia, Lithuania, Mongolia, Uzbekistan, Kyrgyzstan, Tajikistan, Turkmenistan and Ukraine, the allocation of the band 6 765-7 000 kHz to the land mobile service is on a primary basis (see No. **5.33**). (WRC-07)
5.140	*Additional allocation:* in Angola, Iraq, Somalia and Togo, the frequency band 7 000-7 050 kHz is also allocated to the fixed service on a primary basis. (WRC-15)
5.141	*Alternative allocation:* in Egypt, Eritrea, Ethiopia, Guinea, Libya, Madagascar and Niger, the band 7 000-7 050 kHz is allocated to the fixed service on a primary basis. (WRC-12)
5.141A	*Additional allocation:* in Uzbekistan and Kyrgyzstan, the bands 7 000-7 100 kHz and 7 100-7 200 kHz are also allocated to the fixed and land mobile services on a secondary basis. (WRC-03)

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

5.141B	*Additional allocation:* in Algeria, Saudi Arabia, Australia, Bahrain, Botswana, Brunei Darussalam, China, Comoros, Korea (Rep. of), Diego Garcia, Djibouti, Egypt, United Arab Emirates, Eritrea, Guinea, Indonesia, Iran (Islamic Republic of), Japan, Jordan, Kuwait, Libya, Mali, Morocco, Mauritania, Niger, New Zealand, Oman, Papua New Guinea, Qatar, the Syrian Arab Republic, the Dem. People's Rep. of Korea, Singapore, Sudan, South Sudan, Tunisia, Viet Nam and Yemen, the frequency band 7 100-7 200 kHz is also allocated to the fixed and the mobile, except aeronautical mobile (R), services on a primary basis. (WRC-19)
5.141C	In Regions 1 and 3, the band 7 100-7 200 kHz is allocated to the broadcasting service until 29 March 2009 on a primary basis. (WRC-03)
5.142	Until 29 March 2009, the use of the band 7 100-7 300 kHz in Region 2 by the amateur service shall not impose constraints on the broadcasting service intended for use within Region 1 and Region 3. After 29 March 2009 the use of the band 7 200-7 300 kHz in Region 2 by the amateur service shall not impose constraints on the broadcasting service intended for use within Region 1 and Region 3. (WRC-03)
5.143	*Additional allocation:* frequencies in the band 7 300-7 350 kHz may be used by stations in the fixed service and in the land mobile service, communicating only within the boundary of the country in which they are located, on condition that harmful interference is not caused to the broadcasting service. When using frequencies for these services, administrations are urged to use the minimum power required and to take account of the seasonal use of frequencies by the broadcasting service published in accordance with the Radio Regulations. (WRC-07)
5.143A	In Region 3, the band 7 350-7 450 kHz is allocated, until 29 March 2009, to the fixed service on a primary basis and to the land mobile service on a secondary basis. After 29 March 2009, frequencies in this band may be used by stations in the above-mentioned services, communicating only within the boundary of the country in which they are located, on condition that harmful interference is not caused to the broadcasting service. When using frequencies for these services, administrations are urged to use the minimum power required and to take account of the seasonal use of frequencies by the broadcasting service published in accordance with the Radio Regulations. (WRC-03)
5.143B	In Region 1, the band 7 350-7 450 kHz is allocated, until 29 March 2009, to the fixed service on a primary basis and to the land mobile service on a secondary basis. After 29 March 2009, on condition that harmful interference is not caused to the broadcasting service, frequencies in the band 7 350-7 450 kHz may be used by stations in the fixed and land mobile services communicating only within the boundary of the country in which they are located, each station using a total radiated power that shall not exceed 24 dBW. (WRC-03)
5.143C	Additional allocation: after 29 March 2009 in Algeria, Saudi Arabia, Bahrain, Comoros, Djibouti, Egypt, United Arab Emirates, Iran (Islamic Republic of), Libya, Jordan, Kuwait, Morocco, Mauritania, Oman, Qatar, the Syrian Arab Republic, Sudan, South Sudan,Tunisia and Yemen, the bands 7 350-7 400 kHz and 7 400-7 450 kHz are also allocated to the fixed service on a primary basis. (WRC-12)
5.143D	In Region 2, the band 7 350-7 400 kHz is allocated, until 29 March 2009, to the fixed service on a primary basis and to the land mobile service on a secondary basis. After 29 March 2009, frequencies in this band may be used by stations in the above-mentioned services, communicating only within the boundary of the country in which they are located, on condition that harmful interference is not caused to the broadcasting service. When using frequencies for these services, administrations are urged to use the minimum power required and to take

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

	account of the seasonal use of frequencies by the broadcasting service published in accordance with the Radio Regulations. (WRC-03)
5.143E	Until 29 March 2009, the band 7 450-8 100 kHz is allocated to the fixed service on a primary basis and to the land mobile service on a secondary basis. (WRC-03)
5.144	In Region 3, the stations of those services to which the band 7 995-8 005 kHz is allocated may transmit standard frequency and time signals.
5.145	The conditions for the use of the carrier frequencies 8 291 kHz, 12 290 kHz and 16 420 kHz are prescribed in Articles 31 and 52. (WRC-07)
5.145A	Stations in the radiolocation service shall not cause harmful interference to, or claim protection from, stations operating in the fixed service. Applications of the radiolocation service are limited to oceanographic radars operating in accordance with Resolution **612** (WRC-12).
5.145B	*Alternative allocation:* in Armenia, Belarus, Moldova and Kyrgyzstan, the frequency bands 9 305-9 355 kHz and 16 100- 16 200 kHz are allocated to the fixed service on a primary basis. (WRC-19)
5.146	*Additional allocation:* frequencies in the bands 9 400-9 500 kHz, 11 600-11 650 kHz, 12 050-12 100 kHz, 15 600-15 800 kHz, 17 480-17 550 kHz and 18 900-19 020 kHz may be used by stations in the fixed service, communicating only within the boundary of the country in which they are located, on condition that harmful interference is not caused to the broadcasting service. When using frequencies in the fixed service, administrations are urged to use the minimum power required and to take account of the seasonal use of frequencies by the broadcasting service published in accordance with the Radio Regulations. (WRC-07)
5.147	On condition that harmful interference is not caused to the broadcasting service, frequencies in the bands 9 775-9 900 kHz, 11 650-11 700 kHz and 11 975-12 050 kHz may be used by stations in the fixed service communicating only within the boundary of the country in which they are located, each station using a total radiated power not exceeding 24 dBW.

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

5.149	In making assignments to stations of other services to which the bands: 13 360-13 410 kHz, 25 550-25 670 kHz, 37.5-38.25 MHz, 73-74.6 MHz in Regions 1 and 3, 150.05-153 MHz in Region 1, 322-328.6 MHz, 406.1-410 MHz, 608-614 MHz in Regions 1 and 3 1 330-1 400 MHz, 1 610.6-1 613.8 MHz, 1 660-1 670 MHz, 1 718.8-1 722.2 MHz, 2 655-2 690 MHz, 3 260-3 267 MHz, 3 332-3 339 MHz, 3 345.8-3 352.5 MHz, 4 825-4 835 MHz, 4 950-4 990 MHz, 4 990-5 000 MHz, 6 650-6 675.2 MHz, 10.6-10.68 GHz, 14.47-14.5 GHz, 22.01-22.21 GHz, 22.21-22.5 GHz, 22.81-22.86 GHz, 23.07-23.12 GHz, 31.2-31.3 GHz, 31.5-31.8 GHz in Regions 1 and 3, 36.43-36.5 GHz, 42.5-43.5 GHz, 48.94-49.04 GHz, 76-86 GHz, 92-94 GHz, 94.1-100 GHz, 102-109.5 GHz, 111.8-114.25 GHz, 128.33-128.59 GHz, 129.23-129.49 GHz, 130-134 GHz, 136-148.5 GHz, 151.5-158.5 GHz, 168.59-168.93 GHz, 171.11-171.45 GHz, 172.31-172.65 GHz, 173.52-173.85 GHz, 195.75-196.15 GHz, 209-226 GHz, 241-250 GHz, 252-275 GHz are allocated, administrations are urged to take all practicable steps to protect the radio astronomy service from harmful interference. Emissions from spaceborne or airborne stations can be particularly serious sources of interference to the radio astronomy service (see Nos. **4.5** and **4.6** and Article **29**). (WRC-07)
5.149A	*Alternative allocation:* in Armenia, Belarus, Moldova and Kyrgyzstan, the frequency band 13 450-13 550 kHz is allocated to the fixed service on a primary basis and to the mobile, except aeronautical mobile (R), service on a secondary basis. (WRC-19)
5.150	The following bands: 13 553-13 567 kHz (centre frequency 13 560 kHz), 26 957-27 283 kHz (centre frequency 27 120 kHz), 40.66-40.70 MHz (centre frequency 40.68 MHz), 902-928 MHz in Region 2 (centre frequency 915 MHz), 2 400-2 500 MHz (centre frequency 2 450 MHz), 5 725-5 875 MHz (centre frequency 5 800 MHz), and 24-24.25 GHz (centre frequency 24.125 GHz) are also designated for industrial, scientific and medical (ISM) applications. Radiocommunication services operating within these bands must accept harmful interference which may be caused by these applications. ISM equipment operating in these bands is subject to the provisions of No. **15.13**.

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

5.151	*Additional allocation:* frequencies in the bands 13 570-13 600 kHz and 13 800-13 870 kHz may be used by stations in the fixed service and in the mobile except aeronautical mobile (R) service, communicating only within the boundary of the country in which they are located, on the condition that harmful interference is not caused to the broadcasting service. When using frequencies in these services, administrations are urged to use the minimum power required and to take account of the seasonal use of frequencies by the broadcasting service published in accordance with the Radio Regulations. (WRC-07)
5.152	*Additional allocation:* in Armenia, Azerbaijan, China, Côte d'Ivoire, the Russian Federation, Georgia, Iran (Islamic Republic of), Kazakhstan, Uzbekistan, Kyrgyzstan, Tajikistan, Turkmenistan and Ukraine, the band 14 250-14 350 kHz is also allocated to the fixed service on a primary basis. Stations of the fixed service shall not use a radiated power exceeding 24 dBW. (WRC-03)
5.153	In Region 3, the stations of those services to which the band 15 995-16 005 kHz is allocated may transmit standard frequency and time signals.
5.154	*Additional allocation:* in Armenia, Azerbaijan, the Russian Federation, Georgia, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Ukraine, the band 18 068-18 168 kHz is also allocated to the fixed service on a primary basis for use within their boundaries, with a peak envelope power not exceeding 1 kW. (WRC-03)
5.155	*Additional allocation:* in Armenia, Azerbaijan, Belarus, the Russian Federation, Georgia, Kazakhstan, Moldova, Mongolia, Uzbekistan, Kyrgyzstan, Slovakia, Tajikistan, Turkmenistan and Ukraine, the band 21 850-21 870 kHz is also allocated to the aeronautical mobile (R) service on a primary basis. (WRC-07)
5.155A	In Armenia, Azerbaijan, Belarus, the Russian Federation, Georgia, Kazakhstan, Moldova, Mongolia, Uzbekistan, Kyrgyzstan, Slovakia, Tajikistan, Turkmenistan and Ukraine, the use of the band 21 850-21 870 kHz by the fixed service is limited to provision of services related to aircraft flight safety. (WRC-07)
5.155B	The band 21 870-21 924 kHz is used by the fixed service for provision of services related to aircraft flight safety.
5.156	*Additional allocation:* in Nigeria, the band 22 720-23 200 kHz is also allocated to the meteorological aids service (radiosondes) on a primary basis.
5.156A	The use of the band 23 200-23 350 kHz by the fixed service is limited to provision of services related to aircraft flight safety.
5.157	The use of the band 23 350-24 000 kHz by the maritime mobile service is limited to inter-ship radiotelegraphy.
5.158	*Alternative allocation:* in Armenia, Belarus, Moldova and Kyrgyzstan, the frequency band 24 450-24 600 kHz is allocated to the fixed and land mobile services on a primary basis. (WRC-19)
5.159	*Alternative allocation:* in Armenia, Belarus, Moldova and Kyrgyzstan, the frequency band 39-39.5 MHz is allocated to the fixed and mobile services on a primary basis. (WRC-19)
5.160	*Additional allocation:* in Botswana, Burundi, Dem. Rep. of the Congo and Rwanda, the band 41-44 MHz is also allocated to the aeronautical radionavigation service on a primary basis. (WRC-12)
5.161	*Additional allocation:* in Iran (Islamic Republic of) and Japan, the band 41-44 MHz is also allocated to the radiolocation service on a secondary basis.

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

5.161A	*Additional allocation:* in Korea (Rep. of), the United States and Mexico, the frequency bands 41.015-41.665 MHz and 43.35-44 MHz are also allocated to the radiolocation service on a primary basis. Stations in the radiolocation service shall not cause harmful interference to, or claim protection from, stations operating in the fixed or mobile services. Applications of the radiolocation service are limited to oceanographic radars operating in accordance with Resolution **612** (**Rev.WRC-12)**. (WRC-19)
5.161B	*Alternative allocation:* in Albania, Germany, Armenia, Austria, Belarus, Belgium, Bosnia and Herzegovina, Cyprus, Vatican, Croatia, Denmark, Spain, Estonia, Finland, France, Greece, Hungary, Ireland, Iceland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, North Macedonia, Malta, Moldova, Monaco, Montenegro, Norway, Uzbekistan, Netherlands, Portugal, Kyrgyzstan, Slovakia, Czech Rep., Romania, United Kingdom, San Marino, Slovenia, Sweden, Switzerland, Turkey and Ukraine, the frequency band 42-42.5 MHz is allocated to the fixed and mobile services on a primary basis. (WRC-19)
5.162	*Additional allocation:* in Australia, the band 44-47 MHz is also allocated to the broadcasting service on a primary basis.
5.162A	Additional allocation: in Germany, Austria, Belgium, Bosnia and Herzegovina, China, Vatican, Denmark, Spain, Estonia, the Russian Federation, Finland, France, Ireland, Iceland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, North Macedonia, Monaco, Montenegro, Norway, the Netherlands, Poland, Portugal, the Czech Rep., the United Kingdom, Serbia, Slovenia, Sweden and Switzerland the frequency band 46-68 MHz is also allocated to the radiolocation service on a secondary basis. This use is limited to the operation of wind profiler radars in accordance with Resolution **217 (WRC-97)**. (WRC-19)
5.163	*Additional allocation:* in Armenia, Belarus, the Russian Federation, Georgia, Hungary, Kazakhstan, Latvia, Lithuania, Moldova, Uzbekistan, Kyrgyzstan, Tajikistan, Turkmenistan and Ukraine, the bands 47-48.5 MHz and 56.5-58 MHz are also allocated to the fixed and land mobile services on a secondary basis. (WRC-12)
5.164	*Additional allocation:* in Albania, Algeria, Germany, Austria, Belgium, Bosnia and Herzegovina, Botswana, Bulgaria, Côte d'Ivoire, Croatia, Denmark, Spain, Estonia, Eswatini, Finland, France, Gabon, Greece, Hungary, Ireland, Israel, Italy, Jordan, Lebanon, Libya, Liechtenstein, Lithuania, Luxembourg, Madagascar, Mali, Malta, Morocco, Mauritania, Monaco, Montenegro, Nigeria, Norway, the Netherlands, Poland, Syrian Arab Republic, Slovakia, Czech Rep., Romania, the United Kingdom, Serbia, Slovenia, Sweden, Switzerland, Chad, Togo, Tunisia and Turkey, the frequency band 47-68 MHz, in South Africa the frequency band 47-50 MHz, and in Latvia the frequency bands 48.5-56.5 MHz and 58-68 MHz, are also allocated to the land mobile service on a primary basis. However, stations of the land mobile service in the countries mentioned in connection with each frequency band referred to in this footnote shall not cause harmful interference to, or claim protection from, existing or planned broadcasting stations of countries other than those mentioned in connection with the frequency band. (WRC-19)
5.165	*Additional allocation:* in Angola, Cameroon, Congo (Rep. of the), Egypt, Madagascar, Mozambique, Niger, Somalia, Sudan, South Sudan, Tanzania and Chad, the frequency band 47-68 MHz is also allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis. (WRC-19)
5.166	SUP (WRC-15)

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

5.166A	*Different category of service:* in Austria, Cyprus, the Vatican, Croatia, Denmark, Spain, Finland, Hungary, Latvia, the Netherlands, the Czech Republic, the United Kingdom, Slovakia and Slovenia, the frequency band 50.0-50.5 MHz is allocated to the amateur service on a primary basis. Stations in the amateur service in these countries shall not cause harmful interference to, or claim protection from, stations of the broadcasting, fixed and mobile services operating in accordance with the Radio Regulations in the frequency band 50.0-50.5 MHz in the countries not listed in this provision. For a station of these services, the protection criteria in No. **5.169B** shall also apply. In Region 1, with the exception of those countries listed in No. **5.169**, wind profiler radars operating in the radiolocation service under No. **5.162A** are authorized to operate on the basis of equality with stations in the amateur service in the frequency band 50.0-50.5 MHz. (WRC-19)
5.166B	In Region 1, stations in the amateur service operating on a secondary basis shall not cause harmful interference to, or claim protection from, stations of the broadcasting service. The field strength generated by an amateur station in Region 1 in the frequency band 50-52 MHz shall not exceed a calculated value of +6 dB(μV/m) at a height of 10 m above ground for more than 10% of time along the border of a country with operational analogue broadcasting stations in Region 1 and of neighbouring countries with broadcasting stations in Region 3 listed in Nos. **5.167** and **5.168**. (WRC-19)
5.166C	In Region 1, stations in the amateur service in the frequency band 50-52 MHz, with the exception of those countries listed in No. **5.169**, shall not cause harmful interference to, or claim protection from, wind profiler radars operating in the radiolocation service under No. **5.162A**. (WRC-19)
5.166D	*Different category of service:* in Lebanon, the frequency band 50-52 MHz is allocated to the amateur service on a primary basis. Stations in the amateur service in Lebanon shall not cause harmful interference to, or claim protection from, stations of the broadcasting, fixed and mobile services operating in accordance with the Radio Regulations in the frequency band 50-52 MHz in the countries not listed in this provision. (WRC-19)
5.166E	In the Russian Federation, only the frequency band 50.080-50.280 MHz is allocated to the amateur service on a secondary basis. The protection criteria for the other services in the countries not listed in this provision are specified in Nos. **5.166B** and **5.169B**. (WRC-19)
5.167	*Alternative allocation:* in Bangladesh, Brunei Darussalam, India, Iran (Islamic Republic of), Pakistan and Singapore, the frequency band 50-54 MHz is allocated to the fixed, mobile and broadcasting services on a primary basis. (WRC-15)
5.167A	Additional allocation: in Indonesia and Thailand, the frequency band 50-54 MHz is also allocated to the fixed, mobile and broadcasting services on a primary basis. (WRC-15)
5.168	*Additional allocation:* in Australia, China and the Dem. People's Rep. of Korea, the band 50-54 MHz is also allocated to the broadcasting service on a primary basis.
5.169	*Alternative allocation:* in Botswana, Eswatini, Lesotho, Malawi, Namibia, Rwanda, South Africa, Zambia and Zimbabwe, the frequency band 50-54 MHz is allocated to the amateur service on a primary basis. In Senegal, the frequency band 50-51 MHz is allocated to the amateur service on a primary basis. (WRC-19)

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

5.169A	*Alternative allocation:* in the following countries in Region 1: Angola, Saudi Arabia, Bahrain, Burkina Faso, Burundi, the United Arab Emirates, Gambia, Jordan, Kenya, Kuwait, Mauritius, Mozambique, Oman, Uganda, Qatar, South Sudan and Tanzania, the frequency band 50-54 MHz is allocated to the amateur service on a primary basis. In Guinea-Bissau, the frequency band 50.0-50.5 MHz is allocated to the amateur service on a primary basis. In Djibouti, the frequency band 50-52 MHz is allocated to the amateur service on a primary basis. With the exception of those countries listed in No. **5.169**, stations in the amateur service operating in Region 1 under this footnote, in all or part of the frequency band 50- 54 MHz, shall not cause harmful interference to, or claim protection from, stations of other services operating in accordance with the Radio Regulations in Algeria, Egypt, Iran (Islamic Republic of), Iraq, Israel, Libya, Palestine*, the Syrian Arab Republic, the Dem. People's Republic of Korea, Sudan and Tunisia. The field strength generated by an amateur station in the frequency band 50-54 MHz shall not exceed a value of +6 dB(μV/m) at a height of 10 m above ground for more than 10% of time along the borders of listed countries requiring protection. (WRC-19)
5.169B	Except countries listed under No. **5.169**, stations in the amateur service used in Region 1, in all or part of the 50-54 MHz frequency band, shall not cause harmful interference to, or claim protection from, stations of other services used in accordance with the Radio Regulations in Algeria, Armenia, Azerbaijan, Belarus, Egypt, Russian Federation, Iran (Islamic Republic of), Iraq, Kazakhstan, Kyrgyzstan, Libya, Uzbekistan, Palestine*, the Syrian Arab Republic, Sudan, Tunisia and Ukraine. The field strength generated by an amateur station in the frequency band 50-54 MHz shall not exceed a value of +6 dB(μV/m) at a height of 10 m above ground for more than 10% of time along the borders of the countries listed in this provision. (WRC-19)
5.170	*Additional allocation:* in New Zealand, the frequency band 51-54 MHz is also allocated to the fixed and mobile services on a primary basis. (WRC-15)
5.171	*Additional allocation:* in Botswana, Eswatini, Lesotho, Malawi, Mali, Namibia, Dem. Rep. of the Congo, Rwanda, South Africa, Zambia and Zimbabwe, the frequency band 54-68 MHz is also allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis. (WRC-19)
5.172	*Different category of service:* in the French overseas departments and communities in Region 2 and Guyana, the allocation of the frequency band 54-68 MHz to the fixed and mobile services is on a primary basis (see No. **5.33**). (WRC- 15)
5.173	*Different category of service:* in the French overseas departments and communities in Region 2 and Guyana, the allocation of the frequency band 68-72 MHz to the fixed and mobile services is on a primary basis (see No. **5.33**). (WRC- 15)
5.175	*Alternative allocation:* in Armenia, Azerbaijan, Belarus, the Russian Federation, Georgia, Kazakhstan, Moldova, Uzbekistan, Kyrgyzstan, Tajikistan, Turkmenistan and Ukraine, the bands 68-73 MHz and 76-87.5 MHz are allocated to the broadcasting service on a primary basis. In Latvia and Lithuania, the bands 68-73 MHz and 76-87.5 MHz are allocated to the broadcasting and mobile, except aeronautical mobile, services on a primary basis. The services to which these bands are allocated in other countries and the broadcasting service in the countries listed above are subject to agreements with the neighbouring countries concerned. (WRC-07)
5.176	*Additional allocation:* in Australia, China, Korea (Rep. of), the Philippines, the Dem. People's Rep. of Korea and Samoa, the band 68-74 MHz is also allocated to the broadcasting service on a primary basis. (WRC-07)

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

5.177	*Additional allocation:* in Armenia, Azerbaijan, Belarus, the Russian Federation, Georgia, Kazakhstan, Uzbekistan, Kyrgyzstan, Tajikistan, Turkmenistan and Ukraine, the band 73-74 MHz is also allocated to the broadcasting service on a primary basis, subject to agreement obtained under No. **9.21**. (WRC-07)
5.178	*Additional allocation:* in Colombia, Cuba, El Salvador, Guatemala, Guyana, Honduras and Nicaragua, the band 73-74.6 MHz is also allocated to the fixed and mobile services on a secondary basis. (WRC-12)
5.179	*Additional allocation:* in Armenia, Azerbaijan, Belarus, China, the Russian Federation, Georgia, Kazakhstan, Lithuania, Mongolia, Kyrgyzstan, Slovakia, Tajikistan, Turkmenistan and Ukraine, the bands 74.6-74.8 MHz and 75.2-75.4 MHz are also allocated to the aeronautical radionavigation service, on a primary basis, for ground-based transmitters only. (WRC-07)
5.180	The frequency 75 MHz is assigned to marker beacons. Administrations shall refrain from assigning frequencies close to the limits of the guardband to stations of other services which, because of their power or geographical position, might cause harmful interference or otherwise place a constraint on marker beacons. Every effort should be made to improve further the characteristics of airborne receivers and to limit the power of transmitting stations close to the limits 74.8 MHz and 75.2 MHz.
5.181	*Additional allocation:* in Egypt, Israel and the Syrian Arab Republic, the band 74.8-75.2 MHz is also allocated to the mobile service on a secondary basis, subject to agreement obtained under No. **9.21**. In order to ensure that harmful interference is not caused to stations of the aeronautical radionavigation service, stations of the mobile service shall not be introduced in the band until it is no longer required for the aeronautical radionavigation service by any administration which may be identified in the application of the procedure invoked under No. **9.21**. (WRC-03)
5.182	*Additional allocation:* in Western Samoa, the band 75.4-87 MHz is also allocated to the broadcasting service on a primary basis.
5.183	*Additional allocation:* in China, Korea (Rep. of), Japan, the Philippines and the Dem. People's Rep. of Korea, the band 76-87 MHz is also allocated to the broadcasting service on a primary basis.
5.184	SUP (WRC-07)
5.185	*Different category of service:* in the United States, the French overseas departments and communities in Region 2, Guyana and Paraguay, the allocation of the frequency band 76-88 MHz to the fixed and mobile services is on a primary basis (see No. **5.33**). (WRC-15)
5.186	SUP (WRC-97)
5.187	*Alternative allocation:* in Albania, the band 81-87.5 MHz is allocated to the broadcasting service on a primary basis and used in accordance with the decisions contained in the Final Acts of the Special Regional Conference (Geneva, 1960).
5.188	*Additional allocation:* in Australia, the band 85-87 MHz is also allocated to the broadcasting service on a primary basis. The introduction of the broadcasting service in Australia is subject to special agreements between the administrations concerned.
5.189	Not used.
5.190	*Additional allocation:* in Monaco, the band 87.5-88 MHz is also allocated to the land mobile service on a primary basis, subject to agreement obtained under No. **9.21**. (WRC-97)
5.191	Not used.

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

5.192	*Additional allocation:* in China and Korea (Rep. of), the band 100-108 MHz is also allocated to the fixed and mobile services on a primary basis. (WRC-97)
5.193	Not used.
5.194	*Additional allocation:* in Kyrgyzstan, Somalia and Turkmenistan, the frequency band 104-108 MHz is also allocated to the mobile, except aeronautical mobile (R), service on a secondary basis. (WRC-19)
5.195	Not used
5.196	Not used.
5.197	*Additional allocation:* in the Syrian Arab Republic, the band 108-111.975 MHz is also allocated to the mobile service on a secondary basis, subject to agreement obtained under No. **9.21**. In order to ensure that harmful interference is not caused to stations of the aeronautical radionavigation service, stations of the mobile service shall not be introduced in the band until it is no longer required for the aeronautical radionavigation service by any administration which may be identified in the application of the procedures invoked under No. **9.21**. (WRC-12)
5.197A	*Additional allocation:* the band 108-117.975 MHz is also allocated on a primary basis to the aeronautical mobile (R) service, limited to systems operating in accordance with recognized international aeronautical standards. Such use shall be in accordance with Resolution **413 (Rev.WRC-07)**. The use of the band 108-112 MHz by the aeronautical mobile (R) service shall be limited to systems composed of ground-based transmitters and associated receivers that provide navigational information in support of air navigation functions in accordance with recognized international aeronautical standards. (WRC-07)
5.200	In the band 117.975-137 MHz, the frequency 121.5 MHz is the aeronautical emergency frequency and, where required, the frequency 123.1 MHz is the aeronautical frequency auxiliary to 121.5 MHz. Mobile stations of the maritime mobile service may communicate on these frequencies under the conditions laid down in Article **31** for distress and safety purposes with stations of the aeronautical mobile service. (WRC-07)
5.201	*Additional allocation:* in Armenia, Azerbaijan, Belarus, Bulgaria, Estonia, the Russian Federation, Georgia, Hungary, Iran (Islamic Republic of), Iraq (Republic of), Japan, Kazakhstan, Mali, Mongolia, Mozambique, Uzbekistan, Papua New Guinea, Poland, Kyrgyzstan, Romania, Senegal, Tajikistan, Turkmenistan and Ukraine, the frequency band 132-136 MHz is also allocated to the aeronautical mobile (OR) service on a primary basis. In assigning frequencies to stations of the aeronautical mobile (OR) service, the administration shall take account of the frequencies assigned to stations in the aeronautical mobile (R) service. (WRC-19)
5.202	*Additional allocation:* in Saudi Arabia, Armenia, Azerbaijan, Bahrain, Belarus, Bulgaria, the United Arab Emirates, the Russian Federation, Georgia, Iran (Islamic Republic of), Jordan, Mali, Oman, Uzbekistan, Poland, the Syrian Arab Republic, Kyrgyzstan, Romania, Senegal, Tajikistan, Turkmenistan and Ukraine, the frequency band 136-137 MHz is also allocated to the aeronautical mobile (OR) service on a primary basis. In assigning frequencies to stations of the aeronautical mobile (OR) service, the administration shall take account of the frequencies assigned to stations in the aeronautical mobile (R) service. (WRC-19)
5.203	SUP (WRC-07)
5.203A	SUP(WRC-07)
5.203B	SUP(WRC-07)

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

5.203C	The use of the space operation service (space-to-Earth) with non-geostationary satellite short-duration mission systems in the frequency band 137-138 MHz is subject to Resolution **660 (WRC-19)**. Resolution **32 (WRC-19)** applies. These systems shall not cause harmful interference to, or claim protection from, the existing services to which the frequency band is allocated on a primary basis. (WRC-19)
5.204	*Different category of service:* in Afghanistan, Saudi Arabia, Bahrain, Bangladesh, Brunei Darussalam, China, Cuba, the United Arab Emirates, India, Indonesia, Iran (Islamic Republic of), Iraq, Kuwait, Montenegro, Oman, Pakistan, the Philippines, Qatar, Singapore, Thailand and Yemen, the frequency band 137-138 MHz is allocated to the fixed and mobile, except aeronautical mobile (R), services on a primary basis (see No. **5.33**). (WRC-19)
5.205	*Different category of service:* in Israel and Jordan, the allocation of the band 137-138 MHz to the fixed and mobile, except aeronautical mobile, services is on a primary basis (see No. **5.33**).
5.206	*Different category of service:* in Armenia, Azerbaijan, Belarus, Bulgaria, Egypt, the Russian Federation, Finland, France, Georgia, Greece, Kazakhstan, Lebanon, Moldova, Mongolia, Uzbekistan, Poland, Kyrgyzstan, the Syrian Arab Republic, Slovakia, the Czech Rep., Romania, Tajikistan, Turkmenistan and Ukraine, the allocation of the band 137-138 MHz to the aeronautical mobile (OR) service is on a primary basis (see No. **5.33**). (WRC-2000)
5.207	*Additional allocation:* in Australia, the band 137-144 MHz is also allocated to the broadcasting service on a primary basis until that service can be accommodated within regional broadcasting allocations.
5.208	The use of the band 137-138 MHz by the mobile-satellite service is subject to coordination under No. **9.11A**. (WRC-97)
5.208A	In making assignments to space stations in the mobile-satellite service in the frequency bands 137-138 MHz, 387-390 MHz and 400.15-401 MHz and in the maritime mobile-satellite service (space-to-Earth) in the frequency bands 157.1875-157.3375 MHz and 161.7875- 161.9375 MHz, administrations shall take all practicable steps to protect the radio astronomy service in the frequency bands 150.05-153 MHz, 322-328.6 MHz, 406.1-410 MHz and 608-614 MHz from harmful interference from unwanted emissions as shown in the most recent version of Recommendation ITU-R RA.769. (WRC-19)
5.208B*	In the frequency bands: 137-138 MHz, 157.1875-157.3375 MHz, 161.7875-161.9375 MHz, 387-390 MHz, 400.15-401 MHz, 1 452-1 492 MHz, 1 525-1 610 MHz, 1 613.8-1 626.5 MHz, 2 655-2 690 MHz, 21.4-22 GHz, Resolution **739 (Rev.WRC-19**) applies. (WRC-19) * This provision was previously numbered as No. **5.347A**. It was renumbered to preserve the sequential order.
5.209	The use of the bands 137-138 MHz, 148-150.05 MHz, 399.9-400.05 MHz, 400.15-401 MHz, 454-456 MHz and 459-460 MHz by the mobile-satellite service is limited to non-geostationary-satellite systems. (WRC-97)

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

5.209A	The use of the frequency band 137.175-137.825 MHz by non-geostationary satellite systems in the space operation service identified as short-duration mission in accordance with Appendix 4 is not subject to No. 9.11A. (WRC-19)
5.210	*Additional allocation:* in Italy, the Czech Rep. and the United Kingdom, the bands 138-143.6 MHz and 143.65-144 MHz are also allocated to the space research service (space-to-Earth) on a secondary basis. (WRC-07)
5.211	*Additional allocation:* in Germany, Saudi Arabia, Austria, Bahrain, Belgium, Denmark, the United Arab Emirates, Spain, Finland, Greece, Guinea, Ireland, Israel, Kenya, Kuwait, Lebanon, Liechtenstein, Luxembourg, North Macedonia, Mali, Malta, Montenegro, Norway, the Netherlands, Qatar, Slovakia, the United Kingdom, Serbia, Slovenia, Somalia, Sweden, Switzerland, Tanzania, Tunisia and Turkey, the frequency band 138-144 MHz is also allocated to the maritime mobile and land mobile services on a primary basis. (WRC-19)
5.212	*Alternative allocation:* in Angola, Botswana, Cameroon, the Central African Rep., Congo (Rep. of the), Eswatini, Gabon, Gambia, Ghana, Guinea, Iraq, Jordan, Lesotho, Liberia, Libya, Malawi, Mozambique, Namibia, Niger, Oman, Uganda, Syrian Arab Republic, the Dem. Rep. of the Congo, Rwanda, Sierra Leone, South Africa, Chad, Togo, Zambia and Zimbabwe, the frequency band 138-144 MHz is allocated to the fixed and mobile services on a primary basis. (WRC-19)
5.213	*Additional allocation:* in China, the band 138-144 MHz is also allocated to the radiolocation service on a primary basis.
5.214	*Additional allocation:* in Eritrea, Ethiopia, Kenya, North Macedonia, Montenegro, Serbia, Somalia, Sudan, South Sudan and Tanzania, the frequency band 138-144 MHz is also allocated to the fixed service on a primary basis. (WRC-19)
5.215	Not used.
5.216	*Additional allocation:* in China, the band 144-146 MHz is also allocated to the aeronautical mobile (OR) service on a secondary basis.
5.217	*Alternative allocation:* in Afghanistan, Bangladesh, Cuba, Guyana and India, the band 146-148 MHz is allocated to the fixed and mobile services on a primary basis.
5.218	*Additional allocation:* the band 148-149.9 MHz is also allocated to the space operation service (Earth-to-space) on a primary basis, subject to agreement obtained under No. **9.21**. The bandwidth of any individual transmission shall not exceed ±25 kHz.
5.218A	The frequency band 148-149.9 MHz in the space operation service (Earth-to-space) may be used by nongeostationary- satellite systems with short-duration missions. Non-geostationary-satellite systems in the space operation service used for a short-duration mission in accordance with Resolution **32 (WRC-19)** of the Radio Regulations are not subject to agreement under No. **9.21**. At the stage of coordination, the provisions of Nos. **9.17** and **9.18** also apply. In the frequency band 148-149.9 MHz, non-geostationary-satellite systems with short-duration missions shall not cause unacceptable interference to, or claim protection from, existing primary services within this frequency band, or impose additional constraints on the space operation and mobile-satellite services. In addition, earth stations in non-geostationary- satellite systems in the space operation service with short-duration missions in the frequency band 148-149.9 MHz shall ensure that the power flux-density does not exceed −149 dB(W/(m2 · 4 kHz)) for more than 1% of time at the border of the territory of the following countries: Armenia, Azerbaijan, Belarus, China, Korea (Rep. of), Cuba, Russian Federation, India, Iran (Islamic Republic of), Japan, Kazakhstan, Malaysia, Uzbekistan, Kyrgyzstan, Thailand and Viet Nam. In case this power flux-density

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

	limit is exceeded, agreement under No. **9.21** is required to be obtained from countries mentioned in this footnote. (WRC-19)
5.219	The use of the frequency band 148-149.9 MHz by the mobile-satellite service is subject to coordination under No. **9.11A**. The mobile-satellite service shall not constrain the development and use of the fixed, mobile and space operation services in the frequency band 148-149.9 MHz. The use of the frequency band 148-149.9 MHz by non-geostationary- satellite systems in the space operation service identified as short-duration mission is not subject to No. **9.11A**. (WRC-19)
5.220	The use of the frequency bands 149.9-150.05 MHz and 399.9-400.05 MHz by the mobile-satellite service is subject to coordination under No. **9.11A**. (WRC-15)
5.221	Stations of the mobile-satellite service in the frequency band 148-149.9 MHz shall not cause harmful interference to, or claim protection from, stations of the fixed or mobile services operating in accordance with the Table of Frequency Allocations in the following countries: Albania, Algeria, Germany, Saudi Arabia, Australia, Austria, Bahrain, Bangladesh, Barbados, Belarus, Belgium, Benin, Bosnia and Herzegovina, Botswana, Brunei Darussalam, Bulgaria, Cameroon, China, Cyprus, Congo (Rep. of the), Korea (Rep. of), Côte d'Ivoire, Croatia, Cuba, Denmark, Djibouti, Egypt, the United Arab Emirates, Eritrea, Spain, Estonia, Eswatini, Ethiopia, the Russian Federation, Finland, France, Gabon, Georgia, Ghana, Greece, Guinea, Guinea Bissau, Hungary, India, Iran (Islamic Republic of), Ireland, Iceland, Israel, Italy, Jamaica, Japan, Jordan, Kazakhstan, Kenya, Kuwait, Lesotho, Latvia, Lebanon, Libya, Liechtenstein, Lithuania, Luxembourg, North Macedonia, Malaysia, Mali, Malta, Mauritania, Moldova, Mongolia, Montenegro, Mozambique, Namibia, Norway, New Zealand, Oman, Uganda, Uzbekistan, Pakistan, Panama, Papua New Guinea, Paraguay, the Netherlands, the Philippines, Poland, Portugal, Qatar, the Syrian Arab Republic, Kyrgyzstan, Dem. People's Rep. of Korea, Slovakia, Romania, the United Kingdom, Senegal, Serbia, Sierra Leone, Singapore, Slovenia, Sudan, Sri Lanka, South Africa, Sweden, Switzerland, Tanzania, Chad, Togo, Tonga, Trinidad and Tobago, Tunisia, Turkey, Ukraine, Viet Nam, Yemen, Zambia and Zimbabwe. (WRC-19)
5.222	SUP (WRC-15)
5.223	SUP (WRC-15)
5.224	SUP (WRC-97)
5.224A	SUP (WRC-15)
5.224B	SUP (WRC-15)
5.225	*Additional allocation:* in Australia and India, the band 150.05-153 MHz is also allocated to the radio astronomy service on a primary basis.

This gazette is also available free online at **www.gpwonline.co.za**

5.225A	*Additional allocation:* in Algeria, Armenia, Azerbaijan, Belarus, China, the Russian Federation, France, Iran (Islamic Republic of), Kazakhstan, Uzbekistan, Kyrgyzstan, Tajikistan, Turkmenistan, Ukraine and Viet Nam, the frequency band 154-156 MHz is also allocated to the radiolocation service on a primary basis. The usage of the frequency band 154-156 MHz by the radiolocation service shall be limited to space-object detection systems operating from terrestrial locations. The operation of stations in the radiolocation service in the frequency band 154-156 MHz shall be subject to agreement obtained under No. **9.21**. For the identification of potentially affected administrations in Region 1, the instantaneous field-strength value of 12 dB(V/m) for 10% of the time produced at 10 m above ground level in the 25 kHz reference frequency band at the border of the territory of any other administration shall be used. For the identification of potentially affected administrations in Region 3, the interference-to-noise ratio (*I*/*N*) value of 6 dB (*N* = 161 dBW/4 kHz), or 10 dB for applications with greater protection requirements, such as public protection and disaster relief (PPDR (*N* = 161 dBW/4 kHz)), for 1% of the time produced at 60 m above ground level at the border of the territory of any other administration shall be used. In the frequency bands 156.7625-156.8375 MHz, 156.5125-156.5375 MHz, 161.9625- 161.9875 MHz, 162.0125-162.0375 MHz, out-of-band e.i.r.p. of space surveillance radars shall not exceed 16 dBW. Frequency assignments to the radiolocation service under this allocation in Ukraine shall not be used without the agreement of Moldova. (WRC-12)
5.226	The frequency 156.525 MHz is the international distress, safety and calling frequency for the maritime mobile VHF radiotelephone service using digital selective calling (DSC). The conditions for the use of this frequency and the band 156.4875-156.5625 MHz are contained in Articles **31** and **52**, and in Appendix **18**. The frequency 156.8 MHz is the international distress, safety and calling frequency for the maritime mobile VHF radiotelephone service. The conditions for the use of this frequency and the band 156.7625-156.8375 MHz are contained in Article **31** and Appendix **18**. In the bands 156-156.4875 MHz, 156.5625-156.7625 MHz, 156.8375-157.45 MHz, 160.6-160.975 MHz and 161.475-162.05 MHz, each administration shall give priority to the maritime mobile service on only such frequencies as are assigned to stations of the maritime mobile service by the administration (see Articles **31** and **52**, and Appendix **18**). Any use of frequencies in these bands by stations of other services to which they are allocated should be avoided in areas where such use might cause harmful interference to the maritime mobile VHF radiocommunication service. However, the frequencies 156.8 MHz and 156.525 MHz and the frequency bands in which priority is given to the maritime mobile service may be used for radiocommunications on inland waterways subject to agreement between interested and affected administrations and taking into account current frequency usage and existing agreements. (WRC-07)
5.227	SUP (WRC-12)
5.228	The use of the frequency bands 156.7625-156.7875 MHz and 156.8125-156.8375 MHz by the mobilesatellite service (Earth-to-space) is limited to the reception of automatic identification system (AIS) emissions of long range AIS broadcast messages (Message 27, see the most recent version of Recommendation ITU-R M.1371). With the exception of AIS emissions,

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

	emissions in these frequency bands by systems operating in the maritime mobile service for communications shall not exceed 1W. (WRC-12)
5.228A	The frequency bands 161.9625-161.9875 MHz and 162.0125-162.0375 MHz may be used by aircraft stations for the purpose of search and rescue operations and other safety-related communications. (WRC-12)
5.228AA	The use of the frequency bands 161.9375-161.9625 MHz and 161.9875-162.0125 MHz by the maritime mobile-satellite (Earth-to-space) service is limited to the systems which operate in accordance with Appendix 18. (WRC-15)
5.228AB	The use of the frequency bands 157.1875-157.3375 MHz and 161.7875-161.9375 MHz by the maritime mobile-satellite service (Earth-to-space) is limited to non-GSO satellite systems operating in accordance with Appendix 18. (WRC-19)
5.228AC	The use of the frequency bands 157.1875-157.3375 MHz and 161.7875-161.9375 MHz by the maritime mobile-satellite service (space-to-Earth) is limited to non-GSO satellite systems operating in accordance with Appendix **18**. Such use is subject to agreement obtained under No. **9.21** with respect to the terrestrial services in Azerbaijan, Belarus, China, Korea (Rep. of), Cuba, the Russian Federation, the Syrian Arab Republic, the Dem. People's Rep. of Korea, South Africa and Viet Nam. (WRC-19)
5.228B	The use of the frequency bands 161.9625-161.9875 MHz and 162.0125-162.0375 MHz by the fixed and land mobile services shall not cause harmful interference to, or claim protection from, the maritime mobile service. (WRC-12)
5.228C	The use of the frequency bands 161.9625-161.9875 MHz and 162.0125-162.0375 MHz by the maritime mobile service and the mobile-satellite (Earth-to-space) service is limited to the automatic identification system (AIS). The use of these frequency bands by the aeronautical mobile (OR) service is limited to AIS emissions from search and rescue aircraft operations. The AIS operations in these frequency bands shall not constrain the development and use of the fixed and mobile services operating in the adjacent frequency bands. (WRC-12)
5.228D	The frequency bands 161.9625-161.9875 MHz (AIS 1) and 162.0125-162.0375 MHz (AIS 2) may continue to be used by the fixed and mobile services on a primary basis until 1 January 2025, at which time this allocation shall no longer be valid. Administrations are encouraged to make all practicable efforts to discontinue the use of these bands by the fixed and mobile services prior to the transition date. During this transition period, the maritime mobile service in these frequency bands has priority over the fixed, land mobile and aeronautical mobile services. (WRC-12)
5.228E	The use of the automatic identification system in the frequency bands 161.9625-161.9875 MHz and 162.0125-162.0375 MHz by the aeronautical mobile (OR) service is limited to aircraft stations for the purpose of search and rescue operations and other safety-related communications. (WRC-12)
5.228F	The use of the frequency bands 161.9625-161.9875 MHz and 162.0125-162.0375 MHz by the mobile-satellite service (Earth-to-space) is limited to the reception of automatic identification system emissions from stations operating in the maritime mobile service. (WRC-12)
5.229	*Alternative allocation:* in Morocco, the band 162-174 MHz is allocated to the broadcasting service on a primary basis. The use of this band shall be subject to agreement with administrations having services, operating or planned, in accordance with the Table which are likely to be affected. Stations in existence on 1 January 1981, with their technical characteristics as of that date, are not affected by such agreement.

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

5.230	*Additional allocation:* in China, the band 163-167 MHz is also allocated to the space operation service (space-to-Earth) on a primary basis, subject to agreement obtained under No. **9.21**.
5.231	*Additional allocation:* in Afghanistan, and China, the band 167-174 MHz is also allocated to the broadcasting service on a primary basis. The introduction of the broadcasting service into this band shall be subject to agreement with the neighbouring countries in Region 3 whose services are likely to be affected. (WRC 12)
5.232	SUP (WRC-12)
5.233	*Additional allocation:* in China, the band 174-184 MHz is also allocated to the space research (space-to-Earth) and the space operation (space-to-Earth) services on a primary basis, subject to agreement obtained under No. **9.21**. These services shall not cause harmful interference to, or claim protection from, existing or planned broadcasting stations.
5.234	SUP (WRC-12)
5.235	*Additional allocation:* in Germany, Austria, Belgium, Denmark, Spain, Finland, France, Israel, Italy, Liechtenstein, Malta, Monaco, Norway, the Netherlands, the United Kingdom, Sweden and Switzerland, the band 174-223 MHz is also allocated to the land mobile service on a primary basis. However, the stations of the land mobile service shall not cause harmful interference to, or claim protection from, broadcasting stations, existing or planned, in countries other than those listed in this footnote.
5.237	*Additional allocation:* in Congo (Rep. of the), Egypt, Eritrea, Ethiopia, Gambia, Guinea, the Libya, Mali, Sierra Leone, Somalia and Chad, the band 174-223 MHz is also allocated to the fixed and mobile services on a secondary basis. (WRC- 12)
5.238	*Additional allocation:* in Bangladesh, India, Pakistan and the Philippines, the band 200-216 MHz is also allocated to the aeronautical radionavigation service on a primary basis.
5.239	Not used.
5.240	*Additional allocation:* in China and India, the band 216-223 MHz is also allocated to the aeronautical radionavigation service on a primary basis and to the radiolocation service on a secondary basis.
5.241	In Region 2, no new stations in the radiolocation service may be authorized in the band 216-225 MHz. Stations authorized prior to 1 January 1990 may continue to operate on a secondary basis.
5.242	*Additional allocation:* in Canada and Mexico, the frequency band 216-220 MHz is also allocated to the land mobile service on a primary basis. (WRC-19)
5.243	*Additional allocation:* in Somalia, the band 216-225 MHz is also allocated to the aeronautical radionavigation service on a primary basis, subject to not causing harmful interference to existing or planned broadcasting services in other countries.
5.244	SUP (WRC-97)
5.245	*Additional allocation:* in Japan, the band 222-223 MHz is also allocated to the aeronautical radionavigation service on a primary basis and to the radiolocation service on a secondary basis.
5.246	*Alternative allocation:* in Spain, France, Israel and Monaco, the band 223-230 MHz is allocated to the broadcasting and land mobile services on a primary basis (see No. **5.33**) on the basis that, in the preparation of frequency plans, the broadcasting service shall have prior choice of frequencies; and allocated to the fixed and mobile, except land mobile, services on a secondary basis. However, the stations of the land mobile service shall not cause harmful interference to, or

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

	claim protection from, existing or planned broadcasting stations in Morocco and Algeria.
5.247	*Additional allocation:* in Saudi Arabia, Bahrain, the United Arab Emirates, Jordan, Oman, Qatar and Syrian Arab Republic, the band 223-235 MHz is also allocated to the aeronautical radionavigation service on a primary basis.
5.248	Not used
5.249	Not used.
5.250	*Additional allocation*: in China, the band 225-235 MHz is also allocated to the radio astronomy service on a secondary basis.
5.251	*Additional allocation:* in Nigeria, the band 230-235 MHz is also allocated to the aeronautical radionavigation service on a primary basis, subject to agreement obtained under No. **9.21.**
5.252	*Alternative allocation:* in Botswana, Eswatini, Lesotho, Malawi, Mozambique, Namibia, South Africa, Zambia and Zimbabwe, the frequency bands 230-238 MHz and 246-254 MHz are allocated to the broadcasting service on a primary basis, subject to agreement obtained under No. **9.21**. (WRC-19)
5.253	Not used.
5.254	The bands 235-322 MHz and 335.4-399.9 MHz may be used by the mobile-satellite service, subject to agreement obtained under No. **9.21**, on condition that stations in this service do not cause harmful interference to those of other services operating or planned to be operated in accordance with the Table of Frequency Allocations except for the additional allocation made in footnote No. **5.256A**. (WRC-03)
5.255	The bands 312-315 MHz (Earth-to-space) and 387-390 MHz (space-to-Earth) in the mobile-satellite service may also be used by non-geostationary-satellite systems. Such use is subject to coordination under No. **9.11A**.
5.256	The frequency 243 MHz is the frequency in this band for use by survival craft stations and equipment used for survival purposes. (WRC-07)
5.256A	*Additional allocation:* in China, the Russian Federation and Kazakhstan, the frequency band 258-261 MHz is also allocated to the space research service (Earth-to-space) and space operation service (Earth-to-space) on a primary basis. Stations in the space research service (Earth-to-space) and space operation service (Earth-to-space) shall not cause harmful interference to, or claim protection from, or constrain the use and development of, the mobile service systems and mobile-satellite service systems operating in the frequency band. Stations in space research service (Earth-to-space) and space operation service (Earth-to-space) shall not constrain the future development of fixed service systems of other countries. (WRC-15)
5.257	The band 267-272 MHz may be used by administrations for space telemetry in their countries on a primary basis, subject to agreement obtained under No. **9.21**.
5.258	The use of the band 328.6-335.4 MHz by the aeronautical radionavigation service is limited to Instrument Landing Systems (glide path).
5.259	*Additional allocation:* in Egypt, and the Syrian Arab Republic, the band 328.6-335.4 MHz is also allocated to the mobile service on a secondary basis, subject to agreement obtained under No. **9.21**. In order to ensure that harmful interference is not caused to stations of the aeronautical radionavigation service, stations of the mobile service shall not be introduced in the band until it is no longer required for the aeronautical radionavigation service by any administration which may be identified in the application of the procedure invoked under No. **9.21**. (WRC-12)
5.260	SUP (WRC-15)

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

5.260A	In the frequency band 399.9-400.05 MHz, the maximum e.i.r.p. of any emission of earth stations in the mobile-satellite service shall not exceed 5 dBW in any 4 kHz band and the maximum e.i.r.p. of each earth station in the mobile-satellite service shall not exceed 5 dBW in the whole 399.9-400.05 MHz frequency band. Until 22 November 2022, this limit shall not apply to satellite systems for which complete notification information has been received by the Radiocommunication Bureau by 22 November 2019 and that have been brought into use by that date. After 22 November 2022, these limits shall apply to all systems within the mobile-satellite service operating in this frequency band. In the frequency band 399.99-400.02 MHz, the e.i.r.p. limits as specified above shall apply after 22 November 2022 to all systems within the mobile-satellite service. Administrations are requested that their mobile-satellite service satellite links in the 399.99-400.02 MHz frequency band comply with the e.i.r.p. limits as specified above, after 22 November 2019. (WRC-19)
5.260B	In the frequency band 400.02-400.05 MHz, the provisions of No. **5.A12** are not applicable for telecommand uplinks within the mobile-satellite service. (WRC-19)
5.261	Emissions shall be confined in a band of ± 25 kHz about the standard frequency 400.1 MHz.
5.262	*Additional allocation:* in Saudi Arabia, Armenia, Azerbaijan, Bahrain, Belarus, Botswana, Colombia, Cuba, Egypt, the United Arab Emirates, Ecuador, the Russian Federation, Georgia, Hungary, Iran (Islamic Republic of), Iraq, Israel, Jordan, Kazakhstan, Kuwait, Liberia, Malaysia, Moldova, Uzbekistan, Pakistan, the Philippines, Qatar, the Syrian Arab Republic, Kyrgyzstan, Romania, Singapore, Somalia, Tajikistan, Chad, Turkmenistan and Ukraine, the band 400.05-401 MHz is also allocated to the fixed and mobile services on a primary basis. (WRC-12)
5.263	The band 400.15-401 MHz is also allocated to the space research service in the space-to-space direction for communications with manned space vehicles. In this application, the space research service will not be regarded as a safety service.
5.264	The use of the band 400.15-401 MHz by the mobile-satellite service is subject to coordination under No. **9.11A**. The power flux-density limit indicated in Annex 1 of Appendix **5** shall apply until such time as a competent world radiocommunication conference revises it.
5.264A	In the frequency band 401-403 MHz, the maximum e.i.r.p. of any emission of each earth station in the meteorological- satellite service and the Earth exploration-satellite service shall not exceed 22 dBW in any 4 kHz band for geostationary systems and non-geostationary systems with an orbit of apogee equal or greater than 35 786 km. The maximum e.i.r.p. of any emission of each earth station in the meteorologicalsatellite service and the Earth exploration-satellite service shall not exceed 7 dBW in any 4 kHz band for non-geostationary systems with an orbit of apogee lower than 35 786 km. The maximum e.i.r.p. of each earth station in the meteorological-satellite service and the Earth exploration-satellite service shall not exceed 22 dBW for geostationary systems and nongeostationary systems with an orbit of apogee equal or greater than 35 786 km in the whole 401-403 MHz frequency band. The maximum e.i.r.p. of each earth station in the meteorological-satellite service and the Earth exploration-satellite service shall not exceed 7 dBW for non-

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

	geostationary systems with an orbit of apogee lower than 35 786 km in the whole 401-403 MHz frequency band. Until 22 November 2029, these limits shall not apply to satellite systems for which complete notification information has been received by the Radiocommunication Bureau by 22 November 2019 and that have been brought into use by that date. After 22 November 2029, these limits shall apply to all systems within the meteorological-satellite service and the Earth exploration-satellite service operating in this frequency band. (WRC-19)
5.264B	Non-geostationary-satellite systems in the meteorological-satellite service and the Earth exploration-satellite service for which complete notification information has been received by the Radiocommunication Bureau before 28 April 2007 are exempt from provisions of No. **5.264A** and may continue to operate in the frequency band 401.898- 402.522 MHz on a primary basis without exceeding a maximum e.i.r.p. level of 12 dBW. (WRC-19)
5.265	In the frequency band 403-410 MHz, Resolution **205 (Rev.WRC-19)** applies. (WRC-19)
5.266	The use of the band 406-406.1 MHz by the mobile-satellite service is limited to low power satellite emergency position- indicating radiobeacons (see also Article **31**). (WRC-07)
5.267	Any emission capable of causing harmful interference to the authorized uses of the band 406-406.1 MHz is prohibited.
5.268	Use of the frequency band 410-420 MHz by the space research service is limited to space-to-space communication links with an orbiting, manned space vehicle. The power flux-density at the surface of the Earth produced by emissions from transmitting stations of the space research service (space-to-space) in the frequency band 410-420 MHz shall not exceed –153 dB(W/m^2) for $0^o \leq \delta \leq 5^o$, -153+ 0.077 (d – 5) dB(W/m^2) for $5^o \leq \delta \leq 70^o$ and –148 dB(W/m^2) for $70^o \leq \delta \leq 90^o$, where δ is the angle of arrival of the radio-frequency wave and the reference bandwidth is 4 kHz. In this frequency band, stations of the space research service (space-to-space) shall not claim protection from, nor constrain the use and development of, stations of the fixed and mobile services. No. **4.10** does not apply. (WRC-15)
5.269	*Different category of service:* in Australia, the United States, India, Japan and the United Kingdom, the allocation of the bands 420-430 MHz and 440-450 MHz to the radiolocation service is on a primary basis (see No. **5.33**).
5.270	*Additional allocation:* in Australia, the United States, Jamaica and the Philippines, the bands 420-430 MHz and 440- 450 MHz are also allocated to the amateur service on a secondary basis.
5.271	SUP (WRC-12)
5.274	*Alternative allocation:* in Denmark, Norway, Sweden, and Chad the bands 430-432 MHz and 438-440 MHz are allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis.(WRC12)
5.275	*Additional allocation:* in Croatia, Estonia, Finland, Libya, North Macedonia, Montenegro and Serbia, the frequency bands 430-432 MHz and 438-440 MHz are also allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis. (WRC-19)
5.276	*Additional allocation:* in Afghanistan, Algeria, Saudi Arabia, Bahrain, Bangladesh, Brunei Darussalam, Burkina Faso, Djibouti, Egypt, the United Arab Emirates, Ecuador, Eritrea, Ethiopia, Greece, Guinea, India, Indonesia, Iran (Islamic Republic of), Iraq, Israel, Italy, Jordan, Kenya, Kuwait, Libya, Malaysia, Niger, Nigeria, Oman, Pakistan, the Philippines, Qatar, the Syrian Arab Republic, the Dem. People's Rep. of Korea, Singapore, Somalia, Sudan,

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

	Switzerland, Thailand, Togo, Turkey and Yemen, the frequency band 430-440 MHz is also allocated to the fixed service on a primary basis and the frequency bands 430-435 MHz and 438-440 MHz are also allocated, except in Ecuador, to the mobile, except aeronautical mobile, service on a primary basis. (WRC-15)
5.277	*Additional allocation:* in Angola, Armenia, Azerbaijan, Belarus, Cameroon, Congo (Rep. of the), Djibouti, the Russian Federation, Georgia, Hungary, Israel, Kazakhstan, Mali, Uzbekistan, Poland, the Dem. Rep. of the Congo, Kyrgyzstan, Slovakia, Romania, Rwanda, Tajikistan, Chad, Turkmenistan and Ukraine, the frequency band 430-440 MHz is also allocated to the fixed service on a primary basis. (WRC-19)
5.278	*Different category of service:* in Argentina, Brazil, Colombia, Costa Rica, Cuba, Guyana, Honduras, Panama, Paraguay, Uruguay and Venezuela, the allocation of the frequency band 430-440 MHz to the amateur service is on a primary basis (see No. **5.33**). (WRC-19)
5.279	*Additional allocation:* in Mexico, the frequency bands 430-435 MHz and 438-440 MHz are also allocated on a primary basis to the mobile, except aeronautical mobile, service, and on a secondary basis to the fixed service, subject to agreement obtained under No. **9.21**. (WRC-19)
5.279A	The use of the frequency band 432-438 MHz by sensors in the Earth exploration-satellite service (active) shall be in accordance with Recommendation ITU-R RS.1260-2. Additionally, the Earth exploration-satellite service (active) in the frequency band 432-438 MHz shall not cause harmful interference to the aeronautical radionavigation service in China. The provisions of this footnote in no way diminish the obligation of the Earth exploration-satellitecservice (active) to operate as a secondary service in accordance with Nos. **5.29** and **5.30**. (WRC-19)
5.280	In Germany, Austria, Bosnia and Herzegovina, Croatia, Liechtenstein, North Macedonia, Montenegro, Portugal, Serbia, Slovenia and Switzerland, the frequency band 433.05-434.79 MHz (centre frequency 433.92 MHz) is designated for industrial, scientific and medical (ISM) applications. Radiocommunication services of these countries operating within this frequency band must accept harmful interference which may be caused by these applications. ISM equipment operating in this frequency band is subject to the provisions of No. **15.13**. (WRC-19)
5.281	*Additional allocation:* in the French overseas departments and communities in Region 2 and India, the band 433.75-434.25 MHz is also allocated to the space operation service (Earth-to-space) on a primary basis. In France and in Brazil, the band is allocated to the same service on a secondary basis.
5.282	In the bands 435-438 MHz, 1 260-1 270 MHz, 2 400-2 450 MHz, 3 400-3 410 MHz (in Regions 2 and 3 only) and 5 650- 5 670 MHz, the amateur-satellite service may operate subject to not causing harmful interference to other services operating in accordance with the Table (see No. **5.43**). Administrations authorizing such use shall ensure that any harmful interference caused by emissions from a station in the amateur-satellite service is immediately eliminated in accordance with the provisions of No. **25.11**. The use of the bands 1 260-1 270 MHz and 5 650-5 670 MHz by the amateur-satellite service is limited to the Earth-to-space direction.
5.283	*Additional allocation:* in Austria, the band 438-440 MHz is also allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis.
5.284	*Additional allocation:* in Canada, the band 440-450 MHz is also allocated to the amateur service on a secondary basis.
5.285	*Different category of service:* in Canada, the allocation of the band 440-450 MHz to the radiolocation service is on a primary basis (see No. **5.33**).

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

5.286	The band 449.75-450.25 MHz may be used for the space operation service (Earth-to-space) and the space research service (Earth-to-space), subject to agreement obtained under No. **9.21**.
5.286A	The use of the bands 454-456 MHz and 459-460 MHz by the mobile-satellite service is subject to coordination under No. **9.11A**. (WRC-97)
5.286AA	The frequency band 450-470 MHz is identified for use by administrations wishing to implement International Mobile Telecommunications (IMT) - see Resolution **224 (Rev.WRC-19)**. This identification does not preclude the use of this frequency band by any application of the services to which it is allocated and does not establish priority in the Radio Regulations. (WRC-19)
5.286B	The use of the band 454-455 MHz in the countries listed in No. **5.286D**, 455-456 MHz and 459-460 MHz in Region 2, and 454-456 MHz and 459-460 MHz in the countries listed in No. **5.286E**, by stations in the mobile-satellite service, shall not cause harmful interference to, or claim protection from, stations of the fixed or mobile services operating in accordance with the Table of Frequency Allocations. (WRC-97)
5.286C	The use of the band 454-455 MHz in the countries listed in No. **5.286D**, 455-456 MHz and 459-460 MHz in Region 2, and 454-456 MHz and 459-460 MHz in the countries listed in No. **5.286E**, by stations in the mobile-satellite service, shall notconstrain the development and use of the fixed and mobile services operating in accordance with the Table of Frequency Allocations. (WRC-97)
5.286D	Additional allocation: in Canada, the United States and Panama, the band 454-455 MHz is also allocated to the mobile- satellite service (Earth-to-space) on a primary basis. (WRC-07)
5.286E	Additional allocation: in Cape Verde, Nepal and Nigeria, the bands 454-456 MHz and 459-460 MHz are also allocated to the mobile-satellite (Earth-to-space) service on a primary basis. (WRC-07)
5.287	Use of the frequency bands 457.5125-457.5875 MHz and 467.5125-467.5875 MHz by the maritime mobile service is limited to on-board communication stations. The characteristics of the equipment and the channelling arrangement shall be in accordance with Recommendation ITU-R M.1174-4. The use of these frequency bands in territorial waters is subject to the national regulations of the administration concerned. (WRC-19)
5.288	In the territorial waters of the United States and the Philippines, the preferred frequencies for use by on-board communication stations shall be 457.525 MHz, 457.550 MHz, 457.575 MHz and 457.600 MHz paired, respectively, with 467.750 MHz, 467.775 MHz, 467.800 MHz and 467.825 MHz. The characteristics of the equipment used shall conform to those specified in Recommendation ITU-R M.1174-4. (WRC-19)
5.289	Earth exploration-satellite service applications, other than the meteorological-satellite service, may also be used in the bands 460-470 MHz and 1 690-1 710 MHz for space-to-Earth transmissions subject to not causing harmful interference to stations operating in accordance with the Table.
5.290	*Different category of service:* in Afghanistan, Azerbaijan, Belarus, China, the Russian Federation, Japan, Kyrgyzstan, , Tajikistan and, Turkmenistan the allocation of the band 460-470 MHz to the meteorological-satellite service (space- to-Earth) is on a primary basis (see No. **5.33**), subject to agreement obtained under No. **9.21**. (WRC-12)
5.291	*Additional allocation:* in China, the band 470-485 MHz is also allocated to the space research (space-to-Earth) and the space operation (space-to-Earth) services on a primary basis subject to agreement obtained under No. **9.21** and subject to not causing harmful interference to existing and planned broadcasting stations.

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

5.291A	*Additional allocation:* in Germany, Austria, Denmark, Estonia, Liechtenstein, the Czech Rep., Serbia and Switzerland, the frequency band 470-494 MHz is also allocated to the radiolocation service on a secondary basis. This use is limited to the operation of wind profiler radars in accordance with Resolution **217 (WRC-97)**. (WRC-15)
5.292	*Different category of service:* in Argentina, Uruguay and Venezuela, the allocation of the frequency band 470-512 MHz to the mobile service is on a primary basis (see No. **5.33**), subject to agreement obtained under No. **9.21**. (WRC-15)
5.293	*Different category of service:* in Canada, Chile, Cuba, the United States, Guyana, Jamaica and Panama, the allocation of the frequency bands 470-512 MHz and 614-806 MHz to the fixed service is on a primary basis (see No. **5.33**), subject to agreement obtained under No. **9.21**. In the Bahamas, Barbados, Canada, Chile, Cuba, the United States, Guyana, Jamaica, Mexico and Panama, the allocation of the frequency bands 470-512 MHz and 614-698 MHz to the mobile service is on a primary basis (see No. **5.33**), subject to agreement obtained under No. **9.21**. In Argentina and Ecuador, the allocation of the frequency band 470-512 MHz to the fixed and mobile services is on a primary basis (see No. **5.33**), subject to agreement obtained under No. **9.21**. (WRC-15)
5.294	*Additional allocation:* in Saudi Arabia, Cameroon, Côte d'Ivoire, Egypt, Ethiopia, Israel, Libya, the Syrian Arab Republic, Chad and Yemen, the frequency band 470-582 MHz is also allocated to the fixed service on a secondary basis. (WRC-15)
5.295	In the Bahamas, Barbados, Canada, the United States and Mexico, the frequency band 470-608 MHz, or portions thereof, is identified for International Mobile Telecommunications (IMT) – see Resolution **224 (Rev.WRC-19)**. This identification does not preclude the use of these frequency bands by any application of the services to which they are allocated and does not establish priority in the Radio Regulations. Mobile service stations of the IMT system within the frequency band are subject to agreement obtained under No. **9.21** and shall not cause harmful interference to, or claim protection from, the broadcasting service of neighbouring countries. Nos. **5.43** and **5.43A** apply. (WRC-19)
5.296	*Additional allocation:* in Albania, Germany, Angola, Saudi Arabia, Austria, Bahrain, Belgium, Benin, Bosnia and Herzegovina, Botswana, Bulgaria, Burkina Faso, Burundi, Cameroon, Vatican, Congo (Rep. of the), Côte d'Ivoire, Croatia, Denmark, Djibouti, Egypt, United Arab Emirates, Spain, Estonia, Eswatini. Finland, France, Gabon, Georgia, Ghana, Hungary, Iraq, Ireland, Iceland, Israel, Italy, Jordan, Kenya, Kuwait, Lesotho, Latvia, Lebanon, Libya, Liechtenstein, Lithuania, Luxembourg, North Macedonia, Malawi, Mali, Malta, Morocco, Mauritius, Mauritania, Moldova, Monaco, Mozambique, Namibia, Niger, Nigeria, Norway, Oman, Uganda, the Netherlands, Poland, Portugal, Qatar, the Syrian Arab Republic, Slovakia, the Czech Republic, Romania, the United Kingdom, Rwanda, San Marino, Serbia, Sudan, South Africa, Sweden, Switzerland, Tanzania, Chad, Togo, Tunisia, Turkey, Ukraine, Zambia and Zimbabwe, the frequency band 470-694 MHz is also allocated on a secondary basis to the land mobile service, intended for applications ancillary to broadcasting and programme-making. Stations of the land mobile service in the countries listed in this footnote shall not cause harmful interference to existing or planned stations operating in accordance with the Table in countries other than those listed in this footnote. (WRC-19)

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

5.296A	In Micronesia, the Solomon Islands, Tuvalu and Vanuatu, the frequency band 470-698 MHz, or portions thereof, and in Bangladesh, Maldives and New Zealand, the frequency band 610-698 MHz, or portions thereof, are identified for use by these administrations wishing to implement International Mobile Telecommunications (IMT) – see Resolution **224 (Rev.WRC-19)**. This identification does not preclude the use of these frequency bands by any application of the services to which they are allocated and does not establish priority in the Radio Regulations. The mobile allocation in this frequency band shall not be used for IMT systems unless subject to agreement obtained under No. **9.21** and shall not cause harmful interference to, or claim protection from, the broadcasting service of neighbouring countries. Nos. **5.43** and **5.43A** apply. (WRC-19)
5.297	*Additional allocation:* in Canada, Costa Rica, Cuba, El Salvador, the United States, Guatemala, Guyana and Jamaica, the frequency band 512-608 MHz is also allocated to the fixed and mobile services on a primary basis, subject to agreement obtained under No. **9.21**. In the Bahamas, Barbados and Mexico, the frequency band 512-608 MHz is also allocated to the mobile service on a primary basis, subject to agreement obtained under No. **9.21**. In Mexico, the frequency band 512-608 MHz is also allocated on a secondary basis to the fixed service (see No. **5.32**). (WRC-19)
5.298	*Additional allocation:* in India, the band 549.75-550.25 MHz is also allocated to the space operation service (space-to- Earth) on a secondary basis.
5.299	Not used.
5.300	*Additional allocation:* in Saudi Arabia, Cameroon, Egypt, United Arab Emirates, Israel, Jordan, Libya, Oman, Qatar, the Syrian Arab Republic and Sudan, the frequency band 582-790 MHz is also allocated to the fixed and mobile, except aeronautical mobile, services on a secondary basis. (WRC-15)
5.301	Not used.
5.302	SUP (WRC-12)
5.303	Not used.
5.304	*Additional allocation:* in the African Broadcasting Area (see Nos. **5.10** to **5.13**), the band 606-614 MHz is also allocated to the radio astronomy service on a primary basis.
5.305	*Additional allocation:* in China, the band 606-614 MHz is also allocated to the radio astronomy service on a primary basis.
5.306	*Additional allocation:* in Region 1, except in the African Broadcasting Area (see Nos. **5.10** to **5.13**), and in Region 3, the band 608-614 MHz is also allocated to the radio astronomy service on a secondary basis.
5.307	*Additional allocation:* in India, the band 608-614 MHz is also allocated to the radio astronomy service on a primary basis.
5.308	*Additional allocation:* in Belize, Colombia and Guatemala, the frequency band 614-698 MHz is also allocated to the mobile service on a primary basis. Stations of the mobile service within the frequency band are subject to agreement obtained under No. **9.21**. (WRC-19)
5.308A	In the Bahamas, Barbados, Belize, Canada, Colombia, the United States, Guatemala and Mexico, the frequency band 614-698 MHz, or portions thereof, is identified for International Mobile Telecommunications (IMT) – see Resolution **224 (Rev.WRC-19)**. This identification does not preclude the use of these frequency bands by any application of the services to which they are allocated and does not establish priority in the Radio Regulations. Mobile service stations of the IMT system within the frequency band are subject to agreement obtained under No. **9.21** and shall not cause harmful interference to, or claim

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

	protection from, the broadcasting service of neighbouring countries. Nos. **5.43** and **5.43A** apply. (WRC-19)
5.309	*Different category of service*: in El Salvador, the allocation of the frequency band 614-806 MHz to the fixed service is on a primary basis (see No. **5.33**), subject to agreement obtained under No. **9.21**. (WRC-15)
5.310	SUP (WRC-97)
5.311	SUP (WRC-07)
5.311A	SUP (WRC-19)
5.312	*Additional allocation*: in Armenia, Azerbaijan, Belarus, the Russian Federation, Georgia, Kazakhstan, Uzbekistan, Kyrgyzstan, Tajikistan, Turkmenistan and Ukraine, the frequency band 645-862 MHz, and in Bulgaria the frequency bands 646-686 MHz, 726-753 MHz, 778-811 MHz and 822-852 MHz, are also allocated to the aeronautical radionavigation service on a primary basis. (WRC-19)
5.312A	In Region 1, the use of the frequency band 694-790 MHz by the mobile, except aeronautical mobile, service is subject to the provisions of Resolution 760 (Rev.WRC-19). See also Resolution 224 (Rev.WRC-19). (WRC-19)
5.313	SUP (WRC-97)
5.313A	The frequency band, or portions of the frequency band 698-790 MHz, in Australia, Bangladesh, Brunei Darussalam, Cambodia, China, Korea (Rep. of), Fiji, India, Indonesia, Japan, Kiribati, Lao P.D.R., Malaysia, Myanmar (Union of), New Zealand, Pakistan, Papua New Guinea, the Philippines, the Dem. People's Rep. of Korea, Solomon Islands, Samoa, Singapore, Thailand, Tonga, Tuvalu, Vanuatu and Viet Nam, are identified for use by these administrations wishing to implement International Mobile Telecommunications (IMT). This identification does not preclude the use of these frequency bands by any application of the services to which they are allocated and does not establish priority in the Radio Regulations. (WRC-19)
5.313B	SUP (WRC-15)
5.314	SUP (WRC-15)
5.315	SUP (WRC-15)
5.316	SUP (WRC-15)
5.316A	SUP (WRC-15)
5.316B	In Region 1, the allocation to the mobile, except aeronautical mobile, service in the frequency band 790-862 MHz is subject to agreement obtained under No. **9.21** with respect to the aeronautical radionavigation service in countries mentioned in No. **5.312**. For countries party to the GE06 Agreement, the use of stations of the mobile service is also subject to the successful application of the procedures of that Agreement. Resolutions **224 (Rev.WRC-19)** and **749 (Rev.WRC-19)** shall apply, as appropriate. (WRC-19)
5.317	*Additional allocation*: in Region 2 (except Brazil, the United States and Mexico), the frequency band 806-890 MHz is also allocated to the mobile-satellite service on a primary basis, subject to agreement obtained under No. **9.21**. The use of this service is intended for operation within national boundaries. (WRC-15)
5.317A	The parts of the frequency band 698-960 MHz in Region 2 and the frequency bands 694-790 MHz in Region 1 and 790- 960 MHz in Regions 1 and 3 which are allocated to the mobile service on a primary basis are identified for use by administrations wishing to implement International Mobile Telecommunications (IMT) – see Resolutions **224 (Rev.WRC- 19)**, **760 (Rev.WRC-19)** and **749 (Rev.WRC-19)**, where applicable. This identification does not preclude the use of these frequency bands by any application of the

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

	services to which they are allocated and does not establish priority in the Radio Regulations. (WRC-19)
5.318	*Additional allocation*: in Canada, the United States and Mexico, the bands 849-851 MHz and 894-896 MHz are also allocated to the aeronautical mobile service on a primary basis, for public correspondence with aircraft. The use of the band 849-851 MHz is limited to transmissions from aeronautical stations and the use of the band 894-896 MHz is limited to transmissions from aircraft stations.
5.319	*Additional allocation*: in Belarus, the Russian Federation and Ukraine, the bands 806-840 MHz (Earth-to-space) and 856-890 MHz (space-to-Earth) are also allocated to the mobile-satellite, except aeronautical mobile-satellite (R), service. The use of these bands by this service shall not cause harmful interference to, or claim protection from, services in other countries operating in accordance with the Table of Frequency Allocations and is subject to special agreements between the administrations concerned.
5.320	Additional allocation: in Region 3, the bands 806-890 MHz and 942-960 MHz are also allocated to the mobile-satellite, except aeronautical mobile-satellite (R), service on a primary basis, subject to agreement obtained under No. **9.21.** The use of this service is limited to operation within national boundaries. In seeking such agreement, appropriate protection shall be afforded to services operating in accordance with the Table, to ensure that no harmful interference is caused to such services.
5.321	SUP (WRC-07)
5.322	In Region 1, in the band 862-960 MHz, stations of the broadcasting service shall be operated only in the African Broadcasting Area (see Nos. **5.10** to **5.13**) excluding Algeria, Burundi, Egypt, Spain, Lesotho, Libya, Morocco, Malawi, Namibia, Nigeria, South Africa, Tanzania, Zimbabwe and Zambia, subject to agreement obtained under No. **9.21**. (WRC-12)
5.323	*Additional allocation:* in Armenia, Azerbaijan, Belarus, the Russian Federation, Kazakhstan, Uzbekistan, Kyrgyzstan, Tajikistan, Turkmenistan and Ukraine, the frequency band 862-960 MHz, in Bulgaria the frequency bands 862-880 MHz and 915-925 MHz, and in Romania the frequency bands 862-880 MHz and 915-925 MHz, are also allocated to the aeronautical radionavigation service on a primary basis. Such use is subject to agreement obtained under No. **9.21** with administrations concerned and limited to ground-based radiobeacons in operation on 27 October 1997 until the end of their lifetime. (WRC-19)
5.324	Not used.
5.325	*Different category of service*: in the United States, the allocation of the band 890-942 MHz to the radiolocation service is on a primary basis (see No. **5.33**), subject to agreement obtained under No. **9.21**.
5.325A	*Different category of service:* in Argentina, Brazil, Costa Rica, Cuba, Dominican Republic, El Salvador, Ecuador, the French overseas departments and communities in Region 2, Guatemala, Paraguay, Uruguay and Venezuela, the frequency band 902-928 MHz is allocated to the land mobile service on a primary basis. In Mexico, the frequency band 902-928 MHz is allocated to the mobile, except aeronautical mobile, service on a primary basis. In Colombia, the frequency band 902- 905 MHz is allocated to the land mobile service on a primary basis. (WRC-19)
5.326	*Different category of service*: in Chile, the band 903-905 MHz is allocated to the mobile, except aeronautical mobile, service on a primary basis, subject to agreement obtained under No. **9.21**.
5.327	*Different category of service*: in Australia, the allocation of the band 915-928 MHz to the radiolocation service is on a primary basis (see No. **5.33**).

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

5.327A	The use of the frequency band 960-1 164 MHz by the aeronautical mobile (R) service is limited to systems that operate in accordance with recognized international aeronautical standards. Such use shall be in accordance with Resolution **417 (Rev.WRC-15)**. (WRC-15)
5.328	The use of the band 960-1 215 MHz by the aeronautical radionavigation service is reserved on a worldwide basis for the operation and development of airborne electronic aids to air navigation and any directly associated ground-based facilities. (WRC-2000)
5.328A	Stations in the radionavigation-satellite service in the band 1 164-1 215 MHz shall operate in accordance with the provisions of Resolution **609 (Rev.WRC-07)** and shall not claim protection from stations in the aeronautical radionavigation service in the band 960-1 215 MHz. No. **5.43A** does not apply. The provisions of No. **21.18** shall apply. (WRC-07)
5.328AA	The frequency band 1 087.7-1 092.3 MHz is also allocated to the aeronautical mobile-satellite (R) service (Earth-to- space) on a primary basis, limited to the space station reception of Automatic Dependent Surveillance-Broadcast (ADS-B) emissions from aircraft transmitters that operate in accordance with recognized international aeronautical standards. Stations operating in the aeronautical mobile-satellite (R) service shall not claim protection from stations operating in the aeronautical radionavigation service. Resolution **425 (Rev.WRC-19)** shall apply. (WRC-19)
5.328B	The use of the bands 1 164-1 300 MHz, 1 559-1 610 MHz and 5 010-5 030 MHz by systems and networks in the radionavigation-satellite service for which complete coordination or notification information, as appropriate, is received by the Radiocommunication Bureau after 1 January 2005 is subject to the application of the provisions of Nos. **9.12**, **9.12A** and **9.13**. Resolution **610 (WRC-03)** shall also apply; however, in the case of radionavigation-satellite service (space-to-space) networks and systems, Resolution **610 (WRC-03)** shall only apply to transmitting space stations. In accordance with No. **5.329A**, for systems and networks in the radionavigation-satellite service (space-to-space) in thebands 1 215-1 300 MHz and 1 559-1 610 MHz, the provisions of Nos. **9.7**, **9.12**, **9.12A** and **9.13** shall only apply with respect to other systems and networks in the radionavigation-satellite service (space-to-space). (WRC-07)
5.329	Use of the radionavigation-satellite service in the frequency band 1 215-1 300 MHz shall be subject to the condition that no harmful interference is caused to, and no protection is claimed from, the radionavigation service authorized under No. **5.331**. Furthermore, the use of the radionavigation-satellite service in the frequency band 1 215-1 300 MHz shall be subject to the condition that no harmful interference is caused to the radiolocation service. No. **5.43** shall not apply in respect of the radiolocation service. Resolution **608 (Rev.WRC-19)** shall apply. (WRC-19)
5.329A	Use of systems in the radionavigation-satellite service (space-to-space) operating in the bands 1 215-1 300 MHz and 1 559-1 610 MHz is not intended to provide safety service applications, and shall not impose any additional constraints on radionavigation-satellite service (space-to-Earth) systems or on other services operating in accordance with the Table of Frequency Allocations. (WRC-07)
5.330	*Additional allocation:* in Angola, Saudi Arabia, Bahrain, Bangladesh, Cameroon, China, Djibouti,Egypt,the United Arab Emirates, Eritrea, Ethiopia, Guyana, India, Indonesia, Iran (Islamic Republic of), Iraq, Israel, Japan, Jordan, Kuwait, , Nepal, Oman ,Pakistan, the Philippines, Qatar, the Syrian Arab Republic, Somalia, Sudan, South Sudan ,Chad, Togo and Yemen, the band 1 215-1 300 MHz is also allocated to the fixed and mobile services on a primary basis. (WRC-12)

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

5.331	*Additional allocation:* in Algeria, Germany, Saudi Arabia, Australia, Austria, Bahrain, Belarus, Belgium, Benin, Bosnia and Herzegovina, Brazil, Burkina Faso, Burundi, Cameroon, China, Korea (Rep. of), Croatia, Denmark, Egypt, the United Arab Emirates, Estonia, the Russian Federation, Finland, France, Ghana, Greece, Guinea, Equatorial Guinea, Hungary, India, Indonesia, Iran (Islamic Republic of), Iraq, Ireland, Israel, Jordan, Kenya, Kuwait, Lesotho, Latvia, Lebanon, Liechtenstein, Lithuania, Luxembourg, North Macedonia, Madagascar, Mali, Mauritania, Montenegro, Nigeria, Norway, Oman, Pakistan, the Kingdom of the Netherlands, Poland, Portugal, Qatar, the Syrian Arab Republic, Dem. People's Rep. of Korea, Slovakia, the United Kingdom, Serbia, Slovenia, Somalia, Sudan, South Sudan, Sri Lanka, South Africa, Sweden, Switzerland, Thailand, Togo, Turkey, Venezuela and Viet Nam, the frequency band 1 215-1 300 MHz is also allocated to the radionavigation service on a primary basis. In Canada and the United States, the frequency band 1 240- 1 300 MHz is also allocated to the radionavigation service, and use of the radionavigation service shall be limited to the aeronautical radionavigation service. (WRC-19)
5.332	In the band 1 215-1 260 MHz, active spaceborne sensors in the Earth exploration-satellite and space research services shall not cause harmful interference to, claim protection from, or otherwise impose constraints on operation or development of the radiolocation service, the radionavigation-satellite service and other services allocated on a primary basis. (WRC-2000)
5.333	SUP (WRC-97)
5.334	*Additional allocation:* in Canada and the United States, the band 1 350-1 370 MHz is also allocated to the aeronautical radionavigation service on a primary basis. (WRC-03)
5.335	In Canada and the United States in the band 1 240-1 300 MHz, active spaceborne sensors in the earth exploration- satellite and space research services shall not cause interference to, claim protection from, or otherwise impose constraints on operation or development of the aeronautical radionavigation service. (WRC-97)
5.335A	In the band 1 260-1 300 MHz, active spaceborne sensors in the Earth exploration-satellite and space research services shall not cause harmful interference to, claim protection from, or otherwise impose constraints on operation or development of the radiolocation service and other services allocated by footnotes on a primary basis. (WRC-2000)
5.336	Not used.
5.337	The use of the bands 1 300-1 350 MHz, 2 700-2 900 MHz and 9 000-9 200 MHz by the aeronautical radionavigation service is restricted to ground-based radars and to associated airborne transponders which transmit only on frequencies in these bands and only when actuated by radars operating in the same band.
5.337A	The use of the band 1 300-1 350 MHz by earth stations in the radionavigation-satellite service and by stations in the radiolocation service shall not cause harmful interference to, nor constrain the operation and development of, the aeronautical-radionavigation service. (WRC-2000)
5.338	In Kyrgyzstan, Slovakia, and Turkmenistan, existing installations of the radionavigation service may continue to operate in the band 1 350-1 400 MHz. (WRC-12)
5.338A	In the frequency bands 1 350-1 400 MHz, 1 427-1 452 MHz, 22.55-23.55 GHz, 24.25-27.5 GHz, 30-31.3 GHz, 49.7-50.2 GHz, 50.4-50.9 GHz, 51.4-52.6 GHz, 81-86 GHz and 92-94 GHz, Resolution **750 (Rev.WRC-19)** applies. (WRC-19)
5.339	The bands 1 370-1 400 MHz, 2 640-2 655 MHz, 4 950-4 990 MHz and 15.20-15.35 GHz are also allocated to the space research (passive) and Earth exploration-satellite (passive) services on a secondary basis.

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

5.339A	SUP (WRC-07)
5.340	All emissions are prohibited in the following bands: 1 400-1 427 MHz, 2 690-2 700 MHz,except those provided for by No. **5.422,** 10.68-10.7 GHz, except those rovided for by No. **5.483**, 15.35-15.4 GHz,except those provided for by No. **5.511**, 23.6-24 GHz, 31.3-31.5 GHz, 31.5-31.8 GHz, in Region 2, 48.94-49.04 GHz, from airborne stations 50.2-50.4 GHz[2], 52.6-54.25 GHz, 86-92 GHz, 100-102 GHz, 109.5-111.8 GHz, 114.25-116 GHz, 148.5-151.5 GHz, 164-167 GHz, 182-185 GHz, 190-191.8 GHz, 200-209 GHz, 226-231.5 GHz, 250-252 GHz. (WRC-03) [2] **5.340.1** The allocation to the Earth exploration-satellite service (passive) and the space research service (passive) in the band 50.2-50.4 GHz should not impose undue constraints on the use of the adjacent bands by the primary allocated services in those bands. (WRC-97)
5.341	In the bands 1 400-1 727 MHz, 101-120 GHz and 197-220 GHz, passive research is being conducted by some countries in a programme for the search for intentional emissions of extraterrestrial origin.
5.341A	In Region 1, the frequency bands 1 427-1 452 MHz and 1 492-1 518 MHz are identified for use b administrations wishing to implement International Mobile Telecommunications (IMT) in accordance with Resolution **223 (Rev.WRC-15)**. This identification does not preclude the use of these frequency bands by any other application of the services to which it is allocated and does not establish priority in the Radio Regulations. The use of IMT stations is subject to agreement obtained under No. **9.21** with respect to the aeronautical mobile service used for aeronautical telemetry in accordance with No. **5.342**. (WRC-15)
5.341B	In Region 2, the frequency band 1 427-1 518 MHz is identified for use by administrations wishing to implement International Mobile Telecommunications (IMT) in accordance with Resolution **223 (Rev.WRC-15)**. This identification does not preclude the use of this frequency band by any application of the services to which they are allocated and does not establish priority in the Radio Regulations. (WRC-15)
5.341C	The frequency bands 1 427-1 452 MHz and 1 492-1 518 MHz are identified for use by administrations in Region 3 wishing to implement International Mobile Telecommunications (IMT) in accordance with Resolution **223 (Rev.WRC-15)**. The use of these frequency bands by the above administrations for the implementation of IMT in the frequency bands 1 429-1 452 MHz and 1 492-1 518 MHz is subject to agreement obtained under No. **9.21** from countries using stations of the aeronautical mobile service. This identification does not preclude

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

	the use of these frequency bands by any application of the services to which it is allocated and does not establish priority in the Radio Regulations. (WRC-15)
5.342	*Additional allocation:* in Armenia, Azerbaijan, Belarus, the Russian Federation, Uzbekistan, Kyrgyzstan and Ukraine, the frequency band 1 429-1 535 MHz is also allocated to the aeronautical mobile service on a primary basis, exclusively for the purposes of aeronautical telemetry within the national territory. As of 1 April 2007, the use of the frequency band 1 452-1 492 MHz is subject to agreement between the administrations concerned. (WRC-15)
5.343	In Region 2, the use of the band 1 435-1 535 MHz by the aeronautical mobile service for telemetry has priority over other uses by the mobile service.
5.344	*Alternative allocation:* in the United States, the band 1 452-1 525 MHz is allocated to the fixed and mobile services on a primary basis (see also No. **5.343**).
5.345	Use of the frequency band 1 452-1 492 MHz by the broadcasting-satellite service, and by the broadcasting service, is limited to digital audio broadcasting and is subject to the provisions of Resolution **528 (Rev.WRC-19)**. (WRC-19)
5.346	In Algeria, Angola, Saudi Arabia, Bahrain, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Central African Republic, Congo (Rep. of the), Côte d'Ivoire, Djibouti, Egypt, United Arab Emirates, Eswatini, Gabon, Gambia, Ghana, Guinea, Iraq, Jordan, Kenya, Kuwait, Lesotho, Lebanon, Liberia, Madagascar, Malawi, Mali, Morocco, Mauritius, Mauritania, Mozambique, Namibia, Niger, Nigeria, Oman, Uganda, Palestine**1, Qatar, Dem. Rep. of the Congo, Rwanda, Senegal, Seychelles, Sudan, South Sudan, South Africa, Tanzania, Chad, Togo, Tunisia, Zambia, and Zimbabwe, the frequency band 1 452-1 492 MHz is identified for use by administrations listed above wishing to implement International Mobile Telecommunications (IMT) in accordance with Resolution **223 (Rev.WRC-15)**. This identification does not preclude the use of this frequency band by any other application of the services to which it is allocated and does not establish priority in the Radio Regulations. The use of this frequency band for the implementation of IMT is subject to agreement obtained under No. **9.21** with respect to the aeronautical mobile service used for aeronautical telemetry in accordance with No. **5.342**. See also Resolution **761 (WRC-19)**. (WRC-19)
5.346A	The frequency band 1 452-1 492 MHz is identified for use by administrations in Region 3 wishing to implement International Mobile Telecommunications (IMT) in accordance with Resolution **223 (Rev.WRC-19)** and Resolution **761 (Rev.WRC-19)**. The use of this frequency band by the above administrations for the implementation of IMT is subject to agreement obtained under No. **9.21** from countries using stations of the aeronautical mobile service. This identification does not preclude the use of this frequency band by any application of the services to which it is allocated and does not establish priority in the Radio Regulations. (WRC-19)
5.348	The use of the band 1 518-1 525 MHz by the mobile-satellite service is subject to coordination under No. **9.11A**. In the band 1 518-1 525 MHz stations in the mobile-satellite service shall not claim protection from the stations in the fixed service. No. **5.43A** does not apply. (WRC-03)
5.348A	In the band 1 518-1 525 MHz, the coordination threshold in terms of the power flux-density levels at the surface of the Earth in application of No. **9.11A** for space stations in the mobile-satellite (space-to-Earth) service, with respect to the land mobile service use for specialized mobile radios or used in conjunction with public switched telecommunication networks (PSTN) operating within the territory of Japan, shall be –150 dB(W/m2) in any 4 kHz band for all angles of arrival, instead of those given in Table 5-2 of Appendix **5**. In the band 1 518-1 525 MHz stations in the mobile-satellite service shall not claim protection from

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

	stations in the mobile service in the territory of Japan. No. **5.43A** does not apply. (WRC-03)
5.348B	In the band 1 518-1 525 MHz, stations in the mobile-satellite service shall not claim protection from aeronautical mobile telemetry stations in the mobile service in the territory of the United States (see Nos. **5.343** and **5.344**) and in the countries listed in No. **5.342**. No. **5.43A** does not apply. (WRC-03)
5.349	*Different category of service:* in Saudi Arabia, Azerbaijan, Bahrain, Cameroon, Egypt, Iran (Islamic Republic of), Iraq, Israel, Kazakhstan, Kuwait, Lebanon, North Macedonia, Morocco, Qatar, Syrian Arab Republic, Kyrgyzstan, Turkmenistan and Yemen, the allocation of the frequency band 1 525-1 530 MHz to the mobile, except aeronautical mobile, service is on a primary basis (see No. **5.33**). (WRC-19)
5.350	*Additional allocation:* in Kyrgyzstan and Turkmenistan, the frequency band 1 525-1 530 MHz is also allocated to the aeronautical mobile service on a primary basis. (WRC-19)
5.351	The bands 1 525-1 544 MHz, 1 545-1 559 MHz, 1 626.5-1 645.5 MHz and 1 646.5-1 660.5 MHz shall not be used for feeder links of any service. In exceptional circumstances, however, an earth station at a specified fixed point in any of the mobile-satellite services may be authorized by an administration to communicate via space stations using these bands.
5.351A	For the use of the bands 1 518-1 544 MHz, 1 545-1 559 MHz, 1 610-1 645.5 MHz, 1 646.5-1 660.5 MHz, 1 668-1 675 MHz, 1 980-2 010 MHz, 2 170-2 200 MHz, 2 483.5-2 520 MHz and 2 670-2 690 MHz by the mobile-satellite service, see Resolutions **212 (Rev.WRC-07)** and **225 (Rev.WRC-07)**. (WRC-07)
5.352	SUP (WRC-97)
5.352A	In the frequency band 1 525-1 530 MHz, stations in the mobile-satellite service, except stations in the maritime mobile- satellite service, shall not cause harmful interference to, or claim protection from, stations of the fixed service in Algeria, Saudi Arabia, Egypt, Guinea, India, Israel, Italy, Jordan, Kuwait, Mali, Morocco, Mauritania, Nigeria, Oman, Pakistan, the Philippines, Qatar, Syrian Arab Republic, Viet Nam and Yemen notified prior to 1 April 1998. (WRC-19)
5.353	SUP (WRC-97)
5.353A	In applying the procedures of Section II of Article **9** to the mobile-satellite service in the bands 1 530-1 544 MHz and 1 626.5-1 645.5 MHz, priority shall be given to accommodating the spectrum requirements for distress, urgency and safety communications of the Global Maritime Distress and Safety System (GMDSS). Maritime mobile-satellite distress, urgency and safety communications shall have priority access and immediate availability over all other mobile satellite communications operating within a network. Mobile-satellite systems shall not cause unacceptable interference to, or claim protection from, distress, urgency and safety communications of the GMDSS. Account shall be taken of the priority of safety-related communications in the other mobile-satellite services. (The provisions of Resolution **222 (WRC-2000)*** shall apply.) (WRC-2000)
5.354	The use of the bands 1 525-1 559 MHz and 1 626.5-1 660.5 MHz by the mobile-satellite services is subject to coordination under No. **9.11A**.
5.355	*Additional allocation:* in Bahrain, Bangladesh, Congo (Rep. of the), Djibouti, Egypt, Eritrea, Iraq, Israel, Kuwait, , Qatar, Syrian Arab Republic, Somalia, Sudan, South Sudan, Chad, Togo and Yemen, the bands 1 540-1 559 MHz, 1 610-1 645.5 MHz and 1 646.5-1 660 MHz are also allocated to the fixed service on a secondary basis. (WRC-12)

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

5.356	The use of the band 1 544-1 545 MHz by the mobile-satellite service (space-to-Earth) is limited to distress and safety communications (see Article **31**).
5.357	Transmissions in the band 1 545-1 555 MHz from terrestrial aeronautical stations directly to aircraft stations, or between aircraft stations, in the aeronautical mobile (R) service are also authorized when such transmissions are used to extend or supplement the satellite-to-aircraft links.
5.357A	In applying the procedures of Section II of Article **9** to the mobile-satellite service in the bands 1 545-1 555 MHz and 1 646.5-1 656.5 MHz, priority shall be given to accommodating the spectrum requirements of the aeronautical mobile-satellite (R) service providing transmission of messages with priority 1 to 6 in Article **44**. Aeronautical mobile-satellite(R) service communications with priority 1 to 6 in Article **44** shall have priority access and immediate availability, by pre-emption if necessary, over all other mobile-satellite communications operating within a network. Mobile-satellite systems shall not cause unacceptable interference to, or claim protection from, aeronautical mobile-satellite (R) service communications with priority 1 to 6 in Article **44**. Account shall be taken of the priority of safety-related communications in the other mobile-satellite services. (The provisions of Resolution **222 (WRC-12)*** shall apply.) (WRC-12) * Note by the Secretariat: This Resolution was revised by WRC-07.
5.359	*Additional allocation:* in Germany, Saudi Arabia, Armenia, Azerbaijan, Belarus, Cameroon, the Russian Federation, Georgia, Guinea, Guinea-Bissau, Jordan, Kazakhstan, Kuwait, Lithuania, Mauritania, Uganda, Uzbekistan, Pakistan, Poland, the Syrian Arab Republic, Kyrgyzstan, the Dem. People's Rep. of Korea, Romania, Tajikistan, Tunisia, Turkmenistan and Ukraine, the frequency bands 1 550-1 559 MHz, 1 610-1 645.5 MHz and 1 646.5-1 660 MHz are also allocated to the fixed service on a primary basis. Administrations are urged to make all practicable efforts to avoid the implementation of new fixed-service stations in these frequency bands. (WRC-19)
5.362A	In the United States, in the bands 1 555-1 559 MHz and 1 656.5-1 660.5 MHz, the aeronautical mobile-satellite (R) service shall have priority access and immediate availability, by pre-emption if necessary, over all other mobile-satellite communications operating within a network. Mobile-satellite systems shall not cause unacceptable interference to, or claim protection from, aeronautical mobile-satellite (R) service communications with priority 1 to 6 in Article **44**. Account shall be taken of the priority of safety-related communications in the other mobile-satellite services. (WRC-97)
5.362B	SUP (WRC-12)
5.362C	SUP (WRC-12)
5.364	The use of the band 1 610-1 626.5 MHz by the mobile-satellite service (Earth-to-space) and by the radiodetermination- satellite service (Earth-to-space) is subject to coordination under No. **9.11A**. A mobile earth station operating in either of the services in this band shall not produce a peak e.i.r.p. density in excess of -15 dB(W/4 kHz) in the part of the band used by systems operating in accordance with the provisions of No. **5.366** (to which No. **4.10** applies), unless otherwise agreed by the affected administrations. In the part of the band where such systems are not operating, the mean e.i.r.p. density of a mobile earth station shall not exceed –3 dB(W/4 kHz). Stations of the mobile-satellite service shall not claim protection from stations in the aeronautical radionavigation service, stations operating in accordance with the provisions of No. **5.366** and stations in the fixed service operating in accordance with the provisions of No. **5.359**. Administrations responsible for the coordination of mobile-satellite networks

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

	shall make all practicable efforts to ensure protection of stations operating in accordance with the provisions of No. **5.366**.
5.365	The use of the band 1 613.8-1 626.5 MHz by the mobile-satellite service (space-to-Earth) is subject to coordination under No. **9.11A**.
5.366	The band 1 610-1 626.5 MHz is reserved on a worldwide basis for the use and development of airborne electronic aids to air navigation and any directly associated ground-based or satellite-borne facilities. Such satellite use is subject to agreement obtained under No. **9.21**.
5.367	*Additional allocation*: The frequency bands 1 610-1 626.5 MHz is also allocated to the aeronautical mobile-satellite (R) service on a primary basis, subject to agreement obtained under No. **9.21**.
5.368	The provisions of No. **4.10** do not apply with respect to the radiodetermination-satellite and mobile-satellite services in the frequency band 1 610-1 626.5 MHz. However, No. **4.10** applies in the frequency band 1 610-1 626.5 MHz with respect to the aeronautical radionavigation-satellite service when operating in accordance with No. **5.366**, the aeronautical mobile satellite (R) service when operating in accordance with No. **5.367,** and in the frequency band 1 621.35-1 626.5 MHz with respect to the maritime mobile-satellite service when used for GMDSS. (WRC-19)
5.369	*Different category of service:* in Angola, Australia, China, Eritrea, Ethiopia, India, Iran (Islamic Republic of), Israel, Lebanon, Liberia, Madagascar, Mali, Pakistan, Papua New Guinea, Syrian Arab Republic, the Dem. Rep. of the Congo, Sudan, South Sudan ,Togo and Zambia, the allocation of the band 1 610-1 626.5 MHz to the radiodetermination-satellite service (Earth-to-space) is on a primary basis (see No. **5.33**), subject to agreement obtained under No. **9.21** from countries not listed in this provision. (WRC-12)
5.370	*Different category of service:* in Venezuela, the allocation to the radiodetermination-satellite service in the band 1 610- 1 626.5 MHz (Earth-to-space) is on a secondary basis.
5.371	*Additional allocation:* in Region 1, the bands 1 610-1 626.5 MHz (Earth-to-space) (space-to-Earth) is also allocated to the radiodetermination-satellite service on a secondary basis, subject to agreement obtained under No. **9.21**. (WRC 12)
5.372	Harmful interference shall not be caused to stations of the radio astronomy service using the frequency band 1 610.6- 1 613.8 MHz by stations of the radiodetermination-satellite and mobilesatellite services (No. **29.13** applies). The equivalent power flux-density (epfd) produced in the frequency band 1 610.6-1 613.8 MHz by all space stations of a non-geostationary-satellite system in the mobile-satellite service (space-to-Earth) operating in frequency band 1 613.8- 1 626.5 MHz shall be in compliance with the protection criteria provided in Recommendations ITU-R RA.769-2 and ITU- R RA.1513-2, using the methodology given in Recommendation ITU-R M.1583-1, and the radio astronomy antenna pattern described in Recommendation ITU-R RA.1631-0. (WRC-19)
5.373	Maritime mobile earth stations receiving in the frequency band 1 621.35-1 626.5 MHz shall not impose additional constraints on earth stations operating in the maritime mobile-satellite service or maritime earth stations of the radiodetermination-satellite service operating in accordance with the Radio Regulations in the frequency band 1 610-1621.35 MHz or on earth stations operating in the maritime mobile-satellite service operating in accordance with the Radio Regulations in the frequency band 1 626.5-1 660.5 MHz, unless otherwise agreed between the notifying administrations. (WRC-19)

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

5.373A	Maritime mobile earth stations receiving in the frequency band 1 621.35-1 626.5 MHz shall not impose constraints on the assignments of earth stations of the mobile-satellite service (Earth-to-space) and the radiodeterminationsatellite service (Earth-to-space) in the frequency band 1 621.35-1 626.5 MHz in networks for which complete coordination information has been received by the Radiocommunication Bureau before 28 October 2019. (WRC-19)
5.374	Mobile earth stations in the mobile-satellite service operating in the bands 1 631.5-1 634.5 MHz and 1 656.5-1 660 MHz shall not cause harmful interference to stations in the fixed service operating in the countries listed in No. **5.359**. (WRC- 97)
5.375	The use of the band 1 645.5-1 646.5 MHz by the mobile-satellite service (Earth-to-space) and for inter-satellite links is limited to distress and safety communications (see Article **31**).
5.376	Transmissions in the band 1 646.5-1 656.5 MHz from aircraft stations in the aeronautical mobile (R) service directly to terrestrial aeronautical stations, or between aircraft stations, are also authorized when such transmissions are used to extend or supplement the aircraft-to-satellite links.
5.376A	Mobile earth stations operating in the band 1 660-1 660.5 MHz shall not cause harmful interference to stations in the radio astronomy service. (WRC-97)
5.379	*Additional allocation:* in Bangladesh, India, Indonesia, Nigeria and Pakistan, the band 1 660.5-1 668.4 MHz is also allocated to the meteorological aids service on a secondary basis.
5.379A	Administrations are urged to give all practicable protection in the band 1 660.5-1 668.4 MHz for future research in radio astronomy, particularly by eliminating air-to-ground transmissions in the meteorological aids service in the band 1 664.4-1 668.4 MHz as soon as practicable.
5.379B	The use of the band 1 668-1 675 MHz by the mobile-satellite service is subject to coordination under No. **9.11A**. In the band 1 668-1 668.4 MHz, Resolution **904 (WRC-07)** shall apply. (WRC-07)
5.379C	In order to protect the radio astronomy service in the band 1 668-1 670 MHz, the aggregate power flux-density values produced by mobile earth stations in a network of the mobile-satellite service operating in this band shall not exceed – 181 dB(W/m2) in 10 MHz and -194 dB(W/m2) in any 20 kHz at any radio astronomy station recorded in the Master International Frequency Register, for more than 2% of integration periods of 2 000 s. (WRC-03)
5.379D	For sharing of the band 1 668.4-1 675 MHz between the mobile-satellite service and the fixed and mobile services, Resolution 744 (Rev.WRC-07) shall apply. (WRC-07)
5.379E	In the band 1 668.4-1 675 MHz, stations in the mobile-satellite service shall not cause harmful interference to stations in the meteorological aids service in China, Iran (Islamic Republic of), Japan and Uzbekistan. In the band 1 668.4-1 675 MHz, administrations are urged not to implement new systems in the meteorological aids service and are encouraged to migrate existing meteorological aids service operations to other bands as soon as practicable. (WRC-03)
5.380A	In the band 1 670-1 675 MHz, stations in the mobile-satellite service shall not cause harmful interference to, nor constrain the development of, existing earth stations in the meteorological-satellite service notified before 1 January 2004. Any new assignment to these earth stations in this band shall also be protected from harmful interference from stations in the mobile-satellite service. (WRC-07)
5.381	*Additional allocation:* in Afghanistan, , Cuba, India, Iran (Islamic Republic of) and Pakistan, the band 1 690-1 700 MHz is also allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis. (WRC-12)

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

CONTINUES ON PAGE 514 OF BOOK 5

Printed by and obtainable from the Government Printer, Bosman Street, Private Bag X85, Pretoria, 0001
Contact Centre Tel: 012-748 6200. eMail: info.egazette@gpw.gov.za
Publications: Tel: (012) 748 6053, 748 6061, 748 6065

This gazette is also available free online at **www.gpwonline.co.za**



Government Gazette
Staatskoerant

REPUBLIC OF SOUTH AFRICA
REPUBLIEK VAN SUID AFRIKA

Vol. 681 25 March Maart 2022 No. 46088

PART 5 OF 6

N.B. The Government Printing Works will not be held responsible for the quality of "Hard Copies" or "Electronic Files" submitted for publication purposes

ISSN 1682-5845

9 771682 584003 46088

AIDS HELPLINE: 0800-0123-22 Prevention is the cure

5.382	*Different category of service:* in Saudi Arabia, Armenia, Azerbaijan, Bahrain, Belarus, Congo (Rep. of the), Egypt, the United Arab Emirates, Eritrea, Ethiopia, the Russian Federation, Guinea, Iraq, Israel, Jordan, Kazakhstan, Kuwait, Lebanon, North Macedonia, Mauritania, Moldova, Mongolia, Oman, Uzbekistan, Poland, Qatar, the Syrian Arab Republic, Kyrgyzstan, Somalia, Tajikistan, Turkmenistan, Ukraine and Yemen, the allocation of the frequency band 1 690-1 700 MHz to the fixed and mobile, except aeronautical mobile, services is on a primary basis (see No. **5.33**), and in the Dem. People's Rep. of Korea, the allocation of the frequency band 1 690-1 700 MHz to the fixed service is on a primary basis (see No. **5.33**) and to the mobile, except aeronautical mobile, service on a secondary basis. (WRC-19)
5.384	*Additional allocation:* in India, Indonesia and Japan, the band 1 700-1 710 MHz is also allocated to the space research service (space-to-Earth) on a primary basis. (WRC-97)
5.384A	The frequency bands 1 710-1 885 MHz, 2 300-2 400 MHz and 2 500-2 690 MHz, or portions thereof, are identified for use by administrations wishing to implement International Mobile Telecommunications (IMT) in accordance with Resolution **223 (Rev.WRC-15)**. This identification does not preclude the use of these by any application of the services to which they are allocated and does not establish priority in the Radio Regulations. (WRC-15)
5.385	*Additional allocation:* the band 1 718.8-1 722.2 MHz is also allocated to the radio astronomy service on a secondary basis for spectral line observations. (WRC-2000)
5.386	*Additional allocation:* the frequency band 1 750-1 850 MHz is also allocated to the space operation (Earth-to- space) and space research (Earth-to-space) services in Region 2 (except in Mexico), in Australia, Guam, India, Indonesia and Japan on a primary basis, subject to agreement obtained under No. **9.21**, having particular regard to troposcatter systems. (WRC-15)
5.387	*Additional allocation:* in Belarus, Georgia, Kazakhstan, Kyrgyzstan, Romania, Tajikistan and Turkmenistan, the band 1 770-1 790 MHz is also allocated to the meteorological-satellite service on a primary basis, subject to agreement obtained under No. **9.21**. (WRC-12)
5.388	The frequency bands 1 885-2 025 MHz and 2 110-2 200 MHz are intended for use, on a worldwide basis, by administrations wishing to implement International Mobile Telecommunications (IMT). Such use does not preclude the use of these frequency bands by other services to which they are allocated. The frequency bands should be made available for IMT in accordance with Resolution **212 (Rev.WRC-19)** (see also Resolution **223 (Rev.WRC-19)**). (WRC-19)
5.388A	In Regions 1 and 3, the bands 1 885-1 980 MHz, 2 010-2 025 MHz and 2 110-2 170 MHz and, in Region 2, the bands 1 885- 1 980 MHz and 2 110-2 160 MHz may be used by high altitude platform stations as base stations to provide International Mobile Telecommunications-2000 (IMT-2000), in accordance with Resolution 221 (Rev.WRC-03)*. Their use by IMT-2000 applications using high altitude platform stations as base stations does not preclude the use of these bands by any station in the services to which they are allocated and does not establish priority in the Radio Regulations. (WRC- 03)

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

5.388B	In Algeria, Saudi Arabia, Bahrain, Benin, Burkina Faso, Cameroon, Comoros, Côte d'Ivoire, China, Cuba, Djibouti, Egypt, United Arab Emirates, Eritrea, Ethiopia, Gabon, Ghana, India, Iran (Islamic Republic of), Israel, Jordan, Kenya, Kuwait, Lebanon, Libya, Mali, Morocco, Mauritania, Nigeria, Oman, Uganda, Pakistan, Qatar, the Syrian Arab Republic, Senegal, Singapore, Sudan, South Sudan, Tanzania, Chad, Togo, Tunisia, Yemen, Zambia and Zimbabwe, for the purpose of protecting fixed and mobile services, including IMT mobile stations, in their territories from co-channel interference, a high altitude platform station (HAPS) operating as an IMT base station in neighbouring countries, in the frequency bands referred to in No. 5.388A, shall not exceed a co-channel power flux-density of −127 dB(W/(m2 · MHz)) at the Earth's surface outside a country's borders unless explicit agreement of the affected administration is provided at the time of the notification of HAPS. (WRC-19)
5.389A	The use of the bands 1 980-2 010 MHz and 2 170-2 200 MHz by the mobile-satellite service is subject to coordination under No. **9.11A** and to the provisions of Resolution **716 (Rev.WRC-2000)**. (WRC-07)
5.389B	The use of the frequency band 1 980-1 990 MHz by the mobile-satellite service shall not cause harmful interference to or constrain the development of the fixed and mobile services in Argentina, Brazil, Canada, Chile, Ecuador, the United States, Honduras, Jamaica, Mexico, Paraguay, Peru, Suriname, Trinidad and Tobago, Uruguay and Venezuela. (WRC-19)
5.389C	The use of the bands 2 010-2 025 MHz and 2 160-2 170 MHz in Region 2 by the mobile-satellite service is subject to coordination under No. **9.11A** and to the provisions of Resolution **716 (Rev.WRC-2000)**. (WRC-07)
5.389E	The use of the bands 2 010-2 025 MHz and 2 160-2 170 MHz by the mobile-satellite service in Region 2 shall not cause harmful interference to or constrain the development of the fixed and mobile services in Regions 1 and 3.
5.389F	In Algeria, Cape Verde, Egypt, Iran (Islamic Republic of), Mali, Syrian Arab Republic and Tunisia, the use of the frequency bands 1 980-2 010 MHz and 2 170-2 200 MHz by the mobilesatellite service shall neither cause harmful interference to the fixed and mobile services, nor hamper the development of those services prior to 1 January 2005, nor shall the former service request protection from the latter services. (WRC-19)
5.390	SUP (WRC-07)
5.391	In making assignments to the mobile service in the frequency bands 2 025-2 110 MHz and 2 200-2 290 MHz, administrations shall not introduce high-density mobile systems, as described in Recommendation ITU-R SA.1154-0, and shall take that Recommendation into account for the introduction of any other type of mobile system. (WRC-15)
5.392	Administrations are urged to take all practicable measures to ensure that space-to-space transmissions between two or more non-geostationary satellites, in the space research, space operations and Earth exploration-satellite services in the bands 2 025-2 110 MHz and 2 200-2 290 MHz, shall not impose any constraints on Earth-to-space, space-to-Earth and other space-to-space transmissions of those services and in those bands between geostationary and non- geostationary satellites.
5.393	*Additional allocation:* in Canada, the United States and India, the frequency band 2 310-2 360 MHz is also allocated to the broadcasting-satellite service (sound) and complementary terrestrial sound broadcasting service on a primary basis. Such use is limited to digital audio broadcasting and is subject to the provisions of Resolution **528 (Rev.WRC-19)**, with the exception of *resolves* 3 in regard to the limitation on broadcasting-satellite systems in the upper 25 MHz. Complementary terrestrial sound broadcasting stations shall be subject to

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

	bilateral coordination with neighbouring countries prior to their bringing into use. (WRC-19)
5.394	In the United States, the use of the band 2 300-2 390 MHz by the aeronautical mobile service for telemetry has priority over other uses by the mobile services. In Canada, the use of the band 2 360-2 400 MHz by the aeronautical mobile service for telemetry has priority over other uses by the mobile services. (WRC-07)
5.395	In France and Turkey, the use of the band 2 310-2 360 MHz by the aeronautical mobile service for telemetry has priority over other uses by the mobile service. (WRC-03)
5.396	SUP (WRC-19)
5.397	SUP (WRC-12)
5.398	In respect of the radiodetermination-satellite service in the band 2 483.5-2 500 MHz, the provisions of No. **4.10** do not apply
5.398A	*Different category of service:* In Armenia, Azerbaijan, Belarus, the Russian Federation, Kazakhstan, Uzbekistan, Kyrgyzstan, Tajikistan and Ukraine, the band 2 483.5-2 500 MHz is allocated on a primary basis to the radiolocation service. The radiolocation stations in these countries shall not cause harmful interference to, or claim protection from, stations of the fixed, mobile and mobile-satellite services operating in accordance with the Radio Regulations in the frequency band 2 483.5-2 500 MHz. (WRC-12
5.399	Except for cases referred to in No. **5.B118**, stations of the radiodetermination-satellite service operating in the frequency band 2 483.5-2 500 MHz for which notification information is received by the Bureau after 17 February 2012, and the service area of which includes Armenia, Azerbaijan, Belarus, the Russian Federation, Kazakhstan, Uzbekistan, Kyrgyzstan, Tajikistan and Ukraine, shall not cause harmful interference to, and shall not claim protection from stations of the radiolocation service operating in these countries in accordance with No. **5.A118**. (WRC-12)
5.400	SUP (WRC-12)
5.401	In Angola, Australia, Bangladesh, China, Eritrea, Eswatini, Ethiopia, India, Lebanon, Liberia, Libya, Madagascar, Mali, Pakistan, Papua New Guinea, Syrian Arab Republic, Dem. Rep. of the Congo, Sudan, Togo and Zambia, the frequency band 2 483.5-2 500 MHz was already allocated on a primary basis to the radiodetermination-satellite service before WRC-12, subject to agreement obtained under No. **9.21** from countries not listed in this provision. Systems in the radiodetermination-satellite service for which complete coordination information has been received by the Radiocommunication Bureau before 18 February 2012 will retain their regulatory status, as of the date of receipt of the coordination request information. (WRC-19)
5.402	The use of the band 2 483.5-2 500 MHz by the mobile-satellite and the radiodetermination-satellite services is subject to the coordination under No. **9.11A**. Administrations are urged to take all practicable steps to prevent harmful interference to the radio astronomy service from emissions in the 2 483.5-2 500 MHz band, especially those caused by second-harmonic radiation that would fall into the 4 990-5 000 MHz band allocated to the radio astronomy service worldwide.
5.403	Subject to agreement obtained under No. **9.21**, the band 2 520-2 535 MHz may also be used for the mobile-satellite (space-to-Earth), except aeronautical mobile-satellite, service for operation limited to within national boundaries. The provisions of No. **9.11A** apply. (WRC-07)

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

5.404	*Additional allocation:* in India and Iran (Islamic Republic of), the band 2 500-2 516.5 MHz may also be used for the radiodetermination-satellite service (space-to-Earth) for operation limited to within national boundaries, subject to agreement obtained under No. **9.21**
5.405	SUP (WRC-12)
5.407	In the band 2 500-2 520 MHz, the power flux-density at the surface of the Earth from space stations operating in the mobile-satellite (space-to-Earth) service shall not exceed –152 dB(W/(m2 Ill 4 kHz)) in Argentina, unless otherwise agreed by the administrations concerned.
5.410	The band 2 500-2 690 MHz may be used for tropospheric scatter systems in Region 1, subject to agreement obtained under No. **9.21**. No. **9.21** does not apply to tropospheric scatter links situated entirely outside Region 1. Administrations shall make all practicable efforts to avoid developing new tropospheric scatter systems in this band. When planning new tropospheric scatter radio-relay links in this band, all possible measures shall be taken to avoid directing the antennas of these links towards the geostationary-satellite orbit. (WRC-12)
5.412	*Alternative allocation:* in , Kyrgyzstan and Turkmenistan, the band 2 500-2 690 MHz is allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis. (WRC-12
5.413	In the design of systems in the broadcasting-satellite service in the bands between 2 500 MHz and 2 690 MHz, administrations are urged to take all necessary steps to protect the radio astronomy service in the band 2 690- 2 700 MHz.
5.414	The allocation of the frequency band 2 500-2 520 MHz to the mobile-satellite service (space-to-Earth) is subject to coordination under No. **9.11A**. (WRC-07)
5.414A	In Japan and India, the use of the bands 2 500-2 520 MHz and 2 520-2 535 MHz, under **No. 5.403**, by a satellite network in the mobile-satellite service (space-to-Earth) is limited to operation within national boundaries and subject to the application of No. 9.11A. The following pfd values shall be used as a threshold for coordination under **No. 9.11A**, for all conditions and for all methods of modulation, in an area of 1 000 km around the territory of the administration notifying the mobile-satellite service network: -136 dB(W/(m^2 · MHz)) for $0° \leq \Theta \leq 5°$ $-136 + 0.55\,(\Theta - 5)$ dB(W/(m^2 · MHz)) for $5° < \Theta \leq 25°$ -125 dB(W/(m^2 · MHz)) for $25° < \Theta \leq 90°$ where Θ is the angle of arrival of the incident wave above the horizontal plane, in degrees. Outside this area Table 21-4 of Article 21 shall apply. Furthermore, the coordination thresholds in Table 5-2 of Annex 1 to Appendix 5 of the Radio Regulations (Edition of 2004), in conjunction with the applicable provisions of Articles 9 and 11 associated with No. 9.11A, shall apply to systems for which complete notification information has been received by the Radicommunication Bureau by 14 November 2007 and that have been brought into use by that date. (WRC-07)
5.415	The use of the bands 2 500-2 690 MHz in Region 2 and 2 500-2 535 MHz and 2 655-2 690 MHz in Region 3 by the fixed- satellite service is limited to national and regional systems, subject to agreement obtained under No. 9.21, giving particular attention to the broadcasting-satellite service in Region 1. (WRC-07)
5.415A	Additional allocation: in India and Japan, subject to agreement obtained under No. 9.21, the band 2 515-2 535 MHz may also be used for the aeronautical

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

	mobile-satellite service (space-to-Earth) for operation limited to within their national boundaries. (WRC-2000)
5.416	The use of the band 2 520-2 670 MHz by the broadcasting-satellite service is limited to national and regional systems for community reception, subject to agreement obtained under No. **9.21**. The provisions of No. **9.19** shall be applied by administrations in this band in their bilateral and multilateral negotiations. (WRC-07)
5.417	SUP RC-0)
5.417A	SUP (WRC-15)
5.417B	SUP (WRC-15)
5.417C	SUP (WRC-15)
5.417D	SUP (WRC-15)
5.418	*Additional allocation:* in India, the frequency band 2 535-2 655 MHz is also allocated to the broadcasting-satellite service (sound) and complementary terrestrial broadcasting service on a primary basis. Such use is limited to digital audio broadcasting and is subject to the provisions of Resolution **528 (Rev.WRC-19)**. The provisions of No. **5.416** and Table **21-4** of Article **21** do not apply to this additional allocation. Use of non-geostationary-satellite systems in the broadcastingsatellite service (sound) is subject to Resolution **539 (Rev.WRC-19)**. Geostationary broadcastingsatellite service (sound) systems for which complete Appendix **4** coordination information has been received after 1 June 2005 are limited to systems intended for national coverage. The power fluxdensity at the Earth's surface produced by emissions from a geostationary broadcasting-satellite service (sound) space station operating in the frequency band 2 630-2 655 MHz, and for which complete Appendix **4** coordination information has been received after 1 June 2005, shall not exceed the following limits, for all conditions and for all methods of modulation: -130 dB(W/(m^2 · MHz)) for $0^o \leq \Theta \leq 5^o$ $-130 + 0.4(\Theta - 5)$dB(W/(m^2 · MHz)) for $5^o < \Theta \leq 25^o$ –-122 dB(W/(m^2 · MHz)) for $25^o < \Theta \leq 90^o$ where Θ is the angle of arrival of the incident wave above the horizontal plane, in degrees. These limits may be exceeded on the territory of any country whose administration has so agreed. As an exception to the limits above, the pfd value f −122 dB(W/(m2 · MHz)) shall be used as a threshold for coordination under No. **9.11** in an area of 1 500 km around the territory of the administration notifying the broadcasting-satellite service (sound) system. In addition, an administration listed in this provision shall not have simultaneously two frequency assignments, one under this provision and the other under No. **5.416** for systems for which complete Appendix **4** coordination information has been received after 1 June 2005. (WRC-19)
5.418A	In certain Region 3 countries listed in No. **5.418**, use of the band 2 630-2 655 MHz by non-geostationary-satellite systems in the broadcasting-satellite service (sound) for which complete Appendix **4** coordination information, or notification information, has been received after 2 June 2000, is subject to the application of the provisions of No. **9.12A**, in respect of geostationary-satellite networks for which complete Appendix **4** coordination information, or notification information, is considered to have been received after 2 June 2000, and No. **22.2** does not apply. No. **22.2** shall continue to apply with respect to

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

	geostationary-satellite networks for which complete Appendix **4** coordination information, or notification information, is considered to have been received before 3 June 2000. (WRC-03)+B509
5.418B	Use of the band 2 630-2 655 MHz by non-geostationary-satellite systems in the broadcasting-satellite service (sound), pursuant to No. **5.418**, for which complete Appendix **4** coordination information, or notification information, has been received after 2 June 2000, is subject to the application of the provisions of No. **9.12**. (WRC-03)
5.418C	Use of the band 2 630-2 655 MHz by geostationary-satellite networks for which complete Appendix **4** coordination information, or notification information, has been received after 2 June 2000 is subject to the application of the provisions of No. **9.13** with respect to non-geostationary-satellite systems in the broadcasting-satellite service (sound), pursuant to No. **5.418** and No. **22.2** does not apply. (WRC-03)
5.419	When introducing systems of the mobile-satellite service in the band 2 670-2 690 MHz, administrations shall take all necessary steps to protect the satellite systems operating in this band prior to 3 March 1992. The coordination of mobile-satellite systems in the band shall be in accordance with No. **9.11A**. (WRC-07)
5.420	The band 2 655-2 670 MHz may also be used for the mobile-satellite (Earth-to-space), except aeronautical mobile- satellite, service for operation limited to within national boundaries, subject to agreement obtained under No. **9.21**. The coordination under No. **9.11A** applies. (WRC-07)
5.422	*Additional allocation:* in Saudi Arabia, Armenia, Azerbaijan, Bahrain, Belarus, Brunei Darussalam, Congo (Rep. of the), Côte d'Ivoire, Cuba, Djibouti, Egypt, the United Arab Emirates, Eritrea, Ethiopia, Gabon, Georgia, Guinea, Guinea-Bissau, Iran (Islamic Republic of), Iraq, Israel, Jordan, Kuwait, Lebanon, Mauritania, , Mongolia, Montenegro, Nigeria, Oman, Pakistan, the Philippines, Qatar, Syrian Arab Republic, Kyrgyzstan, the Dem. Rep. of the Congo, Romania, Somalia, Tajikistan, Tunisia, Turkmenistan, Ukraine and Yemen, the band 2 690-2 700 MHz is also allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis. Such use is limited to equipment in operation by 1 January 1985. (WRC-12)
5.423	In the band 2 700-2 900 MHz, ground-based radars used for meteorological purposes are authorized to operate on a basis of equality with stations of the aeronautical radionavigation service.
5.424	*Additional allocation:* in Canada, the band 2 850-2 900 MHz is also allocated to the maritime radionavigation service, on a primary basis, for use by shore-based radars.
5.424A	In the band 2 900-3 100 MHz, stations in the radiolocation service shall not cause harmful interference to, nor claim protection from, radar systems in the radionavigation service. (WRC-03)
5.425	In the band 2 900-3 100 MHz, the use of the shipborne interrogator-transponder (SIT) system shall be confined to the sub-band 2 930 -2 950 MHz.
5.426	The use of the band 2 900-3 100 MHz by the aeronautical radionavigation service is limited to ground-based radars.

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

5.427	In the bands 2 900-3 100 MHz and 9 300-9 500 MHz, the response from radar transponders shall not be capable of being confused with the response from radar beacons (racons) and shall not cause interference to ship or aeronautical radars in the radionavigation service, having regard, however, to No. **4.9**.
5.428	*Additional allocation:* in Kyrgyzstan and Turkmenistan, the frequency band 3 100-3 300 MHz is also allocated to the radionavigation service on a primary basis. (WRC-19)
5.429	*Additional allocation:* in Saudi Arabia, Bahrain, Bangladesh, Benin, Brunei Darussalam, Cambodia, Cameroon, China, Congo (Rep. of the), Korea (Rep. of), Côte d'Ivoire, Egypt, the United Arab Emirates, India, Indonesia, Iran (Islamic Republic of), Iraq, Japan, Jordan, Kenya, Kuwait, Lebanon, Libya, Malaysia, New Zealand, Oman, Uganda, Pakistan,Qatar, the Syrian Arab Republic, the Dem. Rep. of the Congo, the Dem. People's Rep. of Korea, Sudan and Yemen, the frequency band 3 300-3 400 MHz is also allocated to the fixed and mobile services on a primary basis. New Zealand and the countries bordering the Mediterranean shall not claim protection for their fixed and mobile services from the radiolocation service. (WRC-19)
5.429A	*Additional allocation*: in Angola, Benin, Botswana, Burkina Faso, Burundi, Djibouti, Eswatini, Ghana, Guinea, Guinea- Bissau, Lesotho, Liberia, Malawi, Mauritania, Mozambique, Namibia, Niger, Nigeria, Rwanda, Sudan, South Sudan, South Africa, Tanzania, Chad, Togo, Zambia and Zimbabwe, the frequency band 3 300-3 400 MHz is allocated to the mobile, except aeronautical mobile, service on a primary basis. Stations in the mobile service operating in the frequency band 3 300-3 400 MHz shall not cause harmful interference to, or claim protection from, stations operating in the radiolocation service. (WRC-19)
5.429B	In the following countries of Region 1 south of 30° parallel north: Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Congo (Rep. of the), Côte d'Ivoire, Egypt, Eswatini, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Malawi, Mauritania, Mozambique, Namibia, Niger, Nigeria, Uganda, the Dem. Rep. of the Congo, Rwanda, Sudan, South Sudan, South Africa, Tanzania, Chad, Togo, Zambia and Zimbabwe, the frequency band 3 300-3 400 MHz is identified for the implementation of International Mobile Telecommunications (IMT). The use of this frequency band shall be in accordance with Resolution **223 (Rev.WRC-15)**. The use of the frequency band 3 300-3 400 MHz by IMT stations in the mobile service shall not cause harmful interference to, or claim protection from, systems in the radiolocation service, and administrations wishing to implement IMT shall obtain the agreement of neighbouring countries to protect operations within the radiolocation service. This identification does not preclude the use of this frequency band by any application of the services to which it is allocated and does not establish priority in the Radio Regulations. (WRC-19)
5.429C	*Different category of service*: in Argentina, Belize, Brazil, Chile, Colombia, Costa Rica, the Dominican Republic, El Salvador, Ecuador, Guatemala, Mexico, Paraguay and Uruguay, the frequency band 3 300-3 400 MHz is allocated to the mobile, except aeronautical mobile, service on a primary basis. In Argentina, Brazil, the Dominican Republic, Guatemala, Mexico, Paraguay and Uruguay, the frequency band 3 300-3 400 MHz is also allocated to the fixed service on a primary basis. Stations in the fixed and mobile services operating in the frequency band 3 300-3 400 MHz shall not cause harmful interference to, or claim protection from, stations operating in the radiolocation service. (WRC-19)

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

5.429D	In the following countries in Region 2: Argentina, Belize, Brazil, Chile, Colombia, Costa Rica, the Dominican Republic, El Salvador, Ecuador, Guatemala, Mexico, Paraguay and Uruguay, the use of the frequency band 3 300-3 400 MHz is identified for the implementation of International Mobile Telecommunications (IMT). Such use shall be in accordance with Resolution **223 (Rev.WRC-15)**. This use in Argentina, Paraguay and Uruguay is subject to the application of **No.9.21**. The use of the frequency band 3 300-3 400 MHz by IMT stations in the mobile service shall not cause harmful interference to, or claim protection from, systems in the radiolocation service, and administrations wishing to implement IMT shall obtain the agreement of neighbouring countries to protect operations within the radiolocation service. This identification does not preclude the use of this frequency band by any application of the services to which it is allocated and does not establish priority in the Radio Regulations. (WRC-19)
5.429E	*Additional allocation*: in Papua New Guinea, the frequency band 3 300-3 400 MHz is allocated to the mobile, except aeronautical mobile, service on a primary basis. Stations in the mobile service operating in the frequency band 3 300-3 400 MHz shall not cause harmful interference to, or claim protection from, stations operating in the radiolocation service. (WRC-15)
5.429F	In the following countries in Region 3: Cambodia, India, Indonesia, Lao P.D.R., Pakistan, the Philippines and Viet Nam, the use of the frequency band 3 300-3 400 MHz is identified for the implementation of International Mobile Telecommunications (IMT). Such use shall be in accordance with Resolution **223 (Rev.WRC-15)**. The use of the frequency band 3 300-3 400 MHz by IMT stations in the mobile service shall not cause harmful interference to, or claim protection from, systems in the radiolocation service. Before an administration brings into use a base or mobile station of an IMT system in this frequency band, it shall seek agreement under No. **9.21** with neighbouring countries to protect the radiolocation service. This identification does not preclude the use of this frequency band by any application of the services to which it is allocated and does not establish priority in the Radio Regulations. (WRC-19)
5.430	*Additional allocation:* in Kyrgyzstan and Turkmenistan, the frequency band 3 300-3 400 MHz is also allocated to the radionavigation service on a primary basis. (WRC-19)
5.430A	The allocation of the frequency band 3 400-3 600 MHz to the mobile, except aeronautical mobile, service is subject to agreement obtained under No. 9.21. This frequency band is identified for International Mobile Telecommunications (IMT). This identification does not preclude the use of this frequency band by any application of the services to which it is allocated and does not establish priority in the Radio Regulations. The provisions of Nos. 9.17 and 9.18 shall also apply in the coordination phase. Before an administration brings into use a (base or mobile) station of the mobile service in this frequency band, it shall ensure that the power flux-density (pfd) produced at 3 m above ground does not exceed -154.5 dB(W/(m2 · 4 kHz)) for more than 20% of time at the border of the territory of any other administration. This limit may be exceeded on the territory of any country whose administration has so agreed. In order to ensure that the pfd limit at the border of the territory of any other administration is met, the calculations and verification shall be made, taking into account all relevant information, with the mutual agreement of both administrations (the administration responsible for the terrestrial station and the administration responsible for the earth station) and with the assistance of the Bureau if so requested. In case of disagreement, calculation and verification of the pfd shall be made by the Bureau, taking into account the information referred to above. Stations of the mobile service in the frequency band 3 400-3 600 MHz shall not

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

	claim more protection from space stations than that provided in Table 21-4 of the Radio Regulations (Edition of 2004). (WRC-15)
5.431	*Additional allocation:* in Germany, the frequency band 3 400-3 475 MHz is also allocated to the amateur service on a secondary basis. (WRC-19)
5.431A	In Region 2, the allocation of the frequency band 3 400-3 500 MHz to the mobile, except aeronautical mobile, service on a primary basis is subject to agreement obtained under No. 9.21. (WRC-15)
5.431B	In Region 2, the frequency band 3 400-3 600 MHz is identified for use by administrations wishing to implement International Mobile Telecommunications (IMT). This identification does not preclude the use of this frequency band by any application of the services to which it is allocated and does not establish priority in the Radio Regulations. At the stage of coordination the provisions of Nos. **9.17** and **9.18** also apply. Before an administration brings into use a base or mobile station of an IMT system, it shall seek agreement under No. **9.21** with other administrations and ensure that the power flux-density (pfd) produced at 3 m above ground does not exceed +154.5 dB(W/(m2 · 4 kHz)) for more than 20% of time at the border of the territory of any other administration. This limit may be exceeded on the territory of any country whose administration has so agreed. In order to ensure that the pfd limit at the border of the territory of any other administration is met, the calculations and verification shall be made, taking into account all relevant information, with the mutual agreement of both administrations (the administration responsible for the terrestrial station and the administration responsible for the earth station), with the assistance of the Bureau if so requested. In case of disagreement, the calculation and verification of the pfd shall be made by the Bureau, taking into account the information referred to above. Stations of the mobile service, including IMT systems, in the frequency band 3 400-3 600 MHz shall not claim more protection from space stations than that provided in Table **21-4** of the Radio Regulations (Edition of 2004). (WRC-15) (Edition of 2004). (WRC-15)
5.432	*Different category of service:* in Korea (Rep. of), Japan, Pakistan and the Dem.People's Rep. of Korea, the allocation of the frequency band 3 400-3 500 MHz to the mobile,except aeronautical mobile, service is on a primary basis (see No. **5.33**). (WRC-19)
5.432A	In Korea (Rep. of), Japan, Pakistan and the Dem. People's Rep. of Korea, the frequency band 3 400-3 500 MHz is identified for International Mobile Telecommunications (IMT). This identification does not preclude the use of this frequency band by any application of the services to which it is allocated and does not establish priority in the Radio Regulations. At the stage of coordination the provisions of Nos. **9.17** and **9.18** also apply. Before an administration brings into use a (base or mobile) station of the mobile service in this frequency band it shall ensure that the power flux-density (pfd) produced at 3 m above ground does not exceed −154.5 dB(W/(m2 · 4 kHz)) for more than 20% of time at the border of the territory of any other administration. This limit may be exceeded on the territory of any country whose administration has so agreed. In order to ensure that the pfd limit at the border of the territory of any other administration is met, the calculations and verification shall be made, taking into account all relevant information, with the mutual agreement of both administrations (the administration responsible for the terrestrial station and the administration responsible for the earth station), with the assistance of the Bureau if so requested. In case of disagreement, the calculation and verification of the pfd shall be made by the Bureau, taking into account the information referred to above. Stations of the mobile service in the frequency band 3 400-3 500 MHz

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

	shall not claim more protection from space stations than that provided in Table 21-4 of the Radio Regulations (Edition of 2004). (WRC- 19)
5.432B	*Different category of service:* in Australia, Bangladesh, Brunei Darussalam, China, French overseas communities of Region 3, India, Indonesia, Iran (Islamic Republic of), Malaysia, New Zealand, the Philippines, Singapore and Thailand, the frequency band 3 400-3 500 MHz is allocated to the mobile, except aeronautical mobile, service on a primary basis, subject to agreement obtained under No. **9.21** with other administrations and is identified for International Mobile Telecommunications (IMT). This identification does not preclude the use of this frequency band by any application of the services to which it is allocated and does not establish priority in the Radio Regulations. At the stage of coordination the provisions of Nos. **9.17** and **9.18** also apply. Before an administration brings into use a (base or mobile) station of the mobile service in this frequency band it shall ensure that the power flux-density (pfd) produced at 3 m above ground does not exceed −154.5 dB(W/(m2 · 4 kHz)) for more than 20% of time at the border of the territory of any other administration. This limit may be exceeded on the territory of any country whose administration has so agreed. In order to ensure that the pfd limit at the border of the territory of any other administration is met, the calculations and verification shall be made, taking into account all relevant information, with the mutual agreement of both administrations (the administration responsible for the terrestrial station and the administration responsible for the earth station), with the assistance of the Bureau if so requested. In case of disagreement, the calculation and verification of the pfd shall be made by the Bureau, taking into account the information referred to above. Stations of the mobile service in the frequency band 3 400-3 500 MHz shall not claim more protection from space stations than that provided in Table 21-4 of the Radio Regulations (Edition of 2004). (WRC-19)
5.433	In Regions 2 and 3, in the band 3 400-3 600 MHz the radiolocation service is allocated on a primary basis. However, all administrations operating radiolocation systems in this band are urged to cease operations by 1985. Thereafter, administrations shall take all practicable steps to protect the fixed-satellite service and coordination requirements shall not be imposed on the fixed-satellite service.
5.433A	In Australia, Bangladesh, Brunei Darussalam, China, French overseas communities of Region 3, Korea (Rep. of), India, Indonesia, Iran (Islamic Republic of), Japan, New Zealand, Pakistan, the Philippines and the Dem. People's Rep. of Korea, the frequency band 3 500-3 600 MHz is identified for International Mobile Telecommunications (IMT). This identification does not preclude the use of this frequency band by any application of the services to which it is allocated and does not establish priority in the Radio Regulations. At the stage of coordination the provisions of Nos. **9.17** and **9.18** also apply. Before an administration brings into use a (base or mobile) station of the mobile service in this frequency band it shall ensure that the power fluxdensity (pfd) produced at 3 m above ground does not exceed −154.5 dB(W/(m2 · 4 kHz)) for more than 20% of time at the border of the territory of any other administration. This limit may be exceeded on the territory of any country whose administration has so agreed. In order to ensure that the pfd limit at the border of the territory of any other administration is met, the calculations and verification shall be made, taking into account all relevant information, with the mutual agreement of both administrations (the administration responsible for the terrestrial station and the administration responsible for the earth station), with the assistance of the Bureau if so requested. In case of disagreement, the calculation and verification

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

	of the pfd shall be made by the Bureau, taking into account the information referred to above. Stations of the mobile service in the frequency band 3 500-3 600 MHz shall not claim more protection from space stations than that provided in Table 21-4 of the Radio Regulations (Edition of 2004). (WRC-19).
5.434	In Canada, Chile, Colombia, Costa Rica, El Salvador, the United States and Paraguay, the frequency band 3 600-3 700 MHz, or portions thereof, is identified for use by these administrations wishing to implement International Mobile Telecommunications (IMT). This identification does not preclude the use of this frequency band by any application of the services to which it is allocated and does not establish priority in the Radio Regulations. At the stage of coordination the provisions of Nos. **9.17** and **9.18** also apply. Before an administration brings into use a base or mobile station of an IMT system, it shall seek agreement under No. **9.21** with other administrations and ensure that the power flux-density (pfd) produced at 3 m above ground does not exceed −154.5 dB(W/(m2 · 4 kHz)) for more than 20% of time at the border of the territory of any other administration. This limit may be exceeded on the territory of any country whose administration has so agreed. In order to ensure that the pfd limit at the border of the territory of any other administration is met, the calculations and verification shall be made, taking into account all relevant information, with the mutual agreement of both administrations (the administration responsible for the terrestrial station and the administration responsible for the earth station), with the assistance of the Bureau if so requested. In case of disagreement, the calculation and verification of the pfd shall be made by the Bureau, taking into account the information referred to above. Stations of the mobile service, including IMT systems, in the frequency band 3 600-3 700 MHz shall not claim more protection from space stations than that provided in Table **21-4** of the Radio Regulations (Edition of 2004). (WRC-19)
5.436	Use of the frequency band 4 200-4 400 MHz by stations in the aeronautical mobile (R) service is reserved exclusively for wireless avionics intra-communication systems that operate in accordance with recognized international aeronautical standards. Such use shall be in accordance with Resolution **424 (WRC-15)**. (WRC-15)
5.437	Passive sensing in the Earth exploration-satellite and space research services may be authorized in the frequency band 4 200-4 400 MHz on a secondary basis. (WRC-15)
5.438	Use of the frequency band 4 200-4 400 MHz by the aeronautical radionavigation service is reserved exclusively for radio altimeters installed on board aircraft and for the associated transponders on the ground. (WRC-15)
5.439	*Additional allocation:* in Iran (Islamic Republic of), the band 4 200-4 400 MHz is also allocated to the fixed service on a secondary basis. (WRC-12)
5.440	The standard frequency and time signal-satellite service may be authorized to use the frequency 4 202 MHz for space- to-Earth transmissions and the frequency 6 427 MHz for Earth-to-space transmissions. Such transmissions shall be confined within the limits of ± 2 MHz of these frequencies, subject to agreement obtained under No. **9.21**.
5.440A	In Region 2 (except Brazil, Cuba, French overseas departments and communities, Guatemala, Paraguay, Uruguay and Venezuela), and in Australia, the band 4 400-4 940 MHz may be used for aeronautical mobile telemetry for flight testing by aircraft stations (see No. **1.83**). Such use shall be in accordance with Resolution **416 (WRC-07)** and shall not cause harmful interference to, nor claim protection from, the fixed-satellite and fixed services. Any such use does not preclude the use of these bands by other mobile service applications or by other services to which these bands are allocated on a co-primary basis and does not establish priority in the Radio Regulations. (WRC-07)

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

5.441	The use of the bands 4 500-4 800 MHz (space-to-Earth), 6 725-7 025 MHz (Earth-to-space) by the fixed-satellite service shall be in accordance with the provisions of Appendix **30B**. The use of the bands 10.7-10.95 GHz (space-to-Earth), 11.2- 11.45 GHz (space-to-Earth) and 12.75-13.25 GHz (Earth-to-space) by geostationary-satellite systems in the fixed- satellite service shall be in accordance with the provisions of Appendix **30B**. The use of the bands 10.7-10.95 GHz (space- to-Earth), 11.2-11.45 GHz (space-to-Earth) and 12.75-13.25 GHz (Earth-to-space) by a non-geostationary-satellite system in the fixed-satellite service is subject to application of the provisions of No. **9.12** for coordination with other non-geostationary-satellite systems in the fixed-satellite service. Non-geostationary-satellite systems in the fixed- satellite service shall not claim protection from geostationary-satellite networks in the fixed-satellite service operating in accordance with the Radio Regulations, irrespective of the dates of receipt by the Bureau of the complete coordination or notification information, as appropriate, for the non-geostationary-satellite systems in the fixed- satellite service and of the complete coordination or notification information, as appropriate, for the geostationary- satellite networks, and No. **5.43A** does not apply. Non-geostationary-satellite systems in the fixed-satellite service in the above bands shall be operated in such a way that any unacceptable interference that may occur during their operation shall be rapidly eliminated. (WRC-2000)
5.441A	In Brazil, Paraguay and Uruguay, the frequency band 4 800-4 900 MHz, or portions thereof, is identified for the implementation of International Mobile Telecommunications (IMT). This identification does not preclude the use of this frequency band by any application of the services to which it is allocated and does not establish priority in the Radio Regulations. The use of this frequency band for the implementation of IMT is subject to agreement obtained with neighbouring countries, and IMT stations shall not claim protection from stations of other applications of the mobile service. Such use shall be in accordance with Resolution **223 (Rev.WRC-19)**. (WRC-19)
5.441B	In Angola, Armenia, Azerbaijan, Benin, Botswana, Brazil, Burkina Faso, Burundi, Cambodia, Cameroon, China, Côte d'Ivoire, Djibouti, Eswatini, Russian Federation, Gambia, Guinea, Iran (Islamic Republic of), Kazakhstan, Kenya, Lao P.D.R., Lesotho, Liberia, Malawi, Mauritius, Mongolia, Mozambique, Nigeria, Uganda, Uzbekistan, the Dem. Rep. of the Congo, Kyrgyzstan, the Dem. People's Rep. of Korea, Sudan, South Africa, Tanzania, Togo, Viet Nam, Zambia and Zimbabwe, the frequency band 4 800-4 990 MHz, or portions thereof, is identified for use by administrations wishing to implement International Mobile Telecommunications (IMT). This identification does not preclude the use of this frequency band by any application of the services to which it is allocated and does not establish priority in the Radio Regulations. The use of IMT stations is subject to agreement obtained under No. 9.21 with concerned administrations, and IMT stations shall not claim protection from stations of other applications of the mobile service. In addition, before an administration brings into use an IMT station in the mobile service, it shall ensure that the power flux-density (pfd) produced by this station does not exceed −155 dB(W/(m2 · 1 MHz)) produced up to 19 km above sea level at 20 km from the coast, defined as the low-water mark, as officially recognized by the coastal State. This pfd criterion is subject to review at WRC-23. Resolution **223 (Rev.WRC-19)** applies. This identification shall be effective after WRC-19. (WRC-19)

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

5.442	In the frequency bands 4 825-4 835 MHz and 4 950-4 990 MHz, the allocation to the mobile service is restricted to the mobile, except aeronautical mobile, service. In Region 2 (except Brazil, Cuba, Guatemala, Mexico, Paraguay, Uruguay and Venezuela), and in Australia, the frequency band 4 825-4 835 MHz is also allocated to the aeronautical mobile service, limited to aeronautical mobile telemetry for flight testing by aircraft stations. Such use shall be in accordance with Resolution **416 (WRC-07)** and shall not cause harmful interference to the fixed service. (WRC-15)
5.443	Different category of service: in Argentina, Australia and Canada, the allocation of the bands 4 825-4 835 MHz and 4 950-4 990 MHz to the radio astronomy service is on a primary basis (see No. 5.33).
5.443A	SUP (WRC-0#)
5.443AA	In the frequency bands 5 000-5 030 MHz and 5 091-5 150 MHz, the aeronautical mobile-satellite (R) service is subject to agreement obtained under No. 9.21. The use of these bands by the aeronautical mobile-satellite (R) service is limited to internationally standardized aeronautical systems. (WRC-12)
5.443B	In order not to cause harmful interference to the microwave landing system operating above 5 030 MHz, the aggregate power flux-density produced at the Earth's surface in the frequency band 5 030-5 150 MHz by all the space stations within any radionavigation-satellite service system (space-to-Earth) operating in the frequency band 5 010-5 030 MHz shall not exceed -124.5 dB(W/m2) in a 150 kHz band. In order not to cause harmful interference to the radio astronomy service in the frequency band 4 990-5 000 MHz, radionavigation-satellite service systems operating in the frequency band 5 010-5 030 MHz shall comply with the limits in the frequency band 4 990-5 000 MHz defined in Resolution **741 (Rev.WRC-15)**. (WRC-15)
5.443C	The use of the frequency band 5 030-5 091 MHz by the aeronautical mobile (R) service is limited to internationally standardized aeronautical systems. Unwanted emissions from the aeronautical mobile (R) service in the frequency band 5 030-5 091 MHz shall be limited to protect RNSS system downlinks in the adjacent 5 010-5 030 MHz band. Until such time that an appropriate value is established in a relevant ITU-R Recommendation, the e.i.r.p. density limit of −75 dBW/MHz in the frequency band 5 010-5 030 MHz for any AM(R)S station unwanted emission should be used. (WRC-12)
5.443D	In the frequency band 5 030-5 091 MHz, the aeronautical mobile-satellite (R) service is subject to coordination under No. **9.11A**. The use of this frequency band by the aeronautical mobile-satellite (R) service is limited to internationally standardized aeronautical systems. (WRC-12)
5.444	The frequency band 5 030-5 150 MHz is to be used for the operation of the international standard system (microwave landing system) for precision approach and landing. In the frequency band 5 030-5 091 MHz, the requirements of this system shall have priority over other uses of this frequency band. For the use of the frequency band 5 091-5 150 MHz, No. **5.444A** and Resolution **114 (Rev.WRC-15)** apply. (WRC-15)
5.444A	The use of the allocation to the fixed-satellite service (Earth-to-space) in the frequency band 5 091-5 150 MHz is limited to feeder links of non-geostationary satellite systems in the mobile-satellite service and is subject to coordination under No. **9.11A**. The use of the frequency band 5 091-5 150 MHz by feeder links of non-geostationary satellite systems in the mobile-satellite service shall be subject to application of Resolution **114 (Rev.WRC-15)**. Moreover, to ensure that the aeronautical radionavigation service is protected from harmful interference, coordination is required for feeder-link earth stations of the non-geostationary satellite systems in the mobile-satellite service which are separated

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

	by less than 450 km from the territory of an administration operating ground stations in the aeronautical radionavigation service. (WRC-15)
5.444B	The use of the frequency band 5 091-5 150 MHz by the aeronautical mobile service is limited to: – systems operating in the aeronautical mobile (R) service and in accordance with international aeronautical standards, limited to surface applications at airports. Such use shall be in accordance with Resolution **748 (Rev.WRC-19)**; – aeronautical telemetry transmissions from aircraft stations (see No. **1.83**) in accordance with Resolution **418 (Rev.WRC-19)**. (WRC-19)
5.446	*Additional allocation:* in the countries listed in No. **5.369**, the frequency band 5 150-5 216 MHz is also allocated to the radiodetermination-satellite service (space-to-Earth) on a primary basis, subject to agreement obtained under No. **9.21**. In Region 2 (except in Mexico), the frequency band is also allocated to the radiodetermination-satellite service (space- to-Earth) on a primary basis. In Regions 1 and 3, except those countries listed in No. **5.369** and Bangladesh, the frequency band is also allocated to the radiodetermination-satellite service (space-to-Earth) on a secondary basis. The use by the radiodetermination-satellite service is limited to feeder links in conjunction with the radiodeterminationsatellite service operating in the frequency bands 1 610-1 626.5 MHz and/or 2 483.5-2 500 MHz. The total power fluxdensity at the Earth's surface shall in no case exceed -159 dB(W/m2) in any 4 kHz band for all angles of arrival. (WRC-15)
5.446A	The use of the bands 5 150-5 350 MHz and 5 470-5 725 MHz by the stations in the mobile, except aeronautical mobile, service shall be in accordance with Resolution **229 (Rev.WRC-19)**. (WRC-19)
5.446B	In the band 5 150-5 250 MHz, stations in the mobile service shall not claim protection from earth stations in the fixed- satellite service. No. **5.43A** does not apply to the mobile service with respect to fixed-satellite service earth stations. (WRC-03)
5.446C	Additional allocation: in Region 1 (except in Algeria, Saudi Arabia, Bahrain, Egypt, United Arab Emirates, Iraq, Jordan, Kuwait, Lebanon, Morocco, Oman, Qatar, Syrian Arab Republic, Sudan, South Sudan and Tunisia), the frequency band 5 150-5 250 MHz is also allocated to the aeronautical mobile service on a primary basis, limited to aeronautical telemetry transmissions from aircraft stations (see No. 1.83), in accordance with Resolution 418 (Rev.WRC-19). These stations shall not claim protection from other stations operating in accordance with Article 5. No. 5.43A does not apply. (WRC-19)
5.446D	Additional allocation: in Brazil, the band 5 150-5 250 MHz is also allocated to the aeronautical mobile service on a primary basis, limited to aeronautical telemetry transmissions from aircraft stations (see No. 1.83), in accordance with Resolution 418 (Rev.WRC-19). (WRC-19)
5.447	*Additional allocation:* in Côte d'Ivoire, Egypt, Lebanon, the Syrian Arab Republic and Tunisia, the frequency band 5 150- 5 250 MHz is also allocated to the mobile service, on a primary basis, subject to agreement obtained under No. **9.21**. In this case, the provisions of Resolution **229 (Rev.WRC-19)** do not apply. (WRC-19)
5.447A	The allocation to the fixed-satellite service (Earth-to-space) is limited to feeder links of non-geostationary-satellite systems in the mobile-satellite service and is subject to coordination under No. **9.11A**.

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

5.447B	*Additional allocation*: the band 5 150-5 216 MHz is also allocated to the fixed-satellite service (space-to-Earth) on a primary basis. This allocation is limited to feeder links of non-geostationary-satellite systems in the mobile-satellite service and is subject to provisions of No. **9.11A**. The power flux-density at the Earth's surface produced by space stations of the fixed-satellite service operating in the space-to-Earth direction in the band 5 150-5 216 MHz shall in no case exceed – 164 dB(W/m2) in any 4 kHz band for all angles of arrival.
5.447C	Administrations responsible for fixed-satellite service networks in the band 5 150-5 250 MHz operated under Nos. **5.447A** and **5.447B** shall coordinate on an equal basis in accordance with No. **9.11A** with administrations responsible for non-geostationary-satellite networks operated under No. **5.446** and brought into use prior to 17 November 1995. Satellite networks operated under No. **5.446** brought into use after 17 November 1995 shall not claim protection from, and shall not cause harmful interference to, stations of the fixed-satellite service operated under Nos. **5.447A** and **5.447B**.
5.447D	The allocation of the band 5 250-5 255 MHz to the space research service on a primary basis is limited to active spaceborne sensors. Other uses of the band by the space research service are on a secondary basis. (WRC-97)
5.447E	Additional allocation: The frequency band 5 250-5 350 MHz is also allocated to the fixed service on a primary basis in the following countries in Region 3: Australia, Korea (Rep. of), India, Indonesia, Iran (Islamic Republic of), Japan, Malaysia, Papua New Guinea, the Philippines, Dem. People's Rep. of Korea, Sri Lanka, Thailand and Viet Nam. The use of this frequency band by the fixed service is intended for the implementation of fixed wireless access systems and shall comply with Recommendation ITU-R F.1613-0. In addition, the fixed service shall not claim protection from the radiodetermination, Earth exploration-satellite (active) and space research (active) services, but the provisions of No. 5.43A do not apply to the fixed service with respect to the Earth exploration-satellite (active) and space research (active) services. After implementation of fixed wireless access systems in the fixed service with protection for the existing radiodetermination systems, no more stringent constraints should be imposed on the fixed wireless access systems by future radiodetermination implementations. (WRC-15)
5.447F	In the frequency band 5 250-5 350 MHz, stations in the mobile service shall not claim protection from the radiolocation service, the Earth exploration-satellite service (active) and the space research service (active). The radiolocation service, the Earth exploration-satellite service (active) and the space research service (active) shall not impose more stringent conditions upon the mobile service than those stipulated in Resolution **229 (Rev.WRC-19)**. (WRC-19)
5.448	Additional allocation: in Kyrgyzstan, Romania and Turkmenistan, the frequency band 5 250-5 350 MHz is also allocated to the radionavigation service on a primary basis. (WRC-19)
5.448A	The Earth exploration-satellite (active) and space research (active) services in the frequency band 5 250-5 350 MHz shall not claim protection from the radiolocation service. **No. 5.43A** does not apply. (WRC-03)
5.448B	The Earth exploration-satellite service (active) operating in the band 5 350-5 570 MHz and space research service (active) operating in the band 5 460-5 570 MHz shall not cause harmful interference to the aeronautical radionavigation service in the band 5 350-5 460 MHz, the radionavigation service in the band 5 460-5 470 MHz and the maritime radionavigation service in the band 5 470-5 570 MHz. (WRC-03)
5.448C	The space research service (active) operating in the band 5 350-5 460 MHz shall not cause harmful interference to nor claim protection from other services to which this band is allocated. (WRC-03

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

5.448D	In the frequency band 5 350-5 470 MHz, stations in the radiolocation service shall not cause harmful interference to, nor claim protection from, radar systems in the aeronautical radionavigation service operating in accordance with No. **5.449.** (WRC-03)
5.449	The use of the band 5 350-5 470 MHz by the aeronautical radionavigation service is limited to airborne radars and associated airborne beacons.
5.450	*Additional allocation:* in Austria, Azerbaijan, Iran (Islamic Republic of), Kyrgyzstan, Romania, Turkmenistan and Ukraine, the band 5 470-5 650 MHz is also allocated to the aeronautical radionavigation service on a primary basis. (WRC-12)
5.450A	In the frequency band 5 470-5 725 MHz, stations in the mobile service shall not claim protection from radiodetermination services. The radiodetermination services shall not impose more stringent conditions upon the mobile service than those stipulated in Resolution **229 (Rev.WRC-19)**. (WRC-19)
5.450B	In the frequency band 5 470-5 650 MHz, stations in the radiolocation service, except ground-based radars used for meteorological purposes in the band 5 600-5 650 MHz, shall not cause harmful interference to, nor claim protection from, radar systems in the maritime radionavigation service. (WRC-03)
5.451	Additional allocation: in the United Kingdom, the band 5470-5 850 MHz is also allocated to the land mobile service on a secondary basis. The power limits specified in Nos. **21.2, 21.3, 21.4** and **21.5** shall apply in the band 5 725-5 850 MHz.
5.452	Between 5 600 MHz and 5 650 MHz, ground-based radars used for meteorological purposes are authorized to operate on a basis of equality with stations of the maritime radionavigation service.
5.453	*Additional allocation:* in Saudi Arabia, Bahrain, Bangladesh, Brunei Darussalam, Cameroon, China, Congo (Rep. of the), Korea (Rep. of), Côte d'Ivoire, Djibouti, Egypt, the United Arab Emirates, Eswatini, Gabon, Guinea, Equatorial Guinea, India, Indonesia, Iran (Islamic Republic of), Iraq, Japan, Jordan, Kenya, Kuwait, Lebanon, Libya, Madagascar, Malaysia, Niger, Nigeria, Oman, Uganda, Pakistan, the Philippines, Qatar, the Syrian Arab Republic, the Dem. Rep. of Korea, Singapore, Sri Lanka, Tanzania, Chad, Thailand, Togo, Viet Nam and Yemen, the band 5 650-5 850 MHz is also allocated to the fixed and mobile services on a primary basis. In this case, the provisions of Resolution **229** (**Rev.WRC-12**) do not apply. In addition, in Afghanistan, Angola, Benin, Bhutan, Botswana, Burkina Faso, Burundi, Dem. Rep. of the Congo, Fiji, Ghana, Kiribati, Lesotho, Malawi, Maldives, Mauritius, Micronesia, Mongolia, Mozambique, Myanmar, Namibia, Nauru, New Zealand, Papua New Guinea, Rwanda, Solomon Islands, South Sudan, South Africa, Tonga, Vanuatu, Zambia and Zimbabwe, the band 5 725-5 850 MHz is allocated to the fixed service on a primary basis, and stations operating in the fixed service shall not cause harmful interference to and shall not claim protection from other primary services in the frequency band. (WRC-19)
5.454	*Different category of service:* in Azerbaijan, the Russian Federation, Georgia, Kyrgyzstan, Tajikistan and Turkmenistan, the allocation of the band 5 670-5 725 MHz to the space research service is on a primary basis (see No. **5.33**). (WRC-12)
5.455	*Additional allocation:* in Armenia, Azerbaijan, Belarus, Cuba, the Russian Federation, Georgia, Hungary, Kazakhstan, Moldova, Uzbekistan, Kyrgyzstan, Romania, Tajikistan, Turkmenistan and Ukraine, the frequency band 5 670-5 850 MHz is also allocated to the fixed service on a primary basis. (WRC-19)
5.456	SUP (WRC-15)

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

5.457	In Australia, Burkina Faso, Cote d'Ivoire, Mali and Nigeria, the allocation to the fixed service in the bands 6 440-6 520 MHz (HAPS-to-ground direction) and 6 560-6 640 MHz (ground-to- HAPS direction) may also be used by gateway links for high-altitude platform stations (HAPS) within the territory of these countries. Such use is limited to operation in HAPS gateway links and shall not cause harmful interference to, and shall not claim protection from, existing services, and shall be in compliance with Resolution **150 (WRC-12)**. Existing services shall not be constrained in future development by HAPS gateway links. The use of HAPS gateway links in these bands requires explicit agreement with other administrations whose territories are located within 1 000 kilometres from the border of an administration intending to use the HAPS gateway links. (WRC-12)
5.457A	In the frequency bands 5 925-6 425 MHz and 14-14.5 GHz, earth stations located on board vessels may communicate with space stations of the fixed-satellite service. Such use shall be in accordance with Resolution **902 (WRC-03)**. In the frequency band 5 925-6 425 MHz, earth stations located on board vessels and communicating with space stations of the fixed-satellite service may employ transmit antennas with minimum diameter of 1.2 m and operate without prior agreement of any administration if located at least 330 km away from the low-water mark as officially recognized by the coastal State. All other provisions of Resolution **902 (WRC-03)** shall apply. (WRC-15)
5.457B	In the frequency bands 5 925-6 425 MHz and 14-14.5 GHz, earth stations located on board vessels may operate with the characteristics and under the conditions contained in Resolution **902 (WRC-03)** in Algeria, Saudi Arabia, Bahrain, Comoros, Djibouti, Egypt, United Arab Emirates, Jordan, Kuwait, Libya, Morocco, Mauritania, Oman, Qatar, the Syrian Arab Republic, Sudan, Tunisia and Yemen, in the maritime mobile-satellite service on a secondary basis. Such use shall be in accordance with Resolution **902 (WRC-03)**. (WRC-15)
5.457C	In Region 2 (except Brazil, Cuba, French overseas departments and communities, Guatemala, Mexico, Paraguay, Uruguay and Venezuela), the frequency band 5 925-6 700 MHz may be used for aeronautical mobile telemetry for flight testing by aircraft stations (see No. **1.83**). Such use shall be in accordance with Resolution **416 (WRC-07)** and shall not cause harmful interference to, or claim protection from, the fixed-satellite and fixed services. Any such use does not preclude the use of this frequency band by other mobile service applications or by other services to which this frequency band is allocated on a co-primary basis and does not establish priority in the Radio Regulations. (WRC-15)
5.458	In the band 6 425-7 075 MHz, passive microwave sensor measurements are carried out over the oceans. In the band 7 075-7 250 MHz, passive microwave sensor measurements are carried out. Administrations should bear in mind the needs of the Earth exploration-satellite (passive) and space research (passive) services in their future planning of the bands 6 425-7 025 MHz and 7 075-7 250 MHz.
5.458A	In making assignments in the band 6 700-7 075 MHz to space stations of the fixed-satellite service, administrations are urged to take all practicable steps to protect spectral line observations of the radio astronomy service in the band 6 650- 6 675.2 MHz from harmful interference from unwanted emissions.
5.458B	The space-to-Earth allocation to the fixed-satellite service in the band 6 700-7 075 MHz is limited to feeder links for non- geostationary satellite systems of the mobile-satellite service and is subject to coordination under No. **9.11A**. The use of the band 6 700-7 075 MHz (space-to-Earth) by feeder links for non-geostationary satellite systems in the mobile- satellite service is not subject to No. **22.2**.

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

5.458C	SUP (WRC-15)
5.459	*Additional allocation:* in the Russian Federation, the frequency bands 7 100-7 155 MHz and 7 190-7 235 MHz are also allocated to the space operation service (Earth-to-space) on a primary basis, subject to agreement obtained under **No.9.21**. In the frequency band 7 190-7 235 MHz, with respect to the Earth exploration satellite service (Earth-to-space), **No. 9.21** does not apply. (WRC-15)
5.460	No emissions from space research service (Earth-to-space) systems intended for deep space shall be effected in the frequency band 7 190-7 235 MHz. Geostationary satellites in the space research service operating in the frequency band 7 190-7 235 MHz shall not claim protection from existing and future stations of the fixed and mobile services and No. **5.43A** does not apply. (WRC-15)
5.460A	The use of the frequency band 7 190-7 250 MHz (Earth-to-space) by the Earth exploration-satellite service shall be limited to tracking, telemetry and command for the operation of spacecraft. Space stations operating in the Earth exploration-satellite service (Earth-to-space) in the frequency band 7 190-7 250 MHz shall not claim protection from existing and future stations in the fixed and mobile services, and No. **5.43A** does not apply. No. **9.17** applies. Additionally, to ensure protection of the existing and future deployment of fixed and mobile services, the location of earth stations supporting spacecraft in the Earth exploration-satellite service in non-geostationary orbits or geostationary orbit shall maintain a separation distance of at least 10 km and 50 km, respectively, from the respective border(s) of neighbouring countries, unless a shorter distance is otherwise agreed between the corresponding administrations. (WRC-15)
5.460B	Space stations on the geostationary orbit operating in the Earth exploration-satellite service (Earth-to-space) in the frequency band 7 190-7 235 MHz shall not claim protection from existing and future stations of the space research service, and No. **5.43A** does not apply. (WRC-15)
5.461	*Additional allocation:* the bands 7 250-7 375 MHz (space-to-Earth) and 7 900-8 025 MHz (Earth-to-space) are also allocated to the mobile-satellite service on a primary basis, subject to agreement obtained under No. **9.21**.
5.461A	The use of the band 7 450-7 550 MHz by the meteorological-satellite service (space-to-Earth) is limited to geostationary- satellite systems. Non-geostationary meteorological-satellite systems in this band notified before 30 November 1997 may continue to operate on a primary basis until the end of their lifetime. (WRC-97)
5.461AA	The use of the frequency band 7 375-7 750 MHz by the maritime mobile-satellite service is limited to geostationary- satellite networks. (WRC-15)
5.461AB	In the frequency band 7 375-7 750 MHz, earth stations in the maritime mobile-satellite service shall not claim protection from, nor constrain the use and development of, stations in the fixed and mobile, except aeronautical mobile, services. No. **5.43A** does not apply. (WRC-15)
5.461B	The use of the band 7 750-7 900 MHz by the meteorological-satellite service (space-to-Earth) is limited to non- geostationary satellite systems. (WRC-12)
5.462	SUP (WRC-97)
5.462A	In Regions 1 and 3 (except for Japan), in the band 8 025-8 400 MHz, the Earth exploration-satellite service using geostationary satellites shall not produce a power flux-density in excess of the following provisional values for angles of arrival (θ), without the consent of the affected administration:

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

	-135 dB(W/m^2) in a 4 kHz band for $0^o \leq \Theta < 5^o$ $-135 + 0.5(\Theta - 5)$ dB(W/m^2) in a 4 for $5^o \leq \Theta < 25^o$ -125 dB(W/m^2) in a 1 MHz band for $25^o \leq \Theta \leq 90^o$
5.463	Aircraft stations are not permitted to transmit in the band 8025-8 400 MHz. (WRC-97)
5.465	In the space research service, the use of the band 8 400-8 450 MHz is limited to deep space.
5.466	*Different category of service:* in , Singapore and Sri Lanka, the allocation of the band 8 400-8 500 MHz to the space research service is on a secondary basis (see No. 5.32). (WRC-12)
5.468	*Additional allocation:* in Saudi Arabia, Bahrain, Bangladesh, Brunei Darussalam, Burundi, Cameroon, China, Congo (Rep. of the), Djibouti, Egypt, the United Arab Emirates, Eswatini, Gabon, Guyana, Indonesia, Iran (Islamic Republic of), Iraq, Jamaica, Jordan, Kenya, Kuwait, Lebanon, Libya, Malaysia, Mali, Morocco, Mauritania, Nepal, Nigeria, Oman, Uganda, Pakistan, Qatar, Syrian Arab Republic, the Dem. People's Rep. of Korea, Senegal, Singapore, Somalia, Sudan, Chad, Togo, Tunisia and Yemen, the frequency band 8 500-8 750 MHz is also allocated to the fixed and mobile services on a primary basis. (WRC-19)
5.469	*Additional allocation:* in Armenia, Azerbaijan, Belarus, the Russian Federation, Georgia, Hungary, Lithuania, Mongolia, Uzbekistan, Poland, Kyrgyzstan, the Czech Rep., Romania, Tajikistan, Turkmenistan and Ukraine, the band 8 500-8 750 MHz is also allocated to the land mobile and radionavigation services on a primary basis. (WRC-12)
5.469A	In the band 8 550-8 650 MHz, stations in the Earth exploration-satellite service (active) and space research service (active) shall not cause harmful interference to, or constrain the use and development of, stations of the radiolocation service. (WRC-97)
5.470	The use of the band 8 750-8 850 MHz by the aeronautical radionavigation service is limited to airborne Doppler navigation aids on a centre frequency of 8 800 MHz.
5.471	Additional allocation: in Algeria, Germany, Bahrain, Belgium, China, Egypt, the United Arab Emirates, France, Greece, Indonesia, Iran (Islamic Republic of), Libya, the Netherlands, Qatar and Sudan, the frequency bands 8 825-8 850 MHz and 9 000-9 200 MHz are also allocated to the maritime radionavigation service, on a primary basis, for use by shore- based radars only. (WRC-15)
5.472	In the bands 8 850-9 000 MHz and 9 200-9 225 MHz, the maritime radionavigation service is limited to shore-based radars.
5.473	*Additional allocation:* in Armenia, Austria, Azerbaijan, Belarus, Cuba, the Russian Federation, Georgia, Hungary, Mongolia, Uzbekistan, Poland, Kyrgyzstan, Romania, Tajikistan, Turkmenistan and Ukraine, the bands 8 850-9 000 MHz and 9 200-9 300 MHz are also allocated to the radionavigation service on a primary basis. (WRC-07)
5.473A	*Additional allocation:* in Armenia, Austria, Azerbaijan, Belarus, Cuba, the Russian Federation, Georgia, Hungary, Uzbekistan, Poland, Kyrgyzstan, Romania, Tajikistan, Turkmenistan and Ukraine, the frequency bands 8 850-9 000 MHz and 9 200-9 300 MHz are also allocated to the radionavigation service on a primary basis. (WRC-19)
5.474	In the band 9 200-9 500 MHz, search and rescue transponders (SART) may be used, having due regard to the appropriate ITU-R Recommendation (see also Article **31**).

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

5.474A	The use of the frequency bands 9 200-9 300 MHz and 9 900-10 400 MHz by the Earth exploration-satellite service (active) is limited to systems requiring necessary bandwidth greater than 600 MHz that cannot be fully accommodated within the frequency band 9 300-9 900 MHz. Such use is subject to agreement to be obtained under No. **9.21** from Algeria, Saudi Arabia, Bahrain, Egypt, Indonesia, Iran (Islamic Republic of), Lebanon and Tunisia. An administration that has not replied under No. 9.52 is considered as not having agreed to the coordination request. In this case, the notifying administration of the satellite system operating in the Earth exploration-satellite service (active) may request the assistance of the Bureau under Sub-Section IID of Article 9. (WRC-15)
5.474B	Stations operating in the Earth exploration-satellite (active) service shall comply with Recommendation ITU-R RS.2066- 0. (WRC-15)
5.474C	Stations operating in the Earth exploration-satellite (active) service shall comply with Recommendation ITU-R RS.2065- 0. (WRC-15)
5.474D	Stations in the Earth exploration-satellite service (active) shall not cause harmful interference to, or claim protection from, stations of the maritime radionavigation and radiolocation services in the frequency band 9 200-9 300 MHz, the radionavigation and radiolocation services in the frequency band 9 900-10 000 MHz and the radiolocation service in the frequency band 10.0-10.4 GHz. (WRC-15)
5.475	The use of the band 9 300-9 500 MHz by the aeronautical radionavigation service is limited to airborne weather radars and ground-based radars. In addition, ground-based radar beacons in the aeronautical radionavigation service are permitted in the band 9 300-9 320 MHz on condition that harmful interference is not caused to the maritime radionavigation service. (WRC-07)
5.475A	The use of the band 9 300-9 500 MHz by the Earth exploration-satellite service (active) and the space research service (active) is limited to systems requiring necessary bandwidth greater than 300 MHz that cannot be fully accommodated within the 9 500-9 800 MHz band. (WRC-07)
5.475B	In the band 9 300-9 500 MHz, stations operating in the radiolocation service shall not cause harmful interference to, nor claim protection from, radars operating in the radionavigation service in conformity with the Radio Regulations. Ground-based radars used for meteorological purposes have priority over other radiolocation uses. (WRC-07)
5.476	SUP (WRC-07)
5.476A	In the band 9 300-9 800 MHz, stations in the Earth exploration-satellite service (active) and space research service (active) shall not cause harmful interference to, nor claim protection from, stations of the radionavigation and radiolocation services. (WRC-07)
5.477	*Different category of service:* in Algeria, Saudi Arabia, Bahrain, Bangladesh, Brunei Darussalam, Cameroon, Djibouti, Egypt, the United Arab Emirates, Eritrea, Ethiopia, Guyana, India, Indonesia, Iran (Islamic Republic of), Iraq, Jamaica, Japan, Jordan, Kuwait, Lebanon, Liberia, Malaysia, Nigeria, Oman, Uganda, Pakistan, Qatar, Syrian Arab Republic, the Dem. People's Rep. of Korea, Singapore, Somalia, Sudan, South Sudan, Trinidad and Tobago, and Yemen, the allocation of the frequency band 9 800-10 000 MHz to the fixed service is on a primary basis (see No. **5.33**). (WRC-15)
5.478	*Additional allocation:* in Azerbaijan, Kyrgyzstan, Romania, Turkmenistan and Ukraine, the frequency band 9 800-10 000 MHz is also allocated to the radionavigation service on a primary basis. (WRC-19)
5.478A	The use of the band 9 800-9 900 MHz by the Earth exploration-satellite service (active) and the space research service (active) is limited to systems requiring necessary bandwidth greater than 500 MHz that cannot be fully accommodated within the 9 300-9 800 MHz band. (WRC-07)

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

5.478B	In the band 9 800-9 900 MHz, stations in the Earth exploration-satellite service (active) and space research service (active) shall not cause harmful interference to, nor claim protection from stations of the fixed service to which this band is allocated on a secondary basis. (WRC-07)
5.479	The band 9 975-10 025 MHz is also allocated to the meteorological-satellite service on a secondary basis for use by weather radars.
5.480	*Additional allocation:* in Argentina, Brazil, Chile, Cuba, El Salvador, Ecuador, Guatemala, Honduras, Paraguay, the overseas countries and territories within the Kingdom of the Netherlands in Region 2, Peru and Uruguay, the frequency band 10-10.45 GHz is also allocated to the fixed and mobile services on a primary basis. In Colombia, Costa Rica, Mexico and Venezuela, the frequency band 10-10.45 GHz is also allocated to the fixed service on a primary basis. (WRC-19)
5.481	*Additional allocation:* in Algeria, Germany, Angola, Brazil, China, Côte d'Ivoire, Egypt, El Salvador, Ecuador, Spain, Guatemala, Hungary, Japan, Kenya, Morocco, Nigeria, Oman, Uzbekistan, Pakistan, Paraguay, Peru, the Dem. People's Rep. of Korea, Romania, Tunisia and Uruguay, the frequency band 10.45-10.5 GHz is also allocated to the fixed and mobile services on a primary basis. In Costa Rica, the frequency band 10.45-10.5 GHz is also allocated to the fixed service on a primary basis. (WRC-19)
5.482	In the band 10.6-10.68 GHz, the power delivered to the antenna of stations of the fixed and mobile, except aeronautical mobile, services shall not exceed −3 dBW. This limit may be exceeded, subject to agreement obtained under No. **9.21**. However, in Algeria, Saudi Arabia, Armenia, Azerbaijan, Bahrain, Bangladesh, Belarus, Egypt, United Arab Emirates, Georgia, India, Indonesia, Iran (Islamic Republic of), Iraq, Jordan, Libyan Arab Jamahiriya, Kazakhstan, Kuwait, Lebanon, Morocco, Mauritania, Moldova, Nigeria, Oman, Uzbekistan, Pakistan, Philippines, Qatar, Syrian Arab Republic, Kyrgyzstan, Singapore, Tajikistan, Tunisia, Turkmenistan and Viet Nam, this restriction on the fixed and mobile, except aeronautical mobile, service is not applicable. (WRC-07)
5.482A	For sharing of the band 10.6-10.68 GHz between the Earth exploration-satellite (passive) service and the fixed and mobile, except aeronautical mobile, services, Resolution 751 (WRC-07) applies. (WRC-07)
5.483	*Additional allocation:* in Saudi Arabia, Armenia, Azerbaijan, Bahrain, Belarus, China Colombia, Korea (Rep. of), Egypt, the United Arab Emirates, Georgia, Iran (Islamic Republic of) Iraq, Israel, Jordan, Kazakhstan, Kuwait, Lebanon, Mongolia, Qatar, Kyrgyzstan, the Dem People's Rep. of Korea, Tajikistan, Turkmenistan and Yemen, the frequency band 10.68-10.7 GHz is also allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis. Such use is limited to equipment in operation by 1 January 1985. (WRC-19)
5.484	In Region 1, the use of the band 10.7-11.7 GHz by the fixed-satellite service (Earth-to-space) is limited to feeder links for the broadcasting-satellite service.

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

5.484A	The use of the bands 10.95-11.2 GHz (space-to-Earth), 11.45-11.7 GHz (space-to-Earth), 11.7-12.2 GHz (space-to-Earth) in Region 2, 12.2-12.75 GHz (space-to-Earth) in Region 3, 12.5-12.75 GHz (space-to-Earth) in Region 1, 13.75-14.5 GHz (Earth-to-space), 17.8-18.6 GHz (space-to-Earth), 19.7-20.2 GHz (space-to-Earth), 27.5-28.6 GHz (Earth-to-space), 29.5- 30 GHz (Earth-to-space) by a non-geostationary-satellite system in the fixed-satellite service is subject to application of the provisions of No. 9.12 for coordination with other non-geostationary-satellite systems in the fixed-satellite service. Non-geostationary-satellite systems in the fixed-satellite service shall not claim protection from geostationary-satellite networks in the fixed-satellite service operating in accordance with the Radio Regulations, irrespective of the dates of receipt by the Bureau of the complete coordination or notification information, as appropriate, for the non- geostationary-satellite systems in the fixed-satellite service and of the complete coordination or notification information, as appropriate, for the geostationary-satellite networks, and No. 5.43A does not apply. Non-geostationary- satellite systems in the fixed-satellite service in the above bands shall be operated in such a way that any unacceptable interference that may occur during their operation shall be rapidly eliminated. (WRC-2000)
5.484B	Resolution **155 (WRC-15)** shall apply. (WRC-15)
5.485	In Region 2, in the band 11.7-12.2 GHz, transponders on space stations in the fixed-satellite service may be used additionally for transmissions in the broadcasting-satellite service, provided that such transmissions do not have a maximum e.i.r.p. greater than 53 dBW per television channel and do not cause greater interference or require more protection from interference than the coordinated fixed-satellite service frequency assignments. With respect to the space services, this band shall be used principally for the fixed-satellite service.
5.486	*Different category of service:* in the United States, the allocation of the frequency band 11.7-12.1 GHz to the fixed service is on a secondary basis (see No. 5.32). (WRC-15)
5.487	In the band 11.7-12.5 GHz in Regions 1 and 3, the fixed, fixed-satellite, mobile, except aeronautical mobile, and broadcasting services, in accordance with their respective allocations, shall not cause harmful interference to, or claim protection from, broadcasting-satellite stations operating in accordance with the Regions 1 and 3 Plan in Appendix **30**. (WRC-03)
5.487A	*Additional allocation:* in Region 1, the band 11.7-12.5 GHz, in Region 2, the band 12.2-12.7 GHz and, in Region 3, the band 11.7-12.2 GHz, are also allocated to the fixed-satellite service (space-to-Earth) on a primary basis, limited to non-geostationary systems and subject to application of the provisions of No. **9.12** for coordination with other non- geostationary-satellite systems in the fixed-satellite service. Non-geostationary-satellite systems in the fixed-satellite service shall not claim protection from geostationary-satellite networks in the broadcasting-satellite service operating in accordance with the Radio Regulations, irrespective of the dates of receipt by the Bureau of the complete coordination or notification information, as appropriate, for the non-geostationary-satellite systems in the fixed- satellite service and of the complete coordination or notification information, as appropriate, for the geostationary-satellite networks, and No. **5.43A** does not apply. Non-geostationary-satellite systems in the fixed-satellite service in the above bands shall be operated in such a way that any unacceptable interference that may occur during their operation shall be rapidly eliminated. (WRC-03)
5.488	The use of the band 11.7-12.2 GHz by geostationary-satellite networks in the fixed-satellite service in Region 2 is subject to application of the provisions of No. **9.14** for coordination with stations of terrestrial services in Regions 1, 2 and

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

	3. For the use of the band 12.2-12.7 GHz by the broadcasting-satellite service in Region 2, see Appendix **30**. (WRC-03)
5.489	*Additional allocation:* in Peru, the band 12.1-12.2 GHz is also allocated to the fixed service on a primary basis.
5.490	In Region 2, in the band 12.2-12.7 GHz, existing and future terrestrial radiocommunication services shall not cause harmful interference to the space services operating in conformity with the broadcasting-satellite Plan for Region 2 contained in Appendix **30**.
5.492	Assignments to stations of the broadcasting-satellite service which are in conformity with the appropriate regional Plan or included in the Regions 1 and 3 List in Appendix **30** may also be used for transmissions in the fixed-satellite service (space-to-Earth), provided that such transmissions do not cause more interference, or require more protection from interference, than the broadcasting-satellite service transmissions operating in conformity with the Plan or the List, as appropriate. (WRC-2000)
5.493	The broadcasting-satellite service in the band 12.5-12.75 GHz in Region 3 is limited to a power flux-density not exceeding –111 dB(W/(m2 ⋅ 27 MHz)) for all conditions and for all methods of modulation at the edge of the service area. (WRC-97)
5.494	*Additional allocation:* in Algeria, Saudi Arabia, Bahrain, Cameroon, the Central African Rep., Congo (Rep. of the), Côte d'Ivoire, Djibouti, Egypt, the United Arab Emirates, Eritrea, Ethiopia, Gabon, Ghana, Guinea, Iraq, Israel, Jordan, Kuwait, Lebanon, Libya, Madagascar, Mali, Morocco, Mongolia, Nigeria, Oman, Qatar, the Syrian Arab Republic, the Dem. Rep. of the Congo, Somalia, Sudan, South Sudan, Chad, Togo and Yemen, the frequency band 12.5-12.75 GHz is also allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis. (WRC-15)
5.495	*Additional allocation:* in Greece, Monaco, Montenegro, Uganda and Tunisia, the frequency band 12.5-12.75 GHz is also allocated to the fixed and mobile, except aeronautical mobile, services on a secondary basis. (WRC-19)
5.496	*Additional allocation:* in Austria, Azerbaijan, Kyrgyzstan and Turkmenistan, the band 12.5-12.75 GHz is also allocated to the fixed service and the mobile, except aeronautical mobile, service on a primary basis. However, stations in these services shall not cause harmful interference to fixed-satellite service earth stations of countries in Region 1 other than those listed in this footnote. Coordination of these earth stations is not required with stations of the fixed and mobile services of the countries listed in this footnote. The power flux-density limit at the Earth's surface given in Table **21-4** of Article **21**, for the fixed-satellite service shall apply on the territory of the countries listed in this footnote. (WRC-2000)
5.497	The use of the band 13.25-13.4 GHz by the aeronautical radionavigation service is limited to Doppler navigation aids.
5.498	SUP (WRC-97)
5.498A	The Earth exploration-satellite (active) and space research (active) services operating in the band 13.25-13.4 GHz shall not cause harmful interference to, or constrain the use and development of, the aeronautical radionavigation service. (WRC-97)
5.499	*Additional allocation:* in Bangladesh, and India , the band 13.25-14 GHz is also allocated to the fixed service on a primary basis. In Pakistan, the band 13.25-13.75 GHz is allocated to the fixed service on a primary basis. (WRC 12)
5.499A	The use of the frequency band 13.4-13.65 GHz by the fixed-satellite service (space-to-Earth) is limited to geostationary- satellite systems and is subject to

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

	agreement obtained under No. **9.21** with respect to satellite systems operating in the space research service (space-to-space) to relay data from space stations in the geostationary-satellite orbit to associated space stations in non-geostationary satellite orbits for which advance publication information has been received by the Bureau by 27 November 2015. (WRC-15)
5.499B	Administrations shall not preclude the deployment and operation of transmitting earth stations in the standard frequency and time signal-satellite service (Earth-to-space) allocated on a secondary basis in the frequency band 13.4-13.65 GHz due to the primary allocation to FSS (space-to-Earth). (WRC-15)
5.499C	The allocation of the frequency band 13.4-13.65 GHz to the space research service on a primary basis is limited to: – satellite systems operating in the space research service (space-to-space) to relay data from space stations in the geostationary-satellite orbit to associated space stations in non-geostationary satellite orbits for which advance publication information has been received by the Bureau by 27 November 2015, – active spaceborne sensors, – satellite systems operating in the space research service (space-to-Earth) to relay data from space stations in the geostationary-satellite orbit to associated earth stations. Other uses of the frequency band by the space research service are on a secondary basis. (WRC-15)
5.499D	In the frequency band 13.4-13.65 GHz, satellite systems in the space research service (space-to-Earth) and/or the space research service (space-to-space) shall not cause harmful interference to, nor claim protection from, stations in the fixed, mobile, radiolocation and Earth exploration-satellite (active) services. (WRC-15)
5.499E	In the frequency band 13.4-13.65 GHz, geostationary-satellite networks in the fixed-satellite service (spaceto- Earth) shall not claim protection from space stations in the Earth exploration-satellite service (active) operating in accordance with these Regulations, and No. **5.43A** does not apply. The provisions of No. **22.2** do not apply to the Earth exploration- satellite service (active) with respect to the fixed-satellite service (space-to-Earth) in this frequency band. (WRC-15)
5.500	*Additional allocation:* in Algeria, Saudi Arabia, Bahrain, Brunei Darussalam, Cameroon, Egypt, the United Arab Emirates, Gabon, Indonesia, Iran (Islamic Republic of), Iraq, Israel, Jordan, Kuwait, Lebanon, Madagascar, Malaysia, Mali, Morocco, Mauritania, Niger, Nigeria, Oman, Qatar, the Syrian Arab Republic, Singapore, Sudan, South Sudan, Chad and Tunisia, the frequency band 13.4-14 GHz is also allocated to the fixed and mobile services on a primary basis. In Pakistan, the frequency band 13.4-13.75 GHz is also allocated to the fixed and mobile services on a primary basis. (WRC-15)
5.501	*Additional allocation:* in Azerbaijan, Hungary, Japan, Mongolia, Kyrgyzstan, Romania and Turkmenistan, the band 13.4- 14 GHz is also allocated to the radionavigation service on a primary basis. (WRC-12)
5.501A	The allocation of the frequency band 13.65-13.75 GHz to the space research service on a primary basis is limited to active spaceborne sensors. Other uses of the frequency band by the space research service are on a secondary basis. (WRC-15)
5.501B	In the band 13.4-13.75 GHz, the Earth exploration-satellite (active) and space research (active) services shall not cause harmful interference to, or constrain the use and development of, the radiolocation service. (WRC-97)
5.502	In the band 13.75-14 GHz, an earth station of a geostationary fixed-satellite service network shall have a minimum antenna diameter of 1.2 m and an

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

	earth station of a non-geostationary fixed-satellite service system shall have a minimum antenna diameter of 4.5 m. In addition, the e.i.r.p., averaged over one second, radiated by a station in the radiolocation or radionavigation services shall not exceed 59 dBW for elevation angles above 2° and 65 dBW at lower angles. Before an administration brings into use an earth station in a geostationary-satellite network in the fixed- satellite service in this band with an antenna diameter smaller than 4.5 m, it shall ensure that the power flux-density produced by this earth station does not exceed: – –115 dB(W/(m^2 · 10 MHz)) for more than 1% of the time produced at 36 m above sea level at the low water mark, as officially recognized by the coastal State; – –115 dB(W/(m^2 · 10 MHz)) for more than 1% of the time produced 3 m above ground at the border of the territory of an administration deploying or planning to deploy land mobile radars in this band, unless prior agreement has been obtained. For earth stations within the fixed-satellite service having an antenna diameter greater than or equal to 4.5 m, the e.i.r.p. of any emission should be at least 68 dBW and should not exceed 85 dBW. (WRC-03)
5.503	In the band 13.75-14 GHz, geostationary space stations in the space research service for which information for advance publication has been received by the Bureau prior to 31 January 1992 shall operate on an equal basis with stations in the fixed-satellite service; after that date, new geostationary space stations in the space research service will operate on a secondary basis. Until those geostationary space stations in the space research service for which information for advance publication has been received by the Bureau prior to 31 January 1992 cease to operate in this band: – in the band 13.77-13.78 GHz, the e.i.r.p. density of emissions from any earth station in the fixed-satellite service operating with a space station in geostationary-satellite orbit shall not exceed: i) 4.7*D* + 28 dB(W/40 kHz), where *D* is the fixed-satellite service earth station antenna diameter (m) for antenna diameters equal to or greater than 1.2 m and less than 4.5 m; ii) 49.2 + 20 log(*D*/4.5) dB(W/40 kHz), where *D* is the fixed-satellite service earth station antenna diameter (m) for antenna diameters equal to or greater than 4.5 m and less than 31.9 m; iii) 66.2 dB(W/40 kHz) for any fixed-satellite service earth station for antenna diameters (m) equal to or greater than 31.9 m; iv) 56.2 dB(W/4 kHz) for narrow-band (less than 40 kHz of necessary bandwidth) fixed-satellite service earth station emissions from any fixed-satellite service earth station having an antenna diameter of 4.5 m or greater; – the e.i.r.p. density of emissions from any earth station in the fixed-

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

	satellite service operating with a space station in non-geostationary-satellite orbit shall not exceed 51 dBW in the 6 MHz band from 13.772 to 13.778 GHz. Automatic power control may be used to increase the e.i.r.p. density in these frequency ranges to compensate for rain attenuation, to the extent that the power flux-density at the fixed-satellite service space station does not exceed the value resulting from use by an earth station of an e.i.r.p. meeting the above limits in clear-sky conditions. (WRC-03)
5.504	The use of the band 14-14.3 GHz by the radionavigation service shall be such as to provide sufficient protection to space stations of the fixed-satellite service.
5.504A	In the band 14-14.5 GHz, aircraft earth stations in the secondary aeronautical mobile-satellite service may also communicate with space stations in the fixed-satellite service. The provisions of Nos. **5.29**, **5.30** and **5.31** apply. (WRC- 03)
5.504B	Aircraft earth stations operating in the aeronautical mobile-satellite service in the frequency band 14-14.5 GHz shall comply with the provisions of Annex 1, Part C of Recommendation ITU-R M.1643-0, with respect to any radio astronomy station performing observations in the 14.47-14.5 GHz frequency band located on the territory of Spain, France, India, Italy, the United Kingdom and South Africa. (WRC-15)
5.504C	In the frequency band 14-14.25 GHz, the power flux-density produced on the territory of the countries of Saudi Arabia, Bahrain, Botswana, Côte d'Ivoire, Egypt, Guinea, India, Iran (Islamic Republic of), Kuwait, Nigeria, Oman, the Syrian Arab Republic and Tunisia by any aircraft earth station in the aeronautical mobile-satellite service shall not exceed the limits given in Annex 1, Part B of Recommendation ITU-R M.1643-0, unless otherwise specifically agreed by the affected administration(s). The provisions of this footnote in no way derogate the obligations of the aeronautical mobile-satellite service to operate as a secondary service in accordance with No. **5.29**. (WRC-15)
5.505	*Additional allocation:* in Algeria, Saudi Arabia, Bahrain, Botswana, Brunei, Darussalam, Cameroon, China, Congo (Rep. of the), Korea (Rep. of), Djibouti, Egypt, the United Arab Emirates, Eswatini, Gabon, Guinea, India, Indonesia, Iran (Islamic Republic of), Iraq, Israel, Japan, Jordan, Kuwait, Lebanon, Malaysia, Mali, Morocco, Mauritania, Oman, the Philippines, Qatar, the Syrian Arab Republic, the Dem. People's Rep. of Korea, Singapore, Somalia, Sudan, South Sudan, Chad, Viet Nam and Yemen, the frequency band 14-14.3 GHz is also allocated to the fixed service on a primary basis. (WRC-19)
5.506	The band 14-14.5 GHz may be used, within the fixed-satellite service (Earth-to-space), for feeder links for the broadcasting-satellite service, subject to coordination with other networks in the fixed-satellite service. Such use of feeder links is reserved for countries outside Europe.
5.506A	In the band 14-14.5 GHz, ship earth stations with an e.i.r.p. greater than 21 dBW shall operate under the same conditions as earth stations located on board vessels, as provided in Resolution **902 (WRC-03)**. This footnote shall not apply to ship earth stations for which the complete Appendix **4** information has been received by the Bureau prior to 5 July 2003. (WRC-03)
5.506B	Earth stations located on board vessels communicating with space stations in the fixed-satellite service may operate in the frequency band 14-14.5 GHz without the need for prior agreement from Cyprus and Malta, within the minimum distance given in Resolution 902 (WRC-03) from these countries. (WRC-15)
5.508	*Additional allocation:* in Germany, France, Italy, Libya, North Macedonia and the United Kingdom, the frequency band 14.25-14.3 GHz is also allocated to the fixed service on a primary basis. (WRC-19)

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

5.508A	In the frequency band 14.25-14.3 GHz, the power flux-density produced on the territory of the countries of Saudi Arabia, Bahrain, Botswana, China, Côte d'Ivoire, Egypt, France, Guinea, India, Iran (Islamic Republic of), Italy, Kuwait, Nigeria, Oman, the Syrian Arab Republic, the United Kingdom and Tunisia by any aircraft earth station in the aeronautical mobile-satellite service shall not exceed the limits given in Annex 1, Part B of Recommendation ITU-R M.1643-0, unless otherwise specifically agreed by the affected administration(s). The provisions of this footnote in no way derogate the obligations of the aeronautical mobile-satellite service to operate as a secondary service in accordance with No. **5.29**.(WRC-15)
5.509	SUP (WRC-07)
5.509A	In the frequency band 14.3-14.5 GHz, the power flux-density produced on the territory of the countries of Saudi Arabia, Bahrain, Botswana, Cameroon, China, Côte d'Ivoire, Egypt, France, Gabon, Guinea, India, Iran (Islamic Republic of), Italy, Kuwait, Morocco, Nigeria, Oman, the Syrian Arab Republic, the United Kingdom, Sri Lanka, Tunisia and Viet Nam by any aircraft earth station in the aeronautical mobile-satellite service shall not exceed the limits given in Annex 1, Part B of Recommendation ITU-R M.1643-0, unless otherwise specifically agreed by the affected administration(s). The provisions of this footnote in no way derogate the obligations of the aeronautical mobile-satellite service to operate as a secondary service in accordance with No. **5.29**. (WRC-15)
5.509B	The use of the frequency bands 14.5-14.75 GHz in countries listed in Resolution **163 (WRC-15)** and 14.5-14.8 GHz in countries listed in Resolution **164 (WRC-15)** by the fixed-satellite service (Earth-to-space) not for feeder links for the broadcasting-satellite service is limited to geostationary-satellites. (WRC-15)
5.509C	For the use of the frequency bands 14.5-14.75 GHz in countries listed in Resolution 163 (WRC-15) and 14.5-14.8 GHz in countries listed in Resolution 164 (WRC-15) by the fixed-satellite service (Earth-to-space) not for feeder links for the broadcasting-satellite service, the fixed-satellite service earth stations shall have a minimum antenna diameter of 6 m and a maximum power spectral density of -44.5 dBW/Hz at the input of the antenna. The earth stations shall be notified at known locations on land. (WRC-15)
5.509D	Before an administration brings into use an earth station in the fixed-satellite service (Earth-to-space) not for feeder links for the broadcasting-satellite service in the frequency bands 14.5-14.75 GHz (in countries listed in Resolution 163 (WRC-15)) and 14.5-14.8 GHz (in countries listed in Resolution 164 (WRC-15)), it shall ensure that the power flux-density produced by this earth station does not exceed -151.5 dB(W/(m2 · 4 kHz)) produced at all altitudes from 0 m to 19 000 m above sea level at 22 km seaward from all coasts, defined as the low-water mark, as officially recognized by each coastal State. (WRC-15)
5.509E	In the frequency bands 14.50-14.75 GHz in countries listed in Resolution **163 (WRC-15)** and 14.50-14.8 GHz in countries listed in Resolution **164 (WRC-15)**, the location of earth stations in the fixed-satellite service (Earth-to-space) not for feeder links for the broadcasting-satellite service shall maintain a separation distance of at least 500 km from the border(s) of other countries unless shorter distances are explicitly agreed by those administrations. No. **9.17** does not apply. When applying this provision, administrations should consider the relevant parts of these Regulations and the latest relevant ITU-R Recommendations. (WRC-15)
5.509F	In the frequency bands 14.50-14.75 GHz in countries listed in Resolution 163 (WRC-15) and 14.50-14.8 GHz in countries listed in Resolution 164 (WRC-15), earth stations in the fixed-satellite service (Earth-to-space) not for feeder links for the broadcasting-satellite service shall not constrain the future deployment of the fixed and mobile services. (WRC-15)

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

5.509G	The frequency band 14.5-14.8 GHz is also allocated to the space research service on a primary basis. However, such use is limited to the satellite systems operating in the space research service (Earth-to-space) to relay data to space stations in the geostationary-satellite orbit from associated earth stations. Stations in the space research service shall not cause harmful interference to, or claim protection from, stations in the fixed and mobile services and in the fixed satellite service limited to feeder links for the broadcasting-satellite service and associated space operations functions using the guardbands under Appendix 30A and feeder links for the broadcasting-satellite service in Region 2. Other uses of this frequency band by the space research service are on a secondary basis. (WRC-15)
5.510	Except for use in accordance with Resolution **163 (WRC-15)** and Resolution **164 (WRC-15)**, the use of the frequency band 14.5-14.8 GHz by the fixed-satellite service (Earth-to-space) is limited to feeder links for the broadcasting-satellite service. This use is reserved for countries outside Europe. Uses other than feeder links for the broadcasting-satellite service are not authorized in Regions 1 and 2 in the frequency band 14.75-14.8 GHz. (WRC-15)
5.511	*Additional allocation:* in Saudi Arabia, Bahrain, Cameroon, Egypt, the United Arab Emirates, Guinea, Iran (Islamic Republic of), Iraq, Israel, , Kuwait, Lebanon, Pakistan, Qatar, the Syrian Arab R epublic and Somalia, the band 15.35-15.4 GHz is also allocated to the fixed and mobile services on a secondary basis. (WRC-12)
5.511A	Use of the frequency band 15.43-15.63 GHz by the fixed-satellite service (Earth-to-space) is limited to feeder links of non-geostationary systems in the mobile-satellite service, subject to coordination under No. **9.11A**. (WRC-15)
5.511C	Stations operating in the aeronautical radionavigation service shall limit the effective e.i.r.p. in accordance with Recommendation ITU-R S.1340-0. The minimum coordination distance required to protect the aeronautical radionavigation stations (No. 4.10 applies) from harmful interference from feeder-link earth stations and the maximum e.i.r.p. transmitted towards the local horizontal plane by a feeder-link earth station shall be in accordance with Recommendation ITU-R S.1340-0. (WRC-15)
5.511D	SUP (WRC-12)
5.511E	In the frequency band 15.4-15.7 GHz, stations operating in the radiolocation service shall not cause harmful interference to, or claim protection from, stations operating in the aeronautical radionavigation service. (WRC-12)
5.511F	In order to protect the radio astronomy service in the frequency band 15.35-15.4 GHz, radiolocation stations operating in the frequency band 15.4-15.7 GHz shall not exceed the power flux-density level of −156 dB(W/m2) in a 50 MHz bandwidth in the frequency band 15.35-15.4 GHz, at any radio astronomy observatory site for more than 2 per cent of the time. (WRC-12)
5.512	*Additional allocation:* in Algeria, Saudi Arabia, Austria, Bahrain, Bangladesh, Brunei Darussalam, Cameroon, Congo (Rep. of the), Egypt, El Salvador, the United Arab Emirates, Eritrea, Finland, Guatemala, India, Indonesia, Iran (Islamic Republic of), Jordan, Kenya, Kuwait, Lebanon, Libya, Malaysia, Mali, Morocco, Mauritania, Montenegro, Nepal, Nicaragua, Niger, Oman, Pakistan, Qatar, Syrian Arab Republic, the Dem. Rep. of the Congo, Singapore, Somalia, Sudan, South Sudan, Chad, Togo and Yemen, the frequency band 15.7-17.3 GHz is also allocated to the fixed and mobile services on a primary basis. (WRC-15)
5.513	*Additional allocation:* in Israel, the band 15.7-17.3 GHz is also allocated to the fixed and mobile services on a primary basis. These services shall not claim protection from or cause harmful interference to services operating in accordance with the Table in countries other than those included in No. **5.512**.

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

5.513A	Spaceborne active sensors operating in the band 17.2-17.3 GHz shall not cause harmful interference to, or constrain the development of, the radiolocation and other services allocated on a primary basis. (WRC-97)
5.514	*Additional allocation:* in Algeria, Saudi Arabia, Bahrain, Bangladesh, Cameroon, El Salvador, the United Arab Emirates, Guatemala, India, Iran (Islamic Republic of), Iraq, Israel, Italy, Japan, Jordan, Kuwait, Libya, Lithuania, Nepal, Nicaragua, Nigeria, Oman, Uzbekistan, Pakistan, Qatar, Kyrgyzstan, Sudan and South Sudan, the frequency band 17.3-17.7 GHz is also allocated to the fixed and mobile services on a secondary basis. The power limits given in Nos. **21.3** and **21.5** shall apply. (WRC-15)
5.515	In the band 17.3-17.8 GHz, sharing between the fixed-satellite service (Earth-to-space) and the broadcasting-satellite service shall also be in accordance with the provisions of § 1 of Annex 4 of Appendix **30A**.
5.516	The use of the band 17.3-18.1 GHz by geostationary-satellite systems in the fixed-satellite service (Earth-to-space) is limited to feeder links for the broadcasting-satellite service. The use of the band 17.3-17.8 GHz in Region 2 by systems in the fixed-satellite service (Earth-to-space) is limited to geostationary satellites. For the use of the band 17.3-17.8 GHz in Region 2 by feeder links for the broadcasting-satellite service in the band 12.2-12.7 GHz, see Article **11**. The use of the bands 17.3-18.1 GHz (Earth-to-space) in Regions 1 and 3 and 17.8-18.1 GHz (Earth-to-space) in Region 2 by non-geostationary-satellite systems in the fixed-satellite service is subject to application of the provisions of No. **9.12** for coordination with other non-geostationary-satellite systems in the fixed-satellite service. Non-geostationary- satellite systems in the fixed-satellite service shall not claim protection from geostationary-satellite networks in the fixed-satellite service operating in accordance with the Radio Regulations, irrespective of the dates of receipt by the Bureau of the complete coordination or notification information, as appropriate, for the non-geostationary-satellite systems in the fixed-satellite service and of the complete coordination or notification information, as appropriate, for the geostationary-satellite networks, and No. **5.43A** does not apply. Non-geostationary-satellite systems in the fixed- satellite service in the above bands shall be operated in such a way that any unacceptable interference that may occur during their operation shall be rapidly eliminated. (WRC-2000)
5.516A	In the band 17.3-17.7 GHz, earth stations of the fixed-satellite service (space-to-Earth) in Region 1 shall not claim protection from the broadcasting-satellite service feeder-link earth stations operating under Appendix **30A**, nor put any limitations or restrictions on the locations of the broadcasting-satellite service feeder-link earth stations anywhere within the service area of the feeder link. (WRC-03)
5.516B	The following bands are identified for use by high-density applications in the fixed-satellite service: 17.3-17.7 GHz (space-to-Earth) in Region 1, 18.3-19.3 GHz (space-to-Earth) in Region 2, 19.7-20.2 GHz (space-to-Earth) in all Regions, 39.5-40 GHz (space-to-Earth) in Region 1, 40-40.5 GHz (space-to-Earth) in all Regions, 40.5-42 GHz (space-to-Earth) in Region 2, 47.5-47.9 GHz (space-to-Earth) in Region 1,

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

	48.2-48.54 GHz (space-to-Earth) in Region 1 49.44-50.2 GHz (space-to-Earth) in Region 1, and 27.5-27.82 GHz (Earth-to-space) in Region 1, 28.35-28.45 GHz (Earth-to-space) in Region 2, 28.45-28.94 GHz (Earth-to-space) in all Regions, 28.94-29.1 GHz (Earth-to-space) in Region 2 and 3, 29.25-29.46 GHz (Earth-to-space) in Region 2, 29.46-30 GHz (Earth-to-space) in all Regions, 48.2-50.2 GHz (Earth-to-space) in Region 2. This identification does not preclude the use of these frequency bands by other fixed-satellite service applications or by other services to which these frequency bands are allocated on a co-primary basis and does not establish priority in these Radio Regulations among users of the frequency bands. Administrations should take this into account when considering regulatory provisions in relation to these frequency bands. See Resolution **143 (Rev.WRC-19)**. (WRC-19)
5.517	In Region 2, use of the fixed-satellite (space-to-Earth) service in the band 17.7-17.8 GHz shall not cause harmful interference to nor claim protection from assignments in the broadcasting-satellite service operating in conformity with the Radio Regulations. (WRC-07)
5.517A	The operation of earth stations in motion communicating with geostationary fixed-satellite service space stations within the frequency bands 17.7-19.7 GHz (space-to-Earth) and 27.5-29.5 GHz (Earth-to-space) shall be subject to the application of Resolution **169 (WRC-19)**. (WRC-19)
5.518	SUP (WRC-07)
5.519	*Additional allocation:* the bands 18-18.3 GHz in Region 2 and 18.1-18.4 GHz in Regions 1 and 3 are also allocated to the meteorological-satellite service (space-to-Earth) on a primary basis. Their use is limited to geostationary satellites. (WRC-07)
5.520	The use of the band 18.1-18.4 GHz by the fixed-satellite service (Earth-to-space) is limited to feeder links of geostationary-satellite systems in the broadcasting-satellite service. (WRC-2000)
5.521	*Alternative allocation:* in the United Arab Emirates and Greece, the frequency band 18.1-18.4 GHz is allocated to the fixed, fixed-satellite (space-to-Earth) and mobile services on a primary basis (see No. **5.33**). The provisions of No. **5.519** also apply. (WRC-15)
5.522	SUP (WRC-2000)
5.522A	The emissions of the fixed service and the fixed-satellite service in the band 18.6-18.8 GHz are limited to the values given in Nos. **21.5A** and **21.16.2**, respectively. (WRC-2000)
5.522B	The use of the band 18.6-18.8 GHz by the fixed-satellite service is limited to geostationary systems and systems with an orbit of apogee greater than 20 000 km. (WRC-2000)

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

5.522C	In the band 18.6-18.8 GHz, in Algeria, Saudi Arabia, Bahrain, Egypt, the United Arab Emirates, the Libyan Arab Jamahiriya, Jordan, Lebanon, Morocco, Oman, Qatar, the Syrian Arab Republic, Tunisia and Yemen, fixed-service systems in operation at the date of entry into force of the Final Acts of WRC-2000 are not subject to the limits of No. **21.5A**. (WRC-2000)
5.523	SUP (WRC-2000)
5.523A	The use of the bands 18.8-19.3 GHz (space-to-Earth) and 28.6-29.1 GHz (Earth-to-space) by geostationary and non- geostationary fixed-satellite service networks is subject to the application of the provisions of No. **9.11A** and No. **22.2** does not apply. Administrations having geostationary-satellite networks under coordination prior to 18 November 1995 shall cooperate to the maximum extent possible to coordinate pursuant to No. **9.11A** with non-geostationary-satellite networks for which notification information has been received by the Bureau prior to that date, with a view to reaching results acceptable to all the parties concerned. Non-geostationary-satellite networks shall not cause unacceptable interference to geostationary fixed-satellite service networks for which complete Appendix **4** notification information is considered as having been received by the Bureau prior to 18 November 1995. (WRC-97)
5.523B	The use of the band 19.3-19.6 GHz (Earth-to-space) by the fixed-satellite service is limited to feeder links for non- geostationary-satellite systems in the mobile-satellite service. Such use is subject to the application of the provisions of No. **9.11A**, and No. **22.2** does not apply.
5.523C	No. **22.2** shall continue to apply in the bands 19.3-19.6 GHz and 29.1-29.4 GHz, between feeder links of non- geostationary mobile-satellite service networks and those fixed-satellite service networks for which complete Appendix **4** coordination information, or notification information, is considered as having been received by the Bureau prior to 18 November 1995. (WRC-97)
5.523D	The use of the band 19.3-19.7 GHz (space-to-Earth) by geostationary fixed-satellite service systems and by feeder links for non-geostationary-satellite systems in the mobile-satellite service is subject to the application of the provisions of No. 9.11A, but not subject to the provisions of No. 22.2. The use of this band for other non-geostationary fixed-satellite service systems, or for the cases indicated in Nos. 5.523C and 5.523E, is not subject to the provisions of No. 9.11A and shall continue to be subject to Articles 9 (except No. 9.11A) and 11 procedures, and to the provisions of No. 22.2. (WRC-97)
5.523E	No. **22.2** shall continue to apply in the bands 19.6-19.7 GHz and 29.4-29.5 GHz, between feeder links of non- geostationary mobile-satellite service networks and those fixed-satellite service networks for which complete Appendix **4** coordination information, or notification information, is considered as having been received by the Bureau by 21 November 1997. (WRC-97)
5.524	*Additional allocation:* in Afghanistan, Algeria, Saudi Arabia, Bahrain, Brunei Darussalam, Cameroon, China, Congo (Rep. of the), Costa Rica, Egypt, the United Arab Emirates, Gabon, Guatemala, Guinea, India, Iran (Islamic Republic of), Iraq, Israel, Japan, Jordan, Kuwait, Lebanon, Malaysia, Mali, Morocco, Mauritania, Nepal, Nigeria, Oman, Pakistan, the Philippines, Qatar, the Syrian Arab Republic, the Dem. Rep. of the Congo, the Dem. People's Rep. of Korea, Singapore, Somalia, Sudan, South Sudan, Chad, Togo and Tunisia, the frequency band 19.7-21.2 GHz is also allocated to the fixed and mobile services on a primary basis. This additional use shall not impose any limitation on the power flux-density of space stations in the fixed-satellite service in the frequency band 19.7-21.2 GHz and of space stations in the mobile- satellite service in the frequency band 19.7-20.2 GHz where the allocation to the mobile-satellite service is on a primary basis in the latter frequency band. (WRC-15)

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

5.525	In order to facilitate interregional coordination between networks in the mobile-satellite and fixed-satellite services, carriers in the mobile-satellite service that are most susceptible to interference shall, to the extent practicable, be located in the higher parts of the bands 19.7-20.2 GHz and 29.5-30 GHz.
5.526	In the bands 19.7-20.2 GHz and 29.5-30 GHz in Region 2, and in the bands 20.1-20.2 GHz and 29.9-30 GHz in Regions 1 and 3, networks which are both in the fixed-satellite service and in the mobile-satellite service may include links between earth stations at specified or unspecified points or while in motion, through one or more satellites for point- to-point and point-to-multipoint communications.
5.527	In the bands 19.7-20.2 GHz and 29.5-30 GHz, the provisions of No. **4.10** do not apply with respect to the mobile-satellite service.
5.527A	The operation of earth stations in motion communicating with the FSS is subject to Resolution **156 (WRC-15)**. (WRC-15)
5.528	The allocation to the mobile-satellite service is intended for use by networks which use narrow spot-beam antennas and other advanced technology at the space stations. Administrations operating systems in the mobile-satellite service in the band 19.7-20.1 GHz in Region 2 and in the band 20.1-20.2 GHz shall take all practicable steps to ensure the continued availability of these bands for administrations operating fixed and mobile systems in accordance with the provisions of No. **5.524**.
5.529	The use of the bands 19.7-20.1 GHz and 29.5-29.9 GHz by the mobile-satellite service in Region 2 is limited to satellite networks which are both in the fixed-satellite service and in the mobile-satellite service as described in No. **5.526**.
5.530	SUP (WRC-12)
5.530A	Unless otherwise agreed between the administrations concerned, any station in the fixed or mobile services of an administration shall not produce a power flux-density in excess of -120.4 dB(W/(m2 · MHz)) at 3 m above the ground of any point of the territory of any other administration in Regions 1 and 3 for more than 20% of the time. In conducting the calculations, administrations should use the most recent version of Recommendation ITU-R P.452 (see also the most recent version of Recommendation ITU-R BO.1898). (WRC-15)
5.530B	In the band 21.4-22 GHz, in order to facilitate the development of the broadcasting satellite service, administrations in Regions 1 and 3 are encouraged not to deploy stations in the mobile service and are encouraged to limit the deployment of stations in the fixed service to point to-point links. (WRC-12)
5.530C	SUP (WRC-15)
5.530D	SUP (WRC-19)
5.530E	The allocation to the fixed service in the frequency band 21.4-22 GHz is identified for use in Region 2 by high-altitude platform stations (HAPS). This identification does not preclude the use of this frequency band by other fixed-service applications or by other services to which it is allocated on a co-primary basis, and does not establish priority in the Radio Regulations. Such use of the fixed-service allocation by HAPS is limited to the HAPS-to-ground direction, and shall be in accordance with the provisions of Resolution **165 (WRC-19)**. (WRC-19)
5.531	*Additional allocation:* in Japan, the band 21.4-22 GHz is also allocated to the broadcasting service on a primary basis.
5.532	The use of the band 22.21-22.5 GHz by the Earth exploration-satellite (passive) and space research (passive) services shall not impose constraints upon the fixed and mobile, except aeronautical mobile, services.

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

5.532A	The location of earth stations in the space research service shall maintain a separation distance of at least 54 km from the respective border(s) of neighbouring countries to protect the existing and future deployment of fixed and mobile services unless a shorter distance is otherwise agreed between the corresponding administrations. Nos. **9.17** and **9.18** do not apply. (WRC 12)
5.532AA	The allocation to the fixed service in the frequency band 24.25-25.25 GHz is identified for use in Region 2 by high- altitude platform stations (HAPS). This identification does not preclude the use of this frequency band by other fixed-service applications or by other services to which this frequency band is allocated on a co-primary basis, and does not establish priority in the Radio Regulations. Such use of the fixed-service allocation by HAPS is limited to the HAPS-to- ground direction and shall be in accordance with the provisions of Resolution 166 (WRC-19). (WRC-19)
5.532AB	The frequency band 24.25-27.5 GHz is identified for use by administrations wishing to implement the terrestrial component of International Mobile Telecommunications (IMT). This identification does not preclude the use of this frequency band by any application of the services to which it is allocated and does not establish priority in the Radio Regulations. Resolution **242 (WRC-19)** applies. (WRC-19)
5.532B	Use of the band 24.65-25.25 GHz in Region 1 and the band 24.65-24.75 GHz in Region 3 by the fixed-satellite service (Earth-to-space) is limited to earth stations using a minimum antenna diameter of 4.5m. (WRC-12)
5.533	The inter-satellite service shall not claim protection from harmful interference from airport surface detection equipment stations of the radionavigation service.
5.534	SUP (WRC-03)
5.534A	The allocation to the fixed service in the frequency band 25.25-27.5 GHz is identified in Region 2 for use by high-altitude platform stations (HAPS) in accordance with the provisions of Resolution **166 (WRC-19)**. Such use of the fixed-service allocation by HAPS shall be limited to the ground-to-HAPS direction in the frequency band 25.25-27.0 GHz and to the HAPS-to-ground direction in the frequency band 27.0-27.5 GHz. Furthermore, the use of the frequency band 25.5-27.0 GHz by HAPS shall be limited to gateway links. This identification does not preclude the use of this frequency band by other fixed-service applications or by other services to which this band is allocated on a co-primary basis, and does not establish priority in the Radio Regulations. (WRC-19)
5.535	In the band 24.75-25.25 GHz, feeder links to stations of the broadcasting-satellite service shall have priority over other uses in the fixed-satellite service (Earth-to-space). Such other uses shall protect and shall not claim protection from existing and future operating feeder-link networks to such broadcasting satellite stations.
5.535A	The use of the band 29.1-29.5 GHz (Earth-to-space) by the fixed-satellite service is limited to geostationary-satellite systems and feeder links to non-geostationary-satellite systems in the mobile-satellite service. Such use is subject to the application of the provisions of No. **9.11A**, but not subject to the provisions of No. **22.2**, except as indicated in Nos. **5.523C** and **5.523E** where such use is not subject to the provisions of No. **9.11A** and shall continue to be subject to Articles **9** (except No. **9.11A**) and **11** procedures, and to the provisions of No. **22.2**. (WRC-97)
5.536	Use of the 25.25-27.5 GHz band by the inter-satellite service is limited to space research and Earth exploration-satellite applications, and also transmissions of data originating from industrial and medical activities in space.

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

5.536A	Administrations operating earth stations in the Earth exploration-satellite service or the space research service shall not claim protection from stations in the fixed and mobile services operated by other administrations. In addition, earth stations in the Earth exploration-satellite service or in the space research service should be operated taking into account the most recent version of Recommendation ITU-R SA.1862. Resolution **242 (WRC-19)** applies. (WRC-19)
5.536B	In Algeria, Saudi Arabia, Austria, Bahrain, Belgium, Brazil, China, Korea (Rep. of), Denmark, Egypt, United Arab Emirates, Estonia, Finland, Hungary, India, Iran (Islamic Republic of), Iraq, Ireland, Israel, Italy, Jordan, Kenya, Kuwait, Lebanon, Libya, Lithuania, Moldova, Norway, Oman, Uganda, Pakistan, the Philippines, Poland, Portugal, Qatar, the Syrian Arab Republic, Dem. People's Rep. of Korea, Slovakia, the Czech Rep., Romania, the United Kingdom, Singapore, Slovenia, Sudan, Sweden, Tanzania, Turkey, Viet Nam and Zimbabwe, earth stations operating in the Earth exploration-satellite service in the frequency band 25.5-27 GHz shall not claim protection from, or constrain the use and deployment of, stations of the fixed and mobile services. Resolution **242 (WRC-19)** applies. (WRC-19)
5.536C	In Algeria, Saudi Arabia, Bahrain, Botswana, Brazil, Cameroon, Comoros, Cuba, Djibouti, Egypt, United Arab Emirates, Estonia, Finland, Iran (Islamic Republic of), Israel, Jordan, Kenya, Kuwait, Lithuania, Malaysia, Morocco, Nigeria, Oman, Qatar, Syrian Arab Republic, Somalia, Sudan, South Sudan, Tanzania, Tunisia, Uruguay, Zambia and Zimbabwe, earth stations operating in the space research service in the band 25.5-27 GHz shall not claim protection from, or constrain the use and deployment of, stations of the fixed and mobile services. (WRC-12)
5.537	Space services using non-geostationary satellites operating in the inter-satellite service in the band 27-27.5 GHz are exempt from the provisions of No. **22.2**.
5.537A	In Bhutan, Cameroon, China, Korea (Rep. of), the Russian Federation, India, Indonesia, Iran (Islamic Republic of), Iraq, Japan, Kazakhstan, Malaysia, Maldives, Mongolia, Myanmar, Uzbekistan, Pakistan, the Philippines, Kyrgyzstan, the Dem. People's Rep. of Korea, Sudan, Sri Lanka, Thailand and Viet Nam, the allocation to the fixed service in the band 27.9- 28.2 GHz may also be used by high altitude platform stations (HAPS) within the territory of these countries. Such use of 300 MHz of the fixed-service allocation by HAPS in the above countries is further limited to operation in the HAPS-to- ground direction and shall not cause harmful interference to, nor claim protection from, other types of fixed-service systems or other co-primary services. Furthermore, the development of these other services shall not be constrained by HAPS. See Resolution **145 (Rev.WRC-19)**. (WRC-19)
5.538	*Additional allocation:* the bands 27.500-27.501 GHz and 29.999-30.000 GHz are also allocated to the fixed-satellite service (space-to-Earth) on a primary basis for the beacon transmissions intended for up-link power control. Such space- to-Earth transmissions shall not exceed an equivalent isotropically radiated power (e.i.r.p.) of ±10 dBW in the direction of adjacent satellites on the geostationary-satellite orbit. (WRC-07)
5.539	The band 27.5-30 GHz may be used by the fixed-satellite service (Earth-to-space) for the provision of feeder links for the broadcasting-satellite service.
5.540	*Additional allocation:* the band 27.501-29.999 GHz is also allocated to the fixed-satellite service (space-to-Earth) on a secondary basis for beacon transmissions intended for up-link power control.
5.541	In the band 28.5-30 GHz, the earth exploration-satellite service is limited to the transfer of data between stations and not to the primary collection of information by means of active or passive sensors.

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

5.541A	Feeder links of non-geostationary networks in the mobile-satellite service and geostationary networks in the fixed- satellite service operating in the band 29.1-29.5 GHz (Earth-to-space) shall employ uplink adaptive power control or other methods of fade compensation, such that the earth station transmissions shall be conducted at the power level required to meet the desired link performance while reducing the level of mutual interference between both networks. These methods shall apply to networks for which Appendix **4** coordination information is considered as having been received by the Bureau after 17 May 1996 and until they are changed by a future competent world radiocommunication conference. Administrations submitting Appendix **4** information for coordination before this date are encouraged to utilize these techniques to the extent practicable. (WRC-2000)
5.542	*Additional allocation:* in Algeria, Saudi Arabia, Bahrain, Brunei Darussalam, Cameroon, China, Congo (Rep. of the), Egypt, the United Arab Emirates, Eritrea, Ethiopia, Guinea, India, Iran (Islamic Republic of), Iraq, Japan, Jordan, Kuwait, Lebanon, Malaysia, Mali, Morocco, Mauritania, Nepal, Oman, Pakistan, Philippines, Qatar, the Syrian Arab Republic, the Dem. People's Rep. of Korea, Somalia, Sudan, South Sudan Sri Lanka and Chad, the band 29.5-31 GH to the fixed and mobile services on a secondary basis. The power limits specified in Nos. 21.3 and 21.5 shall apply. (WRC-12)z is also allocated
5.543	The band 29.95-30 GHz may be used for space-to-space links in the Earth exploration-satellite service for telemetry, tracking, and control purposes, on a secondary basis.
5.543A	SUP (WRC-19)
5.543B	The allocation to the fixed service in the frequency band 31-31.3 GHz is identified for worldwide use by high-altitude platform stations (HAPS). This identification does not preclude the use of this frequency band by other fixed-service applications or by other services to which this frequency band is allocated on a co-primary basis, and does not establish priority in the Radio Regulations. Such use of the fixed-service allocation by HAPS shall be in accordance with the provisions of Resolution **167 (WRC-19)**. (WRC-19)
5.544	In the band 31-31.3 GHz the power flux-density limits specified in Article **21**, Table **21-4** shall apply to the space research service.
5.545	*Different category of service:* in Armenia, Georgia, Mongolia, Kyrgyzstan, Tajikistan and Turkmenistan, the allocation of the band 31-31.3 GHz to the space research service is on a primary basis (see No. **5.33**). (WRC-07)
5.546	*Different category of service:* in Saudi Arabia, Armenia, Azerbaijan, Bahrain, Belarus, Egypt, the United Arab Emirates, Spain, Estonia, the Russian Federation, Georgia, Hungary, Iran (Islamic Republic of), Israel, Jordan, Lebanon, Moldova, Mongolia, Oman, Uzbekistan, Poland, the Arab Republic, Kyrgyzstan, Romania, the United Kingdom, South Africa, Tajikistan, Turkmenistan and Turkey, the allocation of the frequency band 31.5-31.8 GHz to the fixed and mobile, except aeronautical mobile, services is on a primary basis (see No. **5.33**). (WRC-19)
5.547	The bands 31.8-33.4 GHz, 37-40 GHz, 40.5-43.5 GHz, 51.4-52.6 GHz, 55.78-59 GHz and 64-66 GHz are available for high- density applications in the fixed service (see Resolution **75 (WRC-2000)**). Administrations should take this into account when considering regulatory provisions in relation to these bands. Because of the potential deployment of high-density applications in the fixed-satellite service in the bands 39.5-40 GHz and 40.5-42 GHz (see No. **5.516B**), administrations should further take into account potential constraints to high-density applications in the fixed service, as appropriate. (WRC-07)

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

5.547A	Administrations should take practical measures to minimize the potential interference between stations in the fixed service and airborne stations in the radionavigation service in the 31.8-33.4 GHz band, taking into account the operational needs of the airborne radar systems. (WRC-2000)
5.547B	*Alternative allocation*: in the United States, the band 31.8-32 GHz is allocated to the radionavigation and space research (deep space) (space-to-Earth) services on a primary basis. (WRC-97)
5.547C	*Alternative allocation*: in the United States, the band 32-32.3 GHz is allocated to the radionavigation and space research (deep space) (space-to-Earth) services on a primary basis. (WRC-03)
5.547D	Alternative allocation: in the United States, the band 32.3-33 GHz is allocated to the inter-satellite and radionavigation services on a primary basis. (WRC-97)
5.547E	*Alternative allocation*: in the United States, the band 33-33.4 GHz is allocated to the radionavigation service on a primary basis. (WRC-97)
5.548	In designing systems for the inter-satellite service in the band 32.3-33 GHz, for the radionavigation service in the band 32-33 GHz, and for the space research service (deep space) in the band 31.8-32.3 GHz, administrations shall take all necessary measures to prevent harmful interference between these services, bearing in mind the safety aspects of the radionavigation service (see Recommendation **707**). (WRC-03)
5.549	*Additional allocation:* in Saudi Arabia, Bahrain, Bangladesh, Egypt, the United Arab Emirates, Gabon, Indonesia, Iran (Islamic Republic of), Iraq, Israel, Jordan, Kuwait, Lebanon, Libya, Malaysia, Mali, , Morocco, Mauritania, Nepal, Nigeria, Oman, Pakistan, the Philippines, Qatar, the Syrian Arab Republic, the Dem. Rep. of the Congo, Singapore, Somalia, Sudan, South Sudan Sri Lanka, Togo, Tunisia and Yemen, the band 33.4-36 GHz is also allocated to the fixed and mobile services on a primary basis. (WRC-12)
5.549A	In the band 35.5-36.0 GHz, the mean power flux-density at the Earth's surface, generated by any spaceborne sensor in the Earth exploration-satellite service (active) or space research service (active), for any angle greater than 0.8° from the beam centre shall not exceed -73.3 dB(W/m2) in this band. (WRC-03)
5.550	*Different category of service:* in Armenia, Azerbaijan, Belarus, the Russian Federation, Georgia, , Kyrgyzstan, Tajikistan and Turkmenistan, the allocation of the band 34.7-35.2 GHz to the space research service is on a primary basis (see No. 5.33). (WRC-12)
5.550A	For sharing of the band 36-37 GHz between the Earth exploration-satellite (passive) service and the fixed and mobile services, Resolution **752 (WRC-07)** shall apply. (WRC-07)
5.550B	The frequency band 37-43.5 GHz, or portions thereof, is identified for use by administrations wishing to implement the terrestrial component of International Mobile Telecommunications (IMT). This identification does not preclude the use of this frequency band by any application of the services to which it is allocated and does not establish priority in the Radio Regulations. Because of the potential deployment of FSS earth stations within the frequency range 37.5-42.5 GHz and high-density applications in the fixed-satellite service in the frequency bands 39.5-40 GHz in Region 1, 40-40.5 GHz in all Regions and 40.5-42 GHz in Region 2 (see No. **5.516B**), administrations should further take into account potential constraints to IMT in these frequency bands, as appropriate. Resolution **243 (WRC-19)** applies. (WRC-19)

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

5.550C	The use of the frequency bands 37.5-39.5 GHz (space-to-Earth), 39.5-42.5 GHz (space-to-Earth), 47.2-50.2 GHz (Earth- to-space) and 50.4-51.4 GHz (Earth-to-space) by a non-geostationary-satellite system in the fixed-satellite service is subject to the application of the provisions of No. **9.12** for coordination with other non-geostationary-satellite systems in the fixed-satellite service but not with non-geostationary-satellite systems in other services. Resolution **770 (WRC- 19) shall also apply, and No. 22.2** shall continue to apply. (WRC-19)
5.550D	The allocation to the fixed service in the frequency band 38-39.5 GHz is identified for worldwide use by administrations wishing to implement high-altitude platform stations (HAPS). In the HAPS-to-ground direction, the HAPS ground station shall not claim protection from stations in the fixed, mobile and fixed-satellite services; and No. **5.43A** does not apply. This identification does not preclude the use of this frequency band by other fixed-service applications or by other services to which this frequency band is allocated on a co-primary basis and does not establish priority in the Radio Regulations. Furthermore, the development of the fixed-satellite, fixed and mobile services shall not be unduly constrained by HAPS. Such use of the fixed-service allocation by HAPS shall be in accordance with the provisions of Resolution **168 (WRC-19).** (WRC-19)
5.550E	The use of the frequency bands 39.5-40 GHz and 40-40.5 GHz by non-geostationary-satellite systems in the mobile- satellite service (space-to-Earth) and by non-geostationary-satellite systems in the fixed-satellite service (space-to- Earth) is subject to the application of the provisions of No. **9.12** for coordination with other non-geostationary-satellite systems in the fixed-satellite and mobile-satellite services but not with non-geostationary-satellite systems in other services. No. **22.2** shall continue to apply for non-geostationary-satellite-systems. (WRC-19)
5.551B	SUP (WRC-2000)
5.551C	SUP (WRC-2000)
5.551D	SUP (WRC-2000)
5.551E	SUP (WRC-2000)
5.551F	*Different category of service*: in Japan, the allocation of the band 41.5-42.5 GHz to the mobile service is on a primary basis (see No. **5.33**). (WRC-97)
5.551G	SUP (WRC-03)
5.551H	The equivalent power flux-density (epfd) produced in the frequency band 42.5-43.5 GHz by all space stations in any non-geostationary-satellite system in the fixed-satellite service (space-to-Earth), or in the broadcasting-satellite service operating in the frequency band 42-42.5 GHz, shall not exceed the following values at the site of any radio astronomy station for more than 2% of the time: – 230 dB(W/m^2) in 1 GHz and –246 dB(W/m^2) in any 500 kHz of the 42.5-43.5 GHz band at the site of any radio astronomy station registered as a single-dish telescope; and – 209 dB(W/m^2) in any 500 kHz of the 42.5-43.5 GHz band at the site of any radio astronomy station registered as a very long baseline interferometry station. These epfd values shall be evaluated using the methodology given in Recommendation ITU-R S.1586-1 and the reference antenna pattern and the maximum gain of an antenna in the radio astronomy service given in Recommendation ITU-R RA.1631-0 and shall apply over the whole sky and for elevation angles higher than the minimum operating angle θ_{min} of the radiotelescope (for which a default value of 5° should be adopted in the absence

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

	of notified information). These values shall apply at any radio astronomy station that either: − was in operation prior to 5 July 2003 and has been notified to the Bureau before 4 January 2004; or − was notified before the date of receipt of the complete Appendix **4** information for coordination or notification, as appropriate, for the space station to which the limits apply. Other radio astronomy stations notified after these dates may seek an agreement with administrations that have authorized the space stations. In Region 2, Resolution **743 (WRC-03)** shall apply. The limits in this footnote may be exceeded at the site of a radio astronomy station of any country whose administration so agreed. (WRC-15)
5.551I	The power flux-density in the band 42.5-43.5 GHz produced by any geostationary space station in the fixed-satellite service (space-to-Earth), or the broadcasting-satellite service operating in the 42-42.5 GHz band, shall not exceed the following values at the site of any radio astronomy station: – 137 dB(W/m^2) in 1 GHz and –153 dB(W/m^2) in any 500 kHz of the 42.5-43.5 GHz band at the site of any radio astronomy station registered as a single-dish telescope; and – 116 dB(W/m^2) in any 500 kHz of the 42.5-43.5 GHz band at the site of any radio astronomy station registered as a very long baseline interferometry station. These values shall apply at the site of any radio astronomy station that either: – was in operation prior to 5 July 2003 and has been notified to the Bureau before 4 January 2004; or – was notified before the date of receipt of the complete Appendix **4** information for coordination or notification, as appropriate, for the space station to which the limits apply. Other radio astronomy stations notified after these dates may seek an agreement with administrations that have authorized the space stations. In Region 2, Resolution **743 (WRC-03)** shall apply. The limits in this footnote may be exceeded at the site of a radio astronomy station of any country whose administration so agreed. (WRC-03)
5.552	The allocation of the spectrum for the fixed-satellite service in the bands 42.5-43.5 GHz and 47.2-50.2 GHz for Earth-to- space transmission is greater than that in the band 37.5-39.5 GHz for space-to-Earth transmission in order to accommodate feeder links to broadcasting satellites. Administrations are urged to take all practicable steps to reserve the band 47.2-49.2 GHz for feeder links for the broadcasting-satellite service operating in the band 40.5-42.5 GHz.
5.552A	The allocation to the fixed service in the frequency bands 47.2-47.5 GHz and 47.9-48.2 GHz is identified for use by high- altitude platform stations (HAPS). This identification does not preclude the use of this frequency band by any application of the services to which it is allocated on a co-primary basis, and does not establish priority in the Radio Regulations. Such use of the fixed-service allocation in the frequency bands 47.2-47.5 GHz and 47.9-48.2 GHz by HAPS shall be in accordance with the provisions of Resolution **122 (Rev.WRC-19)**. (WRC-19)

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

5.553	In the bands 43.5-47 GHz and 66-71 GHz, stations in the land mobile service may be operated subject to not causing harmful interference to the space radiocommunication services to which these bands are allocated (see No. **5.43**). (WRC-2000)
5.553A	In Algeria, Angola, Bahrain, Belarus, Benin, Botswana, Brazil, Burkina Faso, Cabo Verde, Korea (Rep. of), Côte d'Ivoire, Croatia, United Arab Emirates, Estonia, Eswatini, Gabon, Gambia, Ghana, Greece, Guinea, Guinea-Bissau, Hungary, Iran (Islamic Republic of), Iraq, Jordan, Kuwait, Lesotho, Latvia, Liberia, Lithuania, Madagascar, Malawi, Mali, Morocco, Mauritius, Mauritania, Mozambique, Namibia, Niger, Nigeria, Oman, Qatar, Senegal, Seychelles, Sierra Leone, Slovenia, Sudan, South Africa, Sweden, Tanzania, Togo, Tunisia, Zambia and Zimbabwe, the frequency band 45.5-47 GHz is identified for use by administrations wishing to implement the terrestrial component of International Mobile Telecommunications (IMT), taking into account No. **5.553**. With respect to the aeronautical mobile service and radionavigation service, the use of this frequency band for the implementation of IMT is subject to agreement obtained under No. **9.21** with concerned administrations and shall not cause harmful interference to, or claim protection from these services. This identification does not preclude the use of this frequency band by any application of the services to which it is allocated and does not establish priority in the Radio Regulations. Resolution **244 (WRC-19**) applies. (WRC-19)
5.553B	In Region 2 and Algeria, Angola, Saudi Arabia, Australia, Bahrain, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Central African Rep., Comoros, Congo (Rep. of the), Korea (Rep. of), Côte d'Ivoire, Djibouti, Egypt, United Arab Emirates, Eswatini, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Equatorial Guinea, India, Iran (Islamic Republic of), Iraq, Japan, Jordan, Kenya, Kuwait, Lesotho, Liberia, Libya, Lithuania, Madagascar, Malaysia, Malawi, Mali, Morocco, Mauritius, Mauritania, Mozambique, Namibia, Niger, Nigeria, Oman, Uganda, Qatar, the Syrian Arab Republic, the Dem. Rep. of the Congo, Rwanda, Sao Tome and Principe, Senegal, Seychelles, Sierra Leone, Singapore, Slovenia, Somalia, Sudan, South Sudan, South Africa, Sweden, Tanzania, Chad, Togo, Tunisia, Zambia and Zimbabwe, the frequency band 47.2-48.2 GHz is identified for use by administrations wishing to implement International Mobile Telecommunications (IMT). This identification does not preclude the use of this frequency band by any application of the services to which it is allocated, and does not establish any priority in the Radio Regulations. Resolution **243 (WRC-19)** applies.
5.554	In the bands 43.5-47 GHz, 66-71 GHz, 95-100 GHz, 123-130 GHz, 191.8-200 GHz and 252-265 GHz, satellite links connecting land stations at specified fixed points are also authorized when used in conjunction with the mobile-satellite service or the radionavigation-satellite service. (WRC-2000)
5.554A	The use of the bands 47.5-47.9 GHz, 48.2-48.54 GHz and 49.44-50.2 GHz by the fixed-satellite service (space-to-Earth) is limited to geostationary satellites. (WRC-03)
5.555	*Additional allocation:* the band 48.94-49.04 GHz is also allocated to the radio astronomy service on a primary basis. (WRC-2000)
5.555A	SUP (WRC-03)
5.555B	The power flux-density in the band 48.94-49.04 GHz produced by any geostationary space station in the fixed-satellite service (space-to-Earth) operating in the bands 48.2-48.54 GHz and 49.44-50.2 GHz shall not exceed –151.8 dB(W/m2) in any 500 kHz band at the site of any radio astronomy station. (WRC-03)

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

5.555C	The use of the frequency band 51.4-52.4 GHz by the fixed-satellite service (Earth-to-space) is limited to geostationary- satellite networks. The earth stations shall be limited to gateway earth stations with a minimum antenna diameter of 2.4 metres. (WRC-19)
5.556	In the bands 51.4-54.25 GHz, 58.2-59 GHz and 64-65 GHz, radio astronomy observations may be carried out under national arrangements. (WRC-2000)
5.556A	Use of the bands 54.25-56.9 GHz, 57-58.2 GHz and 59-59.3 GHz by the inter-satellite service is limited to satellites in the geostationary-satellite orbit. The single-entry power flux-density at all altitudes from 0 km to 1 000 km above the Earth's surface produced by a station in the inter-satellite service, for all conditions and for all methods of modulation, shall not exceed –147 dB(W/(m2 Ill 100 MHz)) for all angles of arrival. (WRC-97)
5.556B	*Additional allocation:* in Japan, the band 54.25-55.78 GHz is also allocated to the mobile service on a primary basis for low-density use. (WRC-97)
5.557	*Additional allocation:* in Japan, the band 55.78-58.2 GHz is also allocated to the radiolocation service on a primary basis. (WRC-97)
5.557A	In the band 55.78-56.26 GHz, in order to protect stations in the Earth exploration-satellite service (passive), the maximum power density delivered by a transmitter to the antenna of a fixed service station is limited to –26 dB(W/MHz). (WRC-2000)
5.558	In the bands 55.78-58.2 GHz, 59-64 GHz, 66-71 GHz, 122.25-123 GHz, 130-134 GHz, 167-174.8 GHz and 191.8-200 GHz, stations in the aeronautical mobile service may be operated subject to not causing harmful interference to the inter- satellite service (see **No. 5.43**). (WRC-2000)
5.558A	Use of the band 56.9-57 GHz by inter-satellite systems is limited to links between satellites in geostationary-satellite orbit and to transmissions from non-geostationary satellites in high-Earth orbit to those in low-Earth orbit. For links between satellites in the geostationary-satellite orbit, the single entry power flux-density at all altitudes from 0 km to 1 000 km above the Earth's surface, for all conditions and for all methods of modulation, shall not exceed –147 dB(W/(m2 Ill 100 MHz)) for all angles of arrival. (WRC-97)
5.559	In the band 59-64 GHz, airborne radars in the radiolocation service may be operated subject to not causing harmful interference to the inter-satellite service (see No. **5.43**). (WRC-2000)
5.559A	SUP (WRC-07)
5.559AA	The frequency band 66-71 GHz is identified for use by administrations wishing to implement the terrestrial component of International Mobile Telecommunications (IMT). This identification does not preclude the use of this frequency band by any application of the services to which this frequency band is allocated and does not establish priority in the Radio Regulations. Resolution **241 (WRC-19)** applies. (WRC-19)
5.559B	The use of the frequency band 77.5-78 GHz by the radiolocation service shall be limited to short-range radar for ground-based applications, including automotive radars. The technical characteristics of these radars are provided in the most recent version of Recommendation ITU-R M.2057. The provisions of No. **4.10** do not apply. (WRC-15)
5.560	In the band 78-79 GHz radars located on space stations may be operated on a primary basis in the Earth exploration- satellite service and in the space research service.
5.561	In the band 74-76 GHz, stations in the fixed, mobile and broadcasting services shall not cause harmful interference to stations of the fixed-satellite service or stations of the broadcasting-satellite service operating in accordance with the

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

	decisions of the appropriate frequency assignment planning conference for the broadcasting-satellite service. (WRC-2000)
5.561A	The 81-81.5 GHz band is also allocated to the amateur and amateur-satellite services on a secondary basis. (WRC-2000)
5.561B	In Japan, use of the band 84-86 GHz, by the fixed-satellite service (Earth-to-space) is limited to feeder links in the broadcasting-satellite service using the geostationary-satellite orbit. (WRC-2000)
5.562	The use of the band 94-94.1 GHz by the Earth exploration-satellite (active) and space research (active) services is limited to spaceborne cloud radars. (WRC-97)
5.562A	In the bands 94-94.1 GHz and 130-134 GHz, transmissions from space stations of the Earth exploration-satellite service (active) that are directed into the main beam of a radio astronomy antenna have the potential to damage some radio astronomy receivers. Space agencies operating the transmitters and the radio astronomy stations concerned should mutually plan their operations so as to avoid such occurrences to the maximum extent possible. (WRC-2000)
5.562B	In the bands 105-109.5 GHz, 111.8-114.25 GHz and 217-226 GHz, the use of this allocation is limited to space-based radio astronomy only. (WRC-19)
5.562C	Use of the band 116-122.25 GHz by the inter-satellite service is limited to satellites in the geostationary-satellite orbit. The single-entry power flux-density produced by a station in the inter-satellite service, for all conditions and for all methods of modulation, at all altitudes from 0 km to 1 000 km above the Earth's surface and in the vicinity of all geostationary orbital positions occupied by passive sensors, shall not exceed –148 dB(W/(m2 · MHz)) for all angles of arrival. (WRC-2000)
5.562D	Additional allocation: In Korea (Rep. of), the frequency bands 128-130 GHz, 171-171.6 GHz, 172.2-172.8 GHz and 173.3- 174 GHz are also allocated to the radio astronomy service on a primary basis. Radio astronomy stations in Korea (Rep. of) operating in the frequency bands referred to in this footnote shall not claim protection from, or constrain the use and development of, services in other countries operating in accordance with the Radio Regulations. (WRC-15)
5.562E	The allocation to the Earth exploration-satellite service (active) is limited to the band 133.5-134 GHz. (WRC-2000)
5.562F	SUP (WRC-19)
5.562G	SUP (WRC-19)
5.562H	Use of the bands 174.8-182 GHz and 185-190 GHz by the inter-satellite service is limited to satellites in the geostationary- satellite orbit. The single-entry power flux-density produced by a station in the inter-satellite service, for all conditions and for all methods of modulation, at all altitudes from 0 to 1 000 km above the Earth's surface and in the vicinity of all geostationary orbital positions occupied by passive sensors, shall not exceed−144 dB(W/(m2 · MHz)) for all angles of arrival. (WRC-2000)
5.563	SUP (WRC-03)
5.563A	In the bands 200-209 GHz, 235-238 GHz, 250-252 GHz and 265-275 GHz, ground-based passive atmospheric sensing is carried out to monitor atmospheric constituents. (WRC-2000)
5.563B	The band 237.9-238 GHz is also allocated to the Earth exploration-satellite service (active) and the space research service (active) for spaceborne cloud radars only. (WRC-2000)
5.564	SUP (WRC-2000)

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

5.564A	For the operation of fixed and land mobile service applications in frequency bands in the range 275-450 GHz: The frequency bands 275-296 GHz, 306-313 GHz, 318-333 GHz and 356-450 GHz are identified for use by administrations for the implementation of land mobile and fixed service applications, where no specific conditions are necessary to protect Earth exploration-satellite service (passive) applications. The frequency bands 296-306 GHz, 313-318 GHz and 333-356 GHz may only be used by fixed and land mobile service applications when specific conditions to ensure the protection of Earth exploration-satellite service (passive) applications are determined in accordance with Resolution **731 (Rev.WRC-19)**. In those portions of the frequency range 275-450 GHz where radio astronomy applications are used, specific conditions (e.g. minimum separation distances and/or avoidance angles) may be necessary to ensure protection of radio astronomy sites from land mobile and/or fixed service applications, on a case-by-case basis in accordance with Resolution **731 (Rev.WRC-19)**. The use of the above-mentioned frequency bands by land mobile and fixed service applications does not preclude use by, and does not establish priority over, any other applications of radio services in the range of 275-450 GHz. (WRC-19)
5.565	The following frequency bands in the range 275-1 000 GHz are identified for use by administrations for passive service applications: – radio astronomy service: 275-323 GHz, 327-371 GHz, 388-424 GHz, 426-442 GHz, 453-510 GHz, 623-711 GHz, 795-909 GHz and 926-945 GHz; – Earth exploration-satellite service (passive) and space research service (passive): 275-286 GHz, 296-306 GHz, 313-356 GHz, 361-365 GHz, 369-392 GHz, 397-399 GHz, 409-411 GHz, 416-434 GHz, 439-467 GHz, 477-502 GHz, 523-527 GHz, 538-581 GHz, 611-630 GHz, 634-654 GHz, 657-692 GHz, 713-718 GHz, 729-733 GHz, 750-754 GHz, 771-776 GHz, 823-846 GHz, 850-854 GHz, 857-862 GHz, 866-882 GHz, 905-928 GHz, 951-956 GHz, 968-973 GHz and 985-990 GHz. The use of the range 275-1 000 GHz by the passive services does not preclude use of this range by active services. Administrations wishing to make frequencies in the 275-1 000 GHz range available for active service applications are urged to take all practicable steps to protect these passive services from harmful interference until the date when the Table of Frequency Allocations is established in the above-mentioned 275-1 000 GHz frequency range. All frequencies in the range 1 000-3 000 GHz may be used by both active and passive services. (WRC-12)

ITU Footnotes

This gazette is also available free online at **www.gpwonline.co.za**

8 LIST OF FREQUENCY BANDS USED FOR MARITIME SERVICES

Frequency Band	Frequency Used	Services
505-526.5 kHz	518 kHz	[Transmission of Maritime Safety Information (Appendix 15 of ITU RR)[19] (Meteorological, navigational and other urgent information)
2 173.5-2 190.5 kHz	2 182 kHz	Distress, Urgency and Safety communications (traffic) by radio telephony (voice) (Appendix 15 of ITU RR)
	2 187 kHz	DSC Watchkeeping (Article 31) (Appendix 15 of ITU RR)
4 063-4 438 kHz		(Appendix 17)[20]
		(Appendix 17)
	4 125 kHz	Distress, Urgency and Safety communications (traffic) by radio telephony (voice) (Appendix 15 of ITU RR)
	4 207.5 kHz	DSC watchkeeping (Article 31) (Appendix 15 of ITU RR)
	4 369 kHz	(Appendix 17)
	4 375 kHz	Transmission of meteorological bulletins; notices to navigators; (Appendix 17)
	4 417 kHz	Coast Station duplex transmission of Channel 421.
6 200-6 525 kHz	6 203 kHz	(Appendix 17)
	6 215 kHz	Distress, Urgency and Safety communications (traffic) by radio telephony (voice) (Appendix 15 of ITU RR)
	6 312 kHz	DSC watchkeeping (Article 31) (Appendix 15 of ITU RR)
	6 504 kHz	(Appendix 17)
8 195-8 815 kHz	8 207 kHz	(Appendix 17)
	8 216 kHz	(Appendix 17)
	8 255 kHz	(Appendix 17)
	8 291 kHz	Distress, Urgency and Safety communications (traffic) by radio telephony (voice) (Appendix 15 of ITU RR)
	8 731 kHz	(Appendix 17)
	8 740 kHz	Transmission of meteorological bulletins; notices to navigators; (Appendix 17)

[19] Only distress and safety communications are provided, with MSI and Medical Assistance at sea. All MF/HF public correspondence ceased as it was no longer commercially viable and sustainable. Other technologies accommodate this type of communications. (Satellite, GSM, Trunked radio networks, etc.).

[20] Public Correspondence facilities with effect from 1 September 2014 has been discontinued.

This gazette is also available free online at **www.gpwonline.co.za**

Frequency Band	Frequency Used	Services
	8 779 kHz	(Appendix 17)
	8 414.5 kHz	DSC watchkeeping (Article 31)
12 230-13 200 kHz	12 254 kHz	(Appendix 17)
	12 290 kHz	(Appendix 17)
	12 299 kHz	(Appendix 17)
	12 359 kHz	(Appendix 17)
	12 577 kHz	DSC watchkeeping (Article 31) (Appendix 15 of ITU RR)
	13 101 kHz	(Appendix 17)
	13 146 kHz	Transmission of meteorological bulletins; notices to navigators; (Appendix 17)
16 360-17 410 kHz	16 381 kHz	(Appendix 17)
	16 420 kHz	Distress, Urgency and Safety communications (traffic) by radio telephony (voice) (Appendix 15 of ITU RR)
	16 456 kHz	(Appendix 17)
	16 537 kHz	(Appendix 17)
	16 804.5 kHz	DSC watchkeeping (Appendix 15 of ITU RR)
	17 263 kHz	(Appendix 17)
	17 338 kHz	(Appendix 17)

Frequency Band as per NRFP	Frequency Used	Services
154-156.4875 MHz	Several channels used within this range in accordance with Appendix 18 of the ITU RR **Channel 2006 – 160.900 MHz**	APPENDIX 18 Channel 2006 allocated for Man Overboard Devices used for search and rescue operations. New AIS technologies.
156.7875-156.8125 MHz	Channel 16 in accordance with Appendix 18 of the ITU RR **156.7750** **156.8250**	**Appendix 18.** **Mobile Satellite Earth to Space for long range AIS broadcasts (ship stations)**
156.8375-162.0250 MHz	Several channels used within this range in accordance with Appendix 18 of the ITU RR	

This gazette is also available free online at **www.gpwonline.co.za**

	Channel 28 in accordance with Appendix 18 of the ITU RR	**APPENDIX 18** services allocated: Coast Station Analogue Maritime Safety Information (MSI) transmissions using Simplex configurations - 01 to 05; and 60 to 65. Priority to digital transmissions as per Footnote w) from 1 January 2017. Protection of Channel 70 for DSC and Channel 16 distress communications, AIS1 (161.975MHz) and AIS2 (162.025) for navigational safety

Short Title

This document shall be called the "*National Radio Frequency Plan 2021"*

Repeals

1. The National Radio Frequency Plan 2018 …

This gazette is also available free online at **www.gpwonline.co.za**

9 REFERENCE INFORMATION SOURCES

ITU documents

- SM.2015: Methods for determining national long-term strategies for spectrum utilization
- Report ITU-R SM.2012-6 (06/2018)
- Final Acts from WRC-2019
- Report ITU-R M.2290-0 (12/2013) Future spectrum requirements estimate for terrestrial IMT
- Report ITU-R M.2078, "Estimated Spectrum Bandwidth Requirements for the Future Development of IMT-2000 and IMT-Advanced," 2006
- The Radio Regulations from 2016
- The Radio Regulations from 2020

ICASA Published & similar Documents

- SABRE I
- SABRE II
- SATFA 1997
- NRFP 2010
- NRFP 2013
- NRFP 2018
- CRASA/SADC Radio Frequency Spectrum Allocation Plan 2020.
- ECA and associated documents
- The ICASA Frequency Migration Plan 2019
- RFSAP's will be included in the NRFP 2021.
- IMT Road Maps
- ICASA Radio Frequency Migration Plans
- ICASA IMT Roadmaps

Software Used during the project

- RR5 ITU software for extraction of Radio Regulation Navigation Tool version 5.0.4.0 RR 2020 Edition
- Own developed software for SA NRFP comparison exercise

This gazette is also available free online at **www.gpwonline.co.za**

DEPARTMENT OF JUSTICE AND CONSTITUTIONAL DEVELOPMENT

NOTICE 912 OF 2022

INVITATION FOR PUBLIC COMMENTS

ON

THE MAGISTRATES BILL, 2022

1. INVITATION

1.1 The Department of Justice and Constitutional Development (the Department) invites interested parties to submit written comments on the Magistrates Bill, 2022 (the Bill). The Bill and the Memorandum on the Objects of the Bill are available on the website of the Department at the following address: https://www.justice.gov.za/legislation/invitations/invites.htm

1.2 The comments on the Bill must be submitted not later than **Friday, 29 April 2022**, marked for the attention of **Mr M Mokulubete**, and –

(a) if they are forwarded by post, be addressed to -
The Director-General: Justice and Constitutional Development
Private Bag X81
Pretoria
0001

(b) if they are delivered by hand, be delivered at –
SALU Building, Room 23.22
316 Thabo Sehume Street
Pretoria

(c) if they are delivered by email, be emailed to MMokulubete@justice.gov.za

(d) if they are faxed, be faxed to **086 519 8972**.

1.3 For further information, please do not hesitate to contact Mr Mokulubete on **084 842 5780 / 012 406 4755**.

2. BACKGROUND NOTE

2.1 The purpose of the Bill is to provide for the establishment, constitution, objects and functions of the Magistrates Commission, to regulate the appointment, conditions of service, remuneration, retirement, suspension and removal of, magistrates; and to provide for matters in connection with Magistrates.

2.2 The main aims of the Bill are threefold: **Firstly**, it aims to replace the current Magistrates Act, 1993 (Act No. 90 of 1993) in order to ensure the autonomy of the lower courts judiciary from the Executive. **Secondly**, it aims to incorporate all the provisions relating to the appointment of judicial officers of the lower courts in the Bill itself, since some provisions are presently contained in the Magistrates' Courts Act, 1944 (Act No. 32 of 1944). **Thirdly,** it aims to bring the procedure for dealing with complaints about magistrates' conduct in line with the dispensation applicable to judges in the superior courts.

DEPARTMENT OF TRANSPORT

NOTICE 913 OF 2022

INTERNATIONAL AIR SERVICE ACT, (ACT NO.60 OF 1993)
GRANT /AMENDMENT OF INTERNATIONAL AIR SERVICE LICENSE

Pursuant to the provisions of section 17 (12) of Act No.60 of 1993 and Regulation 15 (1) and 15 (2) of the International Air Regulations,1994, it is hereby notified for general information that the applications, detail of which appear in the Schedules hereto, will be considered by the International Air Services Council (Council) Representation in accordance with section 16(3) of the Act No. 60 of 1993 and regulation 25(1) of International Air Services Regulation, 1994, against or in favour of an application, should reach the Chairman of the International Air Services Council at Department of Transport, Private Bag X 193, Pretoria, 0001, within 28 days of the application hereof. It must be stated whether the party or parties making such representation is / are prepared to be represent or represented at the possible hearing of the application.

APPENDIX I

(A) Full name, surname and trade name of the applicant. (B) Full business or residential address of the applicant. (C) Class of licence applied for. (D) Type of International Air Service to which application pertains. (E) Category or kind of aircraft to which application pertains. (F) Airport from and the airport to which flights will be undertaken. (G) Area to be served. (H) Frequency of flight.

(A) Neo Aviation (Pty) Ltd; Neo Aviation. (B) Hangar 27, Lanseria International Airport, Krugersdorp, Gauteng. (C) Class II. (D) Type N1, N2, N3 & N4. (E) Category A1, A2, A3 & A4. (F) (G) Worldwide.

(A) MS Aviation (Pty) Ltd; MS Aviation. (B) Block B, Technosquare, 42 Morningside Raod, N'dabeni, Cape Town, 1405. (C) Class II. (D) Type N1 & N4. (E) Category A2, A3 & A4. (F) (G) Worldwide.

APPENDIX II

(A) Full name, surname and trade name of the applicant. (B) Full business or residential address of the applicant. (C) Class and number of licence in which the amendment is made. (D) Type of International Air Service in respect which amendment was made. (E) Category or kind of aircraft in respect of which license was made. (F) Airport in respect of which the amendment was made. (G) Area to be served. (H) Frequency of flight of which the amendment was made. (I) Condition under which amendment was made.

(A) Comair Limited; Kulula.Com & British Airways. (B)Fortress Street & Whirlwind St, Rhodesfield, Kempton Park,1619. (C) Class I & II; I/S025 & I/N026. (D) Type S1, S2 & N1. (E) Category A1 & A2. (F) OR Tambo International Airport, Cape Town International Airtport & King Shaka International Airport. **Changes to MP dated 06 May 2021:** Frederick Rudolph van Eeden replaces Clive Turner as the RP: Flight Operations, Air Service Safety Officer & Safety Manager & **change to MP dated 25 January 2022:** Deen Gielink replaces Glen Warden as the RP: Flight Operations.

DEPARTMENT OF TRANSPORT

NOTICE 914 OF 2022

AIR SERVICE LICENSING ACT, 1990 (ACT NO.115 OF 1990) APPLICATION FOR THE GRANT OR AMENDMENT OF DOMESTIC AIR SERVICE LICENCE

Pursuant to the provisions of section 15 (1) (b) of Act No. 115 of 1990 and Regulation 8 of the Domestic Air Regulations,1991, it is hereby notified for general information that the application detail of which appear in the appendix, will be considered by the Air Service Licensing Council. Representation in accordance with section 15 (3) of the Act No.115 of 1990 in support of, or in position, an application, should reach the Air Service Licensing Council. Private Box X 193, Pretoria, 0001, within 21 days of date of the publication thereof.

APPENDIX I

(A) Full name and trade name of the applicant. (B) Full business or residential address of the applicant. (C) Class of licence applied for. (D) Type of air service to which application applies. (E) Category of aircraft to which application applies.

(A) MS Aviation (Pty) Ltd; MS Aviation. (B) Block B, Technosquare, 42 Morningside Raod, N'dabeni, Cape Town, 1405. (C) Class III. (D) Type G3, G4 & G16 (RPAS). (E) Category A4, H1 & H2.

(A) Blue Tail Aviation (Pty) Ltd; Blue Tail Aviation. (B) Hangar J One A, Nelspruit Airport, Nelspruitm, Mpumalanga, 1200. (C) Class II & III. (D) Type N21, N2, G2, G3, G4, G5, G8, G10 & G15. (E) Category A3, A4 & H2.

(A) LXNDR Photography (Pty) Ltd. (B) Unit 9 Westridge Shopping Centre, Wespoort & Park Avenue, Westridge, Mitchell Plain, 7785. (C) Class III. (D) Type G2, G3 & G4. (E) Category H1.

APPENDIX II

(A) Full Name and trade name of the applicant. (B) Full business or residential address of the applicant. (C) The Class and number of license in respect of which the amendment is sought (D) Type of air service and the amendment thereto which is being applied for (E) Category of aircraft and the amendment thereto which is being applied for.

(A) MS Aviation (Pty) Ltd; MS Aviation. (B) Block B, Technosquare, 42 Morningside Raod, N'dabeni, Cape Town, 1405. (C) Class II; N940D. (D) Type N1 & N2. (E) Category A3 & A4. **Changes to the MP:** G. A. Templeton replaces E. C. D. Gordon as the CEO, & W. Mosehuus replaces E. C. D. Gordon as the RP: Flight Operations & **adding category** A2.

(A) Safomar Aviation Operations (Pty) Ltd; Safomar Aviation. (B) 3 New Road, Glen Ausrtin AH, Grand Central Airport, Midrand. (C) Class II & III; N1261D & G1262D. (D) Type N1, N2, G5, G10 & G15. (E) Category A3, A4 & H2. **Change to the Shareholding Voting Rights**: Shalem Family Trust has 100% & **changes to the MP:** Mr Y Shalem replaces Mr N. Duvenhage as the CEO, Mr I van Rooyen replaces Mr A. J. Widdall as the RP: Flight Operations (Rotor Wing), Ms M. I. Lord replaces Mr A. J. Widdall as the RP: Flight Operations (Fixed Wing), Mr C. L. G. Kraft replaces Mr Francois as the RP: Aircraft & Mr Jean Kichenbrand replaces Mr D. Steytler as the Air Service Safety Officer.

(A) Comair Limited; Kulula.Com & British Airways. (B)Fortress Street & Whirlwind St, Rhodesfield, Kempton Park,1619. (C) Class I & II; S066D & N067D. (D) Type S1, S2, N1 & N2. (E) Category A1 & A2. **Changes to MP dated 06 May 2021:** & Frederick Rudolph van Eeden replaces Clive Turner as the RP: Flight Operations, Air Service Safety Officer & Safety Manager & **change to MP dated 25 January 2022:** Deen Gielink replaces Glen Warden as the RP: Flight Operations

BOARD NOTICES • RAADSKENNISGEWINGS

BOARD NOTICE 226 OF 2022

CONSTRUCTION INDUSTRY DEVELOPMENT BOARD

FINDINGS AND SANCTIONS OF THE INVESTIGATING COMMITTEE PUBLISHED IN TERMS OF THE CONSTRUCTION INDUSTRY DEVELOPMENT REGULATIONS, 2004 (AS AMENDED)

The Construction Industry Development Board hereby publishes in terms of regulation 29(26) of the Construction Industry Development Regulations the details of the findings and sanctions of the investigating committee as set out in the **Schedule**.

Contractor Name	Employer Registration Number	Company/ Corporation Registration Number	Nature of Complaint
Pikitup LTD (SOC)	ERN: 500670	N/A	The Respondent is charged with the following: a) Contravention of Regulation 27A read with the Cidb Code of Conduct and Regulation 9(2) of the Preferential Procurement Regulations, 2017. b) Contravention of Regulation 27A read with the Cidb Code of Conduct and Regulation 9(3) of the Preferential Procurement Regulations, 2017. c) Contravention of Regulation 27A read with the Cidb Code of Conduct and the Cidb Practice Note 7.
Sanction imposed by CIDB			
Effective date: 05 May 2021 The Board orders that:			

1. The Respondent to pay a fine of R100 000.00 (One Hundred Thousand Rands) in terms of Regulation 29(18) of the Construction Industry Development Regulations, 2004 (as amended)
2. The fine is payable to the cidb within 6 months of issues of this sanction.
3. Should the fine or any portion thereof still be outstanding at the expiry of 6 months referred to in order 2 above, the Respondent shall be restricted from applying for any registration and/or upgrade until the fine has been settled in full.

BOARD NOTICE 227 OF 2022

INDEPENDENT REGULATORY BOARD FOR AUDITORS

NOTICE OF PRESCRIPTION OF:

THE DISCIPLINARY RULES OF THE INDEPENDENT REGULATORY BOARD FOR AUDITORS (IRBA)

In accordance with the provisions of Section 10(1), read together with Section 4(1)(a)(i), (ii) and (iii) of the Auditing Profession Act, 2005, as amended (the Act), and following a public comment process, the Independent Regulatory Board for Auditors (IRBA) hereby:

(a) repeals the Disciplinary Rules adopted on 7 June 2007; and

(b) prescribes the following Disciplinary Rules, with effect from 01 April 2022.

Please be advised that the Disciplinary Rules published herein below are also available and may be downloaded from the IRBA website.

For any inquiries, please contact:

The Director: Legal

Independent Regulatory Board for Auditors (IRBA)

Attention: Ms. R Motsepe

Email: legal@irba.co.za

Imre Nagy
Acting Chief Executive Officer

IRBA DISCIPLINARY RULES

ISSUED IN TERMS OF SECTION 10(1) OF THE AUDITING PROFESSION ACT 26 OF 2005, AS AMENDED

The Board now resolves under section 10(1) of the Auditing Profession Act, 26 of 2005, as amended by Act 2 of 2015 and Act 5 of 2021, ("the Act") read with section 4(1)(a)(i), (ii) and (iii) of the Act to:

(a) repeal the Disciplinary Rules adopted on 7 June 2007; and

(b) prescribe the following Disciplinary Rules, with effect from **01 April 2022**:

TABLE OF CONTENTS

RULE	DESCRIPTION	PAGE
1.	Definitions	1
PART A: INVESTIGATION PROCESSES		
2.	Receipt of a complaint or allegation of improper conduct	6
3.	Investigation of a complaint or allegation of improper conduct	7
4.	Outcome of the investigation and recommendations to the Enforcement Committee	8
5.	Decision on whether or not to charge a respondent with improper conduct and request for a plea	10
PART B: DISCIPLINARY HEARING PROCESSES		
6.	General Matters	13
7.	Amendment of charge sheet prior to hearing	14
8.	Powers of the Chairperson of the Disciplinary Committee	15
9.	Notification of the hearing	16
10.	Pre-hearing conference	17
11.	Disclosure of documents and bundles of documents to be adduced in evidence	19
12.	Witnesses	22
13.	Interlocutory applications / motion proceedings	23
14.	Jurisdictional points	25
15.	Settlement engagements	26
16.	Stated case	26
17.	Public and private hearings	27
18.	Recording of hearing proceedings	27
19.	Merits hearing	28
20.	Sanction hearing	31
21.	Competent sanctions, cost orders and publication	34
22.	Enforcement of sanctions	36
23.	Appeals and reviews	36

This gazette is also available free online at **www.gpwonline.co.za**

PART C: PROCEDURAL MATTERS		
24.	Computation of time periods in terms of these Rules	37
25.	Service and filing of documents	37
26.	Consolidation of matters	38
27.	Subpoenas	39
PART D: RULES RELATING TO SEARCH AND SEIZURES		
28.	Power to conduct a search and seizure	42
29.	Initiation of a search and seizure operation	43
30.	Consent to a search and seizure operation	44
31.	Information, documentation and/or items subject to a search and seizure operation	44
32.	Application for a search and seizure warrant	45
33.	Search and seizure operation	47
34.	Objections to question(s) or disclosure of document(s) and/or information during a search and seizure	51
35.	Limitations to a search and seizure operation	53
36.	Search and seizure report	53
37.	Use of police officials during a search and seizure	53
38.	Retention and/or preservation of documents/information/items seized	54
39.	Use of seized documentation, information and/or items	54
40.	Access to seized documentation, information and/or items	55
41.	Return of seized documentation, information and/or items	56
PART E:	**REFERRAL OF A NON-AUDIT COMPLAINT TO AN ACCREDITED PROFESSIONAL BODY FOR INVESTIGATION AND DISCIPLINARY PROCEEDINGS**	
42.	Referral of a non-audit complaint to an accredited professional body	57
43.	Outcomes of the accredited professional body's investigation and disciplinary proceedings	59
44.	Monitoring of the accredited professional body's investigation and disciplinary processes	60

This gazette is also available free online at **www.gpwonline.co.za**

SCHEDULE OF FORMS		
FORM DCR 1:	REQUEST FOR SUBPOENA	61
FORM DCR 2:	CERTIFICATE OF AUTHORITY TO CONDUCT A SEARCH AND SEIZURE	63
FORM DCR 3:	CONSENT TO SEARCH AND SEIZURE	64
FORM DCR 4:	INVENTORY/RECIEPT OF SEIZED DOCUMENTS OR ITEMS	65

This gazette is also available free online at **www.gpwonline.co.za**

1. Definitions

(1) For the purpose of these Rules, unless otherwise expressly indicated, the following words used in the Rules bear the meaning ascribed to them herein below:

"A person apparently in control of the premises" in respect of business premises means an owner, director, partner, a manager or person in the management team of the business where the search and seizure is to be performed, and in respect of private residence means a person who is 16 years or older and appears to be responsible for the business reasonably believed to be conducted at the private residence;***"Act"*** means the Auditing Profession Act, 26 of 2005, as amended;

"Accreditation" means the status afforded to a professional body in accordance with Part 1 of Chapter III of the Act, which status may be granted in full or in part;

"Accredited Professional Body" means the relevant professional body accredited by the IRBA in terms of section 32(2) of the Act;

"Audit" means the examination of, in accordance with prescribed or applicable auditing standards -

(a) financial statements with the objective of expressing an opinion as to their fairness or compliance with an identified financial reporting framework and any applicable statutory requirements; or
(b) financial and other information, prepared in accordance with suitable criteria, with the objective of expressing an opinion on the financial and other information

"Authorised person" means a suitably qualified person appointed by the Investigating Committee, in terms of Section 48A(1), to conduct a search and seizure in accordance with Section 48A and/or Section 48B of the Act;

"Board" means the governance structure appointed in terms of section 11, read together with section 12 of the Act;

This gazette is also available free online at **www.gpwonline.co.za**

"CEO" means the person appointed by the Board as Chief Executive Officer under section 9(a) of the Act or any person acting in that capacity;

"Chairperson of the Disciplinary Committee" means the retired judge or senior counsel appointed by the Board as Chairperson of the Disciplinary Committee in terms of section 24A(4) of the Act;

"Chairperson of the Panel" means the person appointed by the Chairperson of the Disciplinary Committee in terms of section 24A(7)(a) of the Act, to chair a hearing convened in terms of sections 50 and/or 51B of the Act;

"Cleared personnel" means persons whose access to information or documents has been authorised, in writing, by the Director Investigations.

"Certificate of authority" means a certificate issued by the Chairperson of the Investigating Committee giving the authorised person permission to enter the premises, for the purpose of conducting a search and seizure.

"Director: Investigations" means the person designated as such, who is an employee of the IRBA, or any person acting in that capacity or any other person appointed or delegated to perform the functions of the *Director: Investigations* as contemplated in these Rules;

"Director: Legal" means the person designated as such, who is an employee of the IRBA, or any person acting in that capacity or any other person appointed or delegated to perform the functions of the *Director: Legal* as contemplated in these Rules;

"Disciplinary Committee" means the committee established by the Board under section 20(2)(f) of the Act, read together with section 24A of the Act;

"Documents" means any physical and electronic documents or tape recordings, including but not limited to data and data messages;

"Enforcement Committee" means a subcommittee of the Board established by the Board in terms of section 24B of the Act;

"Firm" means a partnership, company or sole proprietor referred to in section 38 of the Act;

This gazette is also available free online at **www.gpwonline.co.za**

"*Hearing*" means a disciplinary hearing in terms of section 50 and/or 51B of the Act;

"IRBA" means the Independent Regulatory Board for Auditors established in terms of section 3 of the Act;

"Identification document" means an identity document or card issued by the South African Home Affairs Department or a valid passport or valid driver's license;

"Investigation" means an investigation into allegation/s of improper conduct initiated by the IRBA against a registered auditor, in terms of Section 48 of the Act;

"Investigating Committee" means the committee established by the Board under section 20(2)(e) of the Act, read together with section 24 of the Act;

"Investigations Department" means the IRBA department entrusted with the receipt and investigation of complaints of improper conduct against registered auditors.

"Non-audit complaint" means a complaint of alleged improper conduct brought against a registered auditor for conduct that does not meet the definition of audit under section 1 of the Act, which conduct may include areas such as the administration of deceased estates; administration of trusts; insolvency and liquidation services; taxation or accounting services.

"Ordinary business hours" means 08h00 to 17h00, Monday to Friday, excluding public holidays.

"Panel" means the disciplinary hearing panel constituted in terms of section 24A(6) of the Act for the purpose of hearing evidence, and deciding, on the charges of improper conduct brought against a registered auditor and where applicable, imposing sanctions on a registered auditor found guilty of improper conduct;

"Party" means the respondent, his/her representative, or the IRBA and its appointed pro forma complainant, (Parties has the corresponding meaning)

"Premises" means the building identified in the certificate of authority or warrant in respect of which a search and seizure is to be conducted.

This gazette is also available free online at **www.gpwonline.co.za**

"professional body" means a body of, or representing,

(a) registered auditors and registered candidate auditors; or

(b) accountants, registered auditors and registered candidate auditors

"Pro forma complainant" means the person appointed under section 50(1)(b) of the Act to present the charge to the Panel;

"Reasonable force" means the minimum amount of force necessary to gain access to the premises or relevant information, or necessary to overcome any means employed to prevent access to the premises.

"Registered auditor" means an individual or firm registered as an auditor or candidate auditor with the IRBA or who was so registered at the time that the alleged improper conduct took place, whether that registered auditor is or was in public practice or not, and includes the duly authorised representative of the registered auditor if the registered auditor concerned is a firm;

"Relevant documentation/information" means documents or information reasonably considered to be relevant to an ongoing investigation or disciplinary hearing.

"Respondent" means a registered auditor whose conduct is the subject of any proceedings (of whatsoever nature, including a complaint, investigation and/or disciplinary hearing) under these Rules as well as the legal representative of such a registered auditor, if any; and

"*Rules*" means these Disciplinary Rules as prescribed under section 10(1) of the Act and includes these definitions;

"SAPS" means the South African Police Service established in terms of section 5 of the South African Police Services Act, 1995, as amended;

"Search" means A process of carefully and thoroughly looking through items, information and/or documentation that may be relevant to an investigation of improper conduct as contemplated in section 48A;

"Seizure" means the act of taking possession of a document or item, and the subsequent retention of same as contemplated in section 48A and 48B;

This gazette is also available free online at **www.gpwonline.co.za**

"Suitably qualified person" means a person who has professional qualifications, training, skills or experience relevant to the investigation and/or the performance of search and seizures and can give authoritative assessment, advice and/or analysis on information relative to the investigation or the performance of a search and seizure using the relevant protocols, standards, methods, or literature and includes any person appointed as an investigator by the IRBA;

"Warrant" means the document issued by a Judge or Magistrate of a court of competent jurisdiction and authorising a search and seizure in terms of section 48B.

(2) Any reference to a "section" in these Rules is a reference to a section of the Act;

(3) Any term in these Rules which is defined in the Act, unless the context indicates the contrary, bears the meaning ascribed to it in the Act;

(4) Unless the contrary intention appears, words importing the masculine gender include the feminine gender and, words in the singular number include the plural;

(5) These Rules shall, be construed in conformity with the Act; and

(6) Headings, and any footnotes, in these Rules shall be taken into account in the interpretation of these Rules.

This gazette is also available free online at **www.gpwonline.co.za**

PART A: INVESTIGATION PROCESSES

2. Receipt of a complaint or allegation of improper conduct

(1) If a complaint or allegation of improper conduct against a registered auditor comes to the attention of the Director: Investigations or the CEO, he must refer it to the Investigating Committee if –

(a) the allegations are in the public domain and he, on reasonable grounds, suspects that a respondent has committed an act which may render such respondent guilty of improper conduct; or
(b) the allegations are referred by the Inspection Committee established under section 20(2)(d); or
(c) the allegations pertain to an audit complaint against a registered auditor referred to the IRBA by an Accredited Professional Body; or
(d) a court or appropriate regulator sends (or directs to be sent) a record or report under section 48(2); or
(e) a member of the public lodges a complaint and he:
(i) establishes that the person or firm complained about is/was a registered auditor at the time of the alleged improper conduct;
(ii) establishes that the complaint falls within the jurisdiction of the IRBA; and
(iii) is of the opinion that the complaint of improper conduct appears to be justified.

(2) Members of the public who wish to lodge a complaint of improper conduct against a registered auditor shall do so on affidavit, unless the Director: Investigations or the CEO decides otherwise.

(3) A complaint lodged in terms of sub-rule (2) shall set out clearly and concisely the specific conduct, whether it be acts and/or omissions, giving rise to the complaint of improper conduct and must be accompanied by relevant supporting documentation.

(4) Despite sub-rule (1), if the complaint received is a non-audit complaint, the Director: Investigations or the CEO may cause the complaint received to be referred to an Accredited Professional Body, for investigation and disciplinary proceedings, in accordance with section 48(1A) read with Part E of these Rules.

This gazette is also available free online at **www.gpwonline.co.za**

3. Investigation of a complaint or allegation of improper conduct

(1) Upon establishing, in terms of Rule 2(1), that there are grounds for referral of a complaint or allegation to the Investigating Committee, the Director: Investigations or the CEO must:

(a) cause an investigation to be conducted in terms of section 48;

(b) notify the respondent in writing of the nature of the complaint and call upon that respondent to furnish a written explanation in answer to the complaint no later than 30 days from the date of service of such notice; and

(c) correspond with any other party, in respect of the matter, as he/she considers appropriate.

(2) In conducting an investigation in terms of sub-rule (1) the Director: Investigations or the CEO may:

(a) take any steps he considers necessary to gather any information relevant to the complaint or allegation under investigation, including:

(i) Requesting disclosure of any relevant objects, documents or information, under the control or custody of any person, including the Respondent or complainant or any other person with specific knowledge of the matter under investigation;

(ii) Issuing a subpoena, in terms of Rule 27, calling upon any person to produce any relevant object, document or information under their control or custody; and/or

(iii) Preparing a formal request to the Investigating Committee for authority to conduct a search and seizure process as contemplated in section 48A or 48B.

(b) Employ any means he considers necessary for the proper and expeditious investigation of the complaint or allegation.

(3) During the period of the investigation, the registered auditor and the complainant must be provided with bi-annual written communication of the status of the investigation.

This gazette is also available free online at www.gpwonline.co.za

(4) The Director: Investigations or the CEO must cause investigations to be completed as soon as practically possible, subject to the availability of investigators, the complexity of the complaint and the cooperation of the parties involved.

(5) On conclusion of the process of investigating the complaint or allegation of improper conduct, the Director: Investigations or the CEO must table the matter before the Investigating Committee for consideration.

(6) If having considered a matter tabled before it in terms of sub-rule (6), the Investigating Committee requires further information on the matter, then it must direct the Director: Investigations or the CEO to conduct a further investigation on the matter, the outcomes of which, must be re-tabled at any subsequent Investigating Committee meeting for consideration.

4. Outcome of the investigation and recommendations to the Enforcement Committee

(1) Prior to making a recommendation to the Enforcement Committee, and in circumstances where the Investigating Committee intends to recommend that the Respondent be charged with improper conduct, the Investigating Committee will engage in the process of preparing a draft charge sheet and offer the Respondent an opportunity to make submissions on factual inaccuracies in the draft charge sheet, if any.

(2) Any submissions made in terms of sub-rule (1) shall be filed no later than 30 days from the date of request for submissions and must be supported by documentary evidence not previously provided to the Investigating Committee.

(3) On receipt of submissions made in terms of sub-rule (2), the Investigating Committee shall consider the submissions and determine, in its sole discretion, whether changes to the draft charge sheet should be effected.

(4) Thereafter, the Investigating Committee shall report and recommend to the Enforcement Committee whether the Respondent should be charged with improper conduct.

This gazette is also available free online at **www.gpwonline.co.za**

(5) If the Investigating Committee recommends to the Enforcement Committee that the respondent should not be charged with improper conduct, it should state its finding as to whether:

(a) the respondent is not guilty of improper conduct; or

(b) there is a reasonable explanation for the respondent's conduct; or

(c) the conduct of which the respondent may be guilty of is not qualitatively or quantitatively material; or

(d) there are no reasonable prospects of succeeding with a charge of improper conduct against the respondent.

(6) If the Investigating Committee recommends to the Enforcement Committee that the respondent should be charged with improper conduct, it must make a recommendation on:

(a) the charges which should be preferred against the respondent;

(b) whether the matter should follow an admission of guilt process in terms of sections 49(1)(a) and 51; or

(c) whether the matter should be referred to the Disciplinary Committee for determination in terms of sections 50 and 51B.

This gazette is also available free online at **www.gpwonline.co.za**

5. Decision on whether or not to charge a respondent with improper conduct and request for a plea

(1) When the Enforcement Committee receives a recommendation under Rule 4(4) read together with Rule 4(5), recommending that the respondent should not be charged with improper conduct, it shall consider the recommendation and may elect not to charge the respondent.

(2) If the Enforcement Committee decides not to charge a respondent whose conduct was the subject of an investigation, the Director: Investigations or the CEO shall notify the respondent, and the complainant, if applicable, in writing of this decision.

(3) If the Enforcement Committee having considered the recommendation of the Investigating Committee under Rule 4(4) read together with Rule 4(6), decides to charge the respondent with improper conduct, the Enforcement Committee shall cause the Director: Investigations or the CEO to, within 7 days from the date of the decision:

(a) send the respondent a notification of the decision to charge the respondent; and

(b) serve the charge sheet on the respondent together with a request for a plea in terms of Section 49(3).

(4) On receipt of the charge sheet and a request for a plea, the respondent shall prepare a plea to all the charges contained in the charge sheet, which plea must:

(a) Deny any or all of the charges; or

(b) Admit any or all of the charges;

(5) A plea referred to in sub-rule (4)(a) must be supported by a written explanation from the respondent regarding the improper conduct with which the respondent is charged.

(6) If the respondent admits guilt to any or all of the charges, the respondent is considered to have been found guilty as charged.

This gazette is also available free online at **www.gpwonline.co.za**

(7) Where the respondent pleads guilty to all the charges, the respondent must submit, together with the plea, a signed copy of the charge sheet, as well as factors in mitigation of a sanction.

(8) The respondent must submit a plea, together with any written explanation and/or mitigating factors no later than 30 days from the date of the request for a plea.

(9) If the respondent does not submit a plea within the said 30 days, the respondent will be deemed to have denied the charges and entered a plea of not guilty.

(10) The Director: Investigations or the CEO shall, on receipt of the plea, together with any written explanation and/or mitigating factors or on expiry of the period within which the plea was due to be filed, table the matter, together with all documents received before the Enforcement Committee for consideration.

(11) Having considered the matter, together with the recommendation from the Investigating Committee, any plea, written explanation and/or mitigating factors tabled before it, the Enforcement Committee shall:

(a) If the respondent pleaded guilty to all the charges preferred, decide whether to follow an admission of guilt process as set out in sections 49(1)(a) and 51, and if it decides to follow an admission of guilt process:

(i) determine the appropriate sanction to be imposed in terms of section 51; and

(ii) cause the Director: Investigations or the CEO to effect the decision and send written notification of the decision to the respondent and the complainant, if applicable.

(b) Decide to refer the matter to the Disciplinary Committee for a disciplinary hearing in terms of sections 50 and/or 51B, read together with Rules 19 and/or 20, if:

(i) the respondent pleaded guilty to all the charges preferred but the Enforcement Committee decided not to follow an admission of guilt process; or

This gazette is also available free online at www.gpwonline.co.za

(ii) the respondent denies any or all of the charges preferred or failed to plead as required.

(12) Notwithstanding anything to the contrary contained in this Rule, the Enforcement Committee may, on recommendation by the Director: Investigations or the CEO, on the basis that the plea raises new defences, refer the matter back to the Investigating Committee for consideration of the charge sheet against the plea filed under this Rule, in which case, the process set out in Rules 4 and 5 shall follow, with the necessary changes.

(13) In the event that the Enforcement Committee decides in terms of sub-rule (11)(a), the Director: Investigations or the CEO shall, within 14 days from the date of the decision:

(a) Notify the respondent of the Enforcement Committee decision and impose the sanction as determined by the Enforcement Committee in terms of section 51; and

(b) Where, applicable, send written notification to the complainant informing him/her of the outcome of the matter.

(14) In the event that the Enforcement Committee decides in terms of sub-rule (11)(b), the Director: Investigations or the CEO shall, within 14 days from the date of the decision:(a) cause the matter to be referred to the Director: Legal or the CEO for referral to the Disciplinary Committee; and

(b) send written notification of the decision to the respondent and the complainant, if applicable.

(15) Notwithstanding anything to the contrary contained in this Rule, where the Enforcement Committee disagrees with the recommendation of the Investigating Committee, it shall refer the matter back to the Investigating Committee, together with its reasons, for reconsideration and/or further investigation.

This gazette is also available free online at www.gpwonline.co.za

PART B: DISCIPLINARY HEARING PROCESSES

6. General Matters

(1) The Panel may upon good cause shown and in the interests of justice, condone any departure from these Rules on condition that such departure is not prohibited by the Act.

(2) Unless a departure from these Rules is raised at a hearing, it shall not be necessary for the Panel to formally condone such departure and such departure shall not invalidate any action or decision taken, or purportedly taken, under these Rules.

(3) The Disciplinary Committee or Panel are not bound by the strict rules of evidence applicable to Courts in their administrative decision-making process.

(4) Should the matter be referred to the Disciplinary Committee in terms of Rule 5(11)(b) the Director: Legal or the CEO shall cause the matter to be referred for a merits or a sanction hearing in terms of Rule 19 or 20, depending on the circumstances.

(5) Pursuant to a referral to a merits or a sanction hearing, the Director: Legal or the CEO shall appoint the *pro forma* complainant, in his discretion, to present the charge(s), alternatively the submission in aggravation of the sanction(s), to the Panel at the hearing.

(6) The *pro forma* complainant appointed in terms of sub-rule (5) may be assisted by one or more persons with legal or auditing experience.

(7) Any witness at a hearing under Rules 19 and 20 shall only give evidence after the Chairperson of the Panel has administered an oath or affirmation to such witness.

(8) Should the respondent not be present at the date, place and time scheduled for the hearing in terms of Rules 19 and 20 and still not be present within thirty (30) minutes from the time set for the start of the hearing, the hearing may proceed in the respondent's absence if the Panel is satisfied that the notice of set down was duly served on the respondent.

This gazette is also available free online at www.gpwonline.co.za

(9) The respondent shall be present in attendance at all sittings of the hearing, unless excused by the Panel. If the respondent is not present at a hearing, the respondent may only be represented by another person duly authorised as such in writing.

(10) The provisions of Rules 19 and 20 shall apply with the necessary changes to the situation where a hearing proceeds in a respondent's absence.

(11) The Panel may regulate its proceedings under Rules 19 and 20 or any part thereof, as it deems appropriate and in the interests of justice.

(12) In exercising any of its powers and performing its functions, the Panel may act in such a manner as it deems expedient in the circumstances, to achieve the objects of the Act. In doing so, it shall have regard to substance rather than form.

7. Amendment of charge sheet prior to hearing

(1) The Enforcement Committee may at any time after a charge sheet or amended charge sheet was furnished to a respondent in terms of Rule 5(3), and before the commencement of a hearing under Rule 19, amend such charge sheet.

(2) Amendments effected under sub-rule (1) may include but are not limited to errors in formulation or articulation, as well as the addition or deletion of charges.

(3) The amendments shall be effected by furnishing an amended charge sheet to the respondent.

(4) The provisions of Rule 5 (4) – (8) apply with the necessary changes to a respondent after receipt of an amended charge sheet, even if the respondent has pleaded to the original charge sheet, except that the amended plea must be filed within 10 days of receipt of the amended charge sheet.

This gazette is also available free online at **www.gpwonline.co.za**

8. Powers of the Chairperson of the Disciplinary Committee

(1) The Chairperson of the Disciplinary Committee has the duty to:

(a) Appoint members of a Panel, inclusive of a Chairperson of such Panel as contemplated in section 24A(6), read together with subsection (7); and

(b) monitor consistency in the application of disciplinary rules by the Panels convened in terms of section 24A(6), which shall include assessing:

(i) the consistency of the hearing processes with these Rules; and

(ii) the consistency of the decisions and rulings of the Panel with the Act, the Rules and previous decisions of the Disciplinary Committee / or Panels;

(2) Notwithstanding sub-rule (1)(b), the Chairperson of the Disciplinary Committee may not impose a decision or ruling on the Panel, neither may he amend the decision or ruling of the Panel on any matter. The Chairperson of the Disciplinary Committee shall only assume an advisory role in respect of such decisions or rulings.

(3) The Chairperson of the Disciplinary Committee has the power to consider and determine:

(a) any application for a subpoena in terms of Rule 27(1)(c);

(b) requests for postponement in terms of Rule 13, provided that such request is filed prior to the date on which the matter is scheduled for hearing; and

(c) Preliminary, jurisdictional and interlocutory applications filed prior to the appointment of a Panel.

(4) Notwithstanding sub-rule (3), nothing prevents the Chairperson of the Disciplinary Committee from constituting a Panel for the purpose of considering applications made in terms of sub-rule (3)(c) or deferring any such application to the Panel which will be appointed to determine the matter, where in the Chairperson's view, it would be in the interest of justice to do so.

This gazette is also available free online at **www.gpwonline.co.za**

9. Notification of the hearing

(1) On receipt of the referral of the matter to the Disciplinary Committee as contemplated in Rule 5(14) and accompanying documents, the Director: Legal or CEO shall schedule the matter so referred for a hearing under Rules 19 or 20, and cause a notice of set down to be served on the respondent.

(2) The notice of set down referred to in sub-rule (1) shall include:

(a) the details of the parties;

(b) the nature of the hearing (whether it is a merits or sanction hearing);

(c) the date, time and place at which a hearing will take place;

(d) the charge(s) which will be placed before the Panel for determination and/or in respect of which a sanction must be determined;

(e) the rights of the respondent as set out in section 50(11), read together with Rule 19(1) and Rule 20(7);

(f) the right of the respondent to request a subpoena to be issued in respect of any witness;

(g) the right of the respondent to change his/her plea in terms of Rule 19(3) from a plea of not guilty to a plea of guilty and the effects of such a change; and

(h) the consequences of the failure to attend the hearing as per Rule 6(8).

(3) The notice of set down must be served at least 6 weeks before the hearing unless the parties agree to a shorter period.

This gazette is also available free online at **www.gpwonline.co.za**

10. Pre-hearing conference

(1) The parties to a hearing must hold a pre-hearing conference dealing with the matters referred to in sub-rule (3), if:

(a) the hearing scheduled is in terms of Rule 19 and the respondent is represented by a legal practitioner; or

(b) both parties agree to hold a pre-hearing conference; or

(c) the Chairperson of the Disciplinary Committee or Panel directs the parties to hold a pre-hearing conference.

(2) A pre-hearing conference convened in terms of sub-rule (1)(a) and (b) must be convened no less than 14 days prior to the date scheduled for the hearing and at the instance of either party.

(3) At a pre-hearing conference, the parties must attempt to reach an agreement on the following -

(a) amendments to the charge(s) preferred and/or the respondent's plea thereto;

(b) facts that are agreed and those that remain in dispute;

(c) the issues that the Panel is required to decide on;

(d) the exchange of relevant documents;

(e) the preparation of a bundle of documents;

(f) the status of documentary evidence or any part thereof, as well as the manner in which documentary evidence is to be dealt with, including whether:

(i) The documents are what they purport to be without the need to lead evidence to authenticate them;

(ii) The truthfulness of the contents of any document is admitted without the need to lead evidence thereon;

This gazette is also available free online at **www.gpwonline.co.za**

(iii) Any document which purports to have been created by its author shall be regarded as having been so created;

(iv) A document which purports to have been sent and received shall be regarded as having been sent by its author and received by the addressee reflected therein; and/or

(v) Copies of documents may be used without the need to produce the originals.

(g) whether evidence on affidavit will be admitted with or without the right of any party to cross-examine the person who made the affidavit;

(h) preliminary points that are intended to be taken;

(i) witness lists and issues in respect of which each witness will testify, as well as the required time for each witness;

(j) the exchange of witness statements;

(k) whether expert evidence will be led and if so, whether an expert report or statement is to be provided;

(l) if the conference relates to a sanction hearing, agreement on what appropriate sanctions may be imposed by the Panel;

(m) any other means by which the proceedings may be shortened; and

(n) an overall estimate of the time required for the hearing.

(4) The deliberations at a pre-hearing conference shall be recorded in the form of a pre-hearing minute and shall be signed by the parties or their representatives, which minute shall form part of the bundle of documents to be adduced in evidence.

(5) The Chairperson of the Panel, may, after receiving the pre-hearing minute -

(a) direct the parties to hold a further pre-hearing conference; and / or

This gazette is also available free online at www.gpwonline.co.za

(b) issue any other directive to the parties concerning the conduct of the hearing, inclusive of the scope of the evidence to be lead in respect of the issues remaining in dispute.

(6) A pre-hearing conference convened in terms of this Rule shall be attended by at least one representative of either party who shall be deemed to be duly authorised to attend, make binding decisions and sign the minute as evidence of such decisions

(7) Despite non-compliance with the provisions of this Rule, the Chairperson of the Panel may, in his/her discretion, continue with the hearing. However, any non-compliance may be taken into account when considering a costs order at the conclusion of the hearing.

11. Disclosure of documents and bundles of documents to be adduced in evidence

(1) At any time after receipt of the notice of set down as per Rule 9(1), but not less than 14 days prior to the hearing date, either party may request the other party to disclose any documents relevant to the matter.

(2) The party to whom the request in terms of sub-rule (1) is made, must disclose the requested documents within 5 days from the date on which the request was received.

(3) A Chairperson of the Panel may, either before or during the proceedings, on his own accord, or on application, make an order as to the disclosure of relevant documents or any other evidence.

(4) Despite sub-rule (1),(2) and (3), the parties may agree on the disclosure of documents or any other evidence, provided that:

(a) the *pro forma* complainant and/or Director: Legal shall, no later than 20 days before the scheduled hearing, compile and index a bundle of documents intended to be used in evidence at the hearing and cause same to be transmitted to the respondent;

This gazette is also available free online at www.gpwonline.co.za

(b) The respondent, shall, no later than 5 days from the date of receipt of the bundle referred to in sub-rule (4)(a) submit to the *pro forma* complainant or the Director: Legal:

(i) an indication of which documents the respondent admits are what they purport to be;

(ii) an indication of documents in respect of which the content, authenticity and/or truthfulness is disputed, in which case the respondent must provide the grounds on which such documents are disputed.

(iii) an indexed bundle of documents which the respondent intends to use in evidence at the hearing;

(c) The *pro forma* complainant shall, within 5 days of receipt of the respondent's indexed bundle of documents, submit to the respondent an indication of which documents:

(i) are admitted as being what they purport to be; and

(ii) in respect of which the content, authenticity and/or truthfulness is disputed, in which case the *pro forma* complainant must also provide the grounds on which such documents are disputed.

(d) The Director: Legal or the CEO shall, no later than 7 days prior to the date of the scheduled hearing, compile and cause the following bundles of documents to be adduced in evidence at the hearing to be distributed to the members of the Panel appointed to hear the matter; the respondent; and the *pro forma* complainant:

(i) a bundle of agreed documents, containing documents that are admitted as being what they purport to be

(ii) a bundle of documents in respect of which the content, authenticity and/or truthfulness is disputed; and

(iii) where applicable, a bundle of witness statements and expert joint minutes.

This gazette is also available free online at www.gpwonline.co.za

(5) The bundle of documents referred to in sub-rule (4)(d) shall, at least, comprise of the following documents:

(a) the charge sheet(s) served on the respondent in terms of Rule 5(3) and/or Rule 7;

(b) any plea(s), written explanation(s) or mitigating factors furnished by the respondent in terms of Rule 5(8) and/or Rule 7;

(c) the notice of set down issued in terms of Rule 9;

(d) any documents intended to be used in evidence by either party; whether agreed to or disputed;

(e) at the discretion of the *pro forma* complainant, a certified copy of the record of the trial and conviction of the respondent, if the respondent is charged with improper conduct which amounts to the offence of which the respondent was convicted, unless the conviction has been set aside by a superior court; and

(f) a pre-hearing conference minute, if any.

(6) If a document is contained in the undisputed bundle, a party may not later dispute the document unless they give notice of the intention to dispute it as well as the grounds for disputing it.

(7) Disputes raised in relation to the documents contained in the disputed bundle shall be dealt with by the Chairperson of the Panel, following receipt of submissions from the parties.

(8) Nothing in this Rule shall prevent any evidence not included in any bundle referred to in sub-rule (4) and (5) from being adduced at the hearing.

This gazette is also available free online at **www.gpwonline.co.za**

12. Witnesses

(1) A party intending to call a witness shall give notice in writing thereof to the other party no less than 14 days prior to the hearing.

(2) The Chairperson of the Disciplinary Committee or Panel, may if he/she considers it in the interest of the expeditious finalisation of the matter, direct the parties to file witness or expert witness statements within a period directed by him/her, which statements must include:

(a) the proposed evidence of such witness,

(b) reference to documents on which the witness will rely during evidence; and

(c) if the witness is an expert, the basis on which the witness is regarded to be an expert.

(3) Notwithstanding sub-rule (2) above, the parties may agree to exchange and file witness statements prior to the hearing, in which case, the statements must be filed with the Panel no later than 7 days prior to the date of the scheduled hearing.

(4) Where the parties have been directed or have agreed to file expert witness statements in terms of sub-rule (2) or (3) and there are opposing expert witness statements, a joint minute should be prepared by the respective experts, in which it is recorded where the experts have been able to reach agreement on the issues in respect of which they provide expert evidence and to identify the issues where agreement cannot be reached.

(5) The joint minute referred to in sub-rule(4) shall be signed by the relevant experts and contained in a separate bundle filled with the Panel and all relevant parties in terms of Rule 10(4).

This gazette is also available free online at **www.gpwonline.co.za**

13. Interlocutory applications / motion proceedings

(1) This Rule applies to any -

(a) application for condonation, consolidation or postponement;

(b) application in relation to a jurisdictional dispute; and

(c) any other interlocutory applications.

(2) An application in terms of this Rule must be brought at least 14 days prior to the date of the hearing and on notice to the other party and any other persons with an interest in the application.

(3) The party bringing the application must sign the notice, which must state the following:

(a) the parties to the matter;

(b) the reference number assigned to the matter by the IRBA;

(c) the relief sought;

(d) the address at which the party delivering the document will accept delivery of all documents in the proceedings;

(e) that any party that intends to oppose the application must deliver a notice of opposition and answering affidavit within 5 days after the application has been delivered to it;

(f) that the application may be heard in the absence of submissions from any party that does not comply with sub-rule (3)(e); and

(g) that a schedule is included listing the documents that are material.

(4) The application must be supported by an affidavit, which affidavit must clearly and concisely set out:

(a) the names, description and addresses of the parties;

(b) the details of a party deposing to the affidavit;

(c) a statement of the material facts, in chronological order, on which the application is based, in sufficient detail to enable any person opposing the application to reply to the facts;

This gazette is also available free online at www.gpwonline.co.za

(d) a statement of legal issues that arises from the material facts, in sufficient detail to enable any party to reply to the document; and

(e) if the application is filed outside the relevant time period, grounds for condonation for non-compliance with sub-rule (2).

(5) Any party opposing the application may deliver a notice of opposition and an answering affidavit within 5 days from the day on which the application was served on that party.

(6) A notice of opposition and an answering affidavit must contain, with the changes required by the context, the information required by sub-rules (3) and (4) respectively.

(7) The party initiating the proceedings may deliver a replying affidavit within 3 days from the day on which any notice of opposition and answering affidavit are served on it.

(8) The replying affidavit must address only issues raised in the answering affidavit and may not introduce new issues of fact or law.

(9) The Chairperson of the Disciplinary Committee will consider the application filed under this rule based on the papers filed by the parties and without oral arguments, unless the Chairperson, in his/her sole discretion, determines that the presentation of facts and/or legal arguments in the record and the decision process would be significantly aided by oral argument.

(10) Despite this Rule, the Chairperson of the Disciplinary Committee may determine an application in any manner he/she deems fit, provided that the Chairperson of the Disciplinary Committee informs the parties of how the process will be conducted and gives the parties an opportunity to be heard.

(11) Subject to sub-rule (4)(f), nothing in this rule prevents a party to the proceedings from filing an application in terms of sub-rule (1) outside the timelines set out in sub-rule (2) or at the date scheduled for the hearing, if the issue necessitating the application only arose or came to the attention of the party at such later date.

(12) Notwithstanding anything to the contrary set out herein above, and/or in Rules 19 and 20, the parties may, after referral of a matter to the Disciplinary

This gazette is also available free online at **www.gpwonline.co.za**

Committee in terms of Rule 5(11)(b) and by agreement between themselves, request the Chairperson of the Disciplinary Committee to allocate the matter to the Panel for determination in terms of this Rule, provided that:

(a) neither of the parties intend to call witnesses; or

(b) while the parties intend to present evidence of witnesses, they have agreed to do so by way of affidavit and waived their right to cross examine such witnesses.and

(c) the Chairperson of the Disciplinary Committee believes that the matter may appropriately be determined without oral evidence.

(13) Should the Chairperson of the Disciplinary Committee agree to the request in terms of sub-rule (12), he/she shall in addition to affidavits filed under sub-rule (4), (5) and (7), direct the parties to file their heads of arguments on the matter within 5 days of receipt of a reply contemplated in sub-rule (7) or from the date on which such reply was due.

(14) On receipt of all relevant papers, the Chairperson of the Disciplinary Committee shall constitute a Panel as contemplated in Rule 8(1)(a) to determine the matter.

(15) The Panel may, on receipt of the matter, direct the parties to deliver oral arguments at a date and place determined by the Panel.

14. Jurisdictional points

(1) Jurisdictional points must be raised in terms of Rule 13 or, in the case of non-compliance with Rule 13(2) and subject to Rule 13(4)(e), at the commencement of the merits hearing and prior to the pro forma complainant stating his/her case in terms of Rule 19. Failure to raise a jurisdictional point in accordance with this sub-rule amounts to consent to jurisdiction.

This gazette is also available free online at **www.gpwonline.co.za**

15. Settlement engagements

(1) The parties may, at any time after the decision has been made to refer a matter to the Disciplinary Committee in terms of Rule 5(11)(b) but prior to the conclusion of a disciplinary hearing, engage on possible settlement of the matter, provided that any settlement proposal advanced following such engagements is deferred for consideration and approval by:

(a) the Enforcement Committee, where a panel has not yet been convened for the purpose of a hearing and the matter has not yet been scheduled for hearing; or

(b) the Panel, where it has already been convened and the matter is scheduled for a hearing.

(2) Any settlement proposal approved in terms of sub-rule (1)(a) and/or (b) becomes a sanction imposed by the Enforcement Committee or the Panel, as the case may be, and shall be enforced accordingly.

16. Stated case

(1) Notwithstanding anything to the contrary set out in Rules 19 and 20, the parties may, after referral of a matter to the Disciplinary Committee by the Enforcement Committee in terms of Rules 5(11)(b) agree to refer a stated case on any point of law, for adjudication by the Panel.

(2) A stated case shall be referred by filing an agreed statement with the Panel, setting out the following information:

(a) facts agreed upon, and

(b) the question(s) of law in dispute between the parties and their contentions thereon.

(3) The statement referred to in sub-rule (2), shall be supported by copies of documents necessary to enable the Panel to decide upon such question(s) and shall be signed by the parties or their representatives.

(4) A stated case shall be set down for hearing as if it were an opposed applications governed by Rules 13(9) and 13(10), provided that the

This gazette is also available free online at www.gpwonline.co.za

Chairperson of the Panel, may direct the parties to deliver oral arguments at the date, time and place determined by the Panel.

(5) Notwithstanding the absence of an agreement in terms of sub-rule (1), the Chairperson of the Disciplinary Committee or the Panel may, where he determines that the matter before the Panel is one of a point of law and requires no consideration of factual disputes, direct that the matter will be determined by way of a stated case.

17. Public and private hearings

(1) The proceedings under Rules 19 and 20 are open to the public, except where the Chairperson of the Panel on his own accord or on application by any of the parties, directs that any part of the hearing must be held in camera.

(2) Any application for any part of the hearing under Rules 19 and 20 to be held in camera shall be brought in terms of Rule 13.

(3) Despite sub-rule (1) documents forming part of the record of the proceedings do not constitute public records unless the Chairperson of the Panel determines otherwise.

(4) An application for access to documents which form part of the record of the proceedings should be brought in terms of Rule 13.

18. Recording of hearing proceedings

(1) The Panel must ensure that all proceedings are recorded.

(2) The record must be kept by means of a digital recording and/or a transcription thereof.

(3) A party to the proceedings may request a copy of the record or a portion of a record, on payment of the relevant costs, where applicable.

This gazette is also available free online at **www.gpwonline.co.za**

19. Merits hearing

(1) The order of procedure at a hearing under this Rule shall be as follows:

(a) The Chairperson of the Panel shall read the charge sheet referred to in Rule 5(3) and/or Rule 7 to the respondent, unless the respondent agrees to dispense with the reading of the charge sheet.

(b) The Chairperson of the Panel shall ask the respondent to confirm which of the charge(s) set out in the charge sheet the respondent admits or denies, provided that he shall not ask such confirmation with respect to any charge(s) that the respondent may have admitted in terms of section 49(4).

(c) The respondent will be considered to be guilty of any charge(s) to which such respondent admits guilt under sub-rule (1)(b) and such charge(s) will be referred to a sanction hearing in terms of Rule 20.

(d) Should the respondent not admit or deny the charge(s) when asked to do so under sub-rule (1)(b) or should it appear to the Chairperson of the Panel that the respondent may admit the facts but may not admit the charge(s) or should the respondent not be present at the hearing under this Rule, the respondent will be considered to have denied the charge(s).

(e) The *pro forma* complainant shall state his/her case about the charge(s) denied under sub-rules (1)(b) and/or (d) and produce evidence in support thereof.

(f) The pro forma complainant may lead the evidence of any person who was involved in the investigation that gave rise to the charge(s) against the respondent. That person shall be permitted to give factual and opinion evidence relevant to the charge(s).

(g) The respondent may cross-examine any witnesses produced by the *pro forma* complainant and may have access to any documents adduced in evidence by the *pro forma* complainant.

(h) The *pro forma* complainant may re-examine any witnesses cross-examined by the respondent.

This gazette is also available free online at **www.gpwonline.co.za**

(i) At the conclusion of the case presented by the *pro forma* complainant, the respondent shall state the case about the charge(s) denied under sub-rules (1)(b) and/or (d) and produce evidence in support thereof.

(j) The *pro forma* complainant may cross-examine any witnesses produced on behalf of the respondent (including the respondent, if the respondent has elected to give evidence) and may have access to any documents adduced in evidence by the respondent.

(k) The respondent may re-examine any witnesses cross-examined by the *pro forma* complainant.

(l) At the conclusion of the case presented by the respondent:

(i) the *pro forma* complainant may address the Panel on the matter generally;

(ii) the respondent may reply to the *pro forma* complainant; and

(iii) the *pro forma* complainant may reply to any new matter raised by the respondent.

(m) The Panel shall not hear any further evidence from the *pro forma* complainant or from the respondent after the conclusion of their case unless the interests of justice so dictates, in which case sub-rule (1)(e) to (l) shall apply with the necessary changes.

(2) The *pro forma* complainant may, at any time after he/she has started to state his/her case and prior to the conclusion of the hearing under this Rule, bring an application to amend the charge sheet in accordance with section 50(2) of the Act.

(3) The respondent may at any time after the *pro forma* complainant has started to state his case and prior to the conclusion of the hearing under this Rule admit guilt to any charge(s) which have not previously been admitted, upon which such respondent will be considered to be guilty of such charge(s) and the charge(s) referred to a sanction hearing under Rule 20.

(4) The *pro forma* complainant may, with the leave of the Panel, at any time after he started to state his/her case and prior to the conclusion of the hearing withdraw any charge(s) against the respondent.

This gazette is also available free online at **www.gpwonline.co.za**

(5) If the Panel is not seized of any further charge(s) as a result of an admission under sub-rule (3) or a withdrawal under sub-rule (4) and if the respondent is guilty of any charge(s) under Rule 5 (6) or sub-rule (12), the Panel shall proceed in terms of Rule 20.

(6) The Panel may, at any time after the commencement and before the conclusion of the hearing, order the postponement of the remainder of the hearing under this Rule to a time and place determined or to be determined in its discretion, provided that only Panel members present at the commencement of the hearing under this Rule may take part in the remainder of the hearing under this Rule.

(7) The Panel may, at any time after the commencement and before the conclusion of the hearing under this Rule, call as a witness, any person, the evidence of whom it considers material, and who has not been called by the *pro forma* complainant or the respondent. The Panel may regulate its proceedings with respect to the cross-examination of such witness and the right to address the Panel on the evidence given by such witness as it deems fit, in the interests of justice.

(8) Any member of the Panel taking part in the hearing under this Rule may, with the permission of the Chairperson of the Panel, put a question to any witness, the respondent (if such respondent has elected to give evidence), the *pro forma* complainant and/or the legal representative of the respondent (if any).

(9) Where a disciplinary hearing has commenced and it transpires that a member of the Panel for any reason, is unable to complete the proceedings of the disciplinary hearing, the Chairperson of the Disciplinary Committee may, subject to sub-rule (10), direct that the proceedings continue before the remaining Panel members provided that at least two members remain on the panel.

(10) The remaining Panel members under sub-rule (9) must consist of a person with at least 10 years' experience in auditing who was formerly registered as an auditor and an advocate or attorney with at least 10 years' experience in practicing law.

This gazette is also available free online at **www.gpwonline.co.za**

(11) If there are less than two remaining members on the Panel, the Chairperson of the Disciplinary Committee must constitute a new Panel and direct that the proceedings commence afresh.

(12) At the conclusion of a hearing under this Rule, the Chairperson of the Panel must:

(a) inform the parties of the Panel's findings as to the guilt or innocence of the respondent on the charge(s) preferred against the respondent and in respect of which the respondent pleaded not guilty; or

(b) inform the parties of the date when the Panel will notify the parties in writing of its finding(s) as to the guilt or innocence of the respondent on the charge(s) preferred against the respondent and in respect of which the respondent pleaded not guilty, which date shall not be more than 30 days from the date on which the merits hearing is concluded.

20. Sanction hearing

(1) This Rule does not apply when a respondent admitted guilt to the charge(s) and a sanction was imposed on the respondent under section 51, read together with Rule 5(11)(a).

(2) Subject to sub-rule (1), this Rule applies when a respondent is found guilty of any charge(s) under Rule (5)(11)(b), Rule 19(1)(c), Rule 19(3) and/or Rule 19(12) regardless of whether a hearing under Rule 19 took place.

(3) When a respondent is found guilty of any charge(s) and a hearing under Rule 19 took place, the Panel will conduct a hearing under this Rule:

(a) at the date, time and place appointed by the Chairperson of the Panel, which date shall not be more than 30 days after the Panel's finding in terms of Rule 19(12); and

(b) with only such members of the Panel that took part in the hearing under Rule 19 taking part in the hearing under this Rule.

(4) Notwithstanding sub-rule (3)(b) where one or more members of the Panel who took part in the hearing under Rule 19 is, as a result of removal or resignation from the Disciplinary Committe, unable to reconvene for a

This gazette is also available free online at **www.gpwonline.co.za**

hearing under this rule, the Chairperson of the Disciplinary Committee may, direct that the proceedings continue before the remaining members, provided that at least the following two members remain:

(a) a person with at least 10 years' experience in auditing who was formerly registered as an auditor and
(b) an advocate or attorney with at least 10 years' experience in practicing law.

(5) Where following a member's removal as contemplated in sub-rule (4), there are less than two remaining members on the Panel or the remaining members do not comply with sub-rule (4)(a) and (b), then the Chairperson of the Disciplinary Committee may reconstitute a Panel for the purpose of a hearing under this Rule.

(6) If a respondent is found guilty of the charge(s) under Rule 5(11)(b)(i) and a hearing did not take place, the Panel shall conduct the hearing under this Rule at such time and place as is determined by the Director: Legal or the CEO under Rule 9.

(7) The order of procedure at a hearing under this Rule shall be as follows:

(a) The Chairperson of the Panel shall read the charge(s) in respect of which the respondent has been found guilty, unless the respondent agrees to dispense with the reading of the charge(s).

(b) The *pro forma* complainant shall state his/her case regarding aggravating circumstances in respect of the sentence to be imposed on the respondent for the charge(s) in respect of which the respondent has been found guilty and produce evidence in support thereof (if any).

(c) The respondent may cross-examine any witnesses led by the *pro forma* complainant and may have access to any documents adduced in evidence by the *pro forma* complainant.

(d) The *pro forma* complainant may re-examine any witnesses cross-examined by the respondent.

(e) At the conclusion of the case presented by the *pro forma* complainant, the respondent shall state the case regarding mitigating circumstances

This gazette is also available free online at www.gpwonline.co.za

in respect of the sentence to be imposed on the respondent for the charge(s) in respect of which the respondent has been found guilty and produce evidence in support thereof (if any).

(f) The *pro forma* complainant may cross-examine any witnesses led on behalf of the respondent (including the respondent if that respondent has elected to give evidence) and may have access to any documents adduced in evidence by the respondent.

(g) The respondent may re-examine any witnesses cross-examined by the *pro forma* complainant.

(h) At the conclusion of the case presented by the respondent:

(i) the *pro forma* complainant may address the Panel with respect to mitigating or aggravating circumstances presented before the Panel;

(ii) the respondent may reply to the *pro forma* complainant; and

(iii) the *pro forma* complainant may reply to any new matter raised by the respondent.

(i) The Panel shall not hear any further evidence from the *pro forma* complainant or from the respondent after the conclusion of their case on mitigating or aggravating circumstances unless the interests of justice so dictate, in which case sub-rule (6)(b) to (h) shall apply with the necessary changes.

(8) The Panel may at any time after the commencement and before the conclusion of the hearing under this Rule order the postponement of the remainder of the hearing under this Rule to a time and place determined or to be determined in its discretion, provided that only members present at the commencement of the hearing under this Rule may take part in the remainder of the hearing under this Rule.

(9) The Panel may at any time after the commencement and before the conclusion of the hearing under this Rule call as a witness any person, the evidence of whom it considers material, and who has not been called by the *pro forma* complainant or the respondent. The Panel may regulate its

This gazette is also available free online at **www.gpwonline.co.za**

proceedings with respect to the cross-examination of such witness and the right to address the Panel on the evidence given by such witness as it deems fit, in the interests of justice.

(10) Any member of the Panel taking part in the hearing under this Rule may, with the permission of the Chairperson of the Panel, put a question to any witness, to the respondent (if the respondent has elected to give evidence), to the *pro forma* complainant and to the representative of the respondent (if any).

(11) The Panel may make any decision with regard to any matter arising in connection with, or in the course of a hearing under this sub-rule, in camera.

(12) At the conclusion of a hearing under this Rule, the Chairperson of the Panel must:

(a) inform the parties of the Panel's finding as to the sentence which it imposes on the respondent in respect of the charge(s) preferred against the respondent and in respect of which the respondent was found guilty; or

(b) inform the parties of the date when and how the Panel will notify the parties in writing of its finding as to the sentence which it imposes on the respondent in respect of the charge(s) preferred against the respondent and in respect of which the respondent was found guilty, which date shall not be more than 5 days from the date on which the hearing is concluded.

21. Competent sanctions, cost orders and publication

(1) If a respondent is found guilty of all charges of improper conduct preferred, in terms of Rule 5(11)(a) and the matter is not referred to a hearing in terms of Rule 20, the Enforcement Committee may impose one or more of the following sanctions on the respondent:

(a) caution or reprimand the registered auditor;

(b) impose a fine on the registered auditor not exceeding the amount determined by the Minister in the Gazette in terms of section 51(1)(b);

(c) require the registered auditor to attend appropriate training; and/or

This gazette is also available free online at www.gpwonline.co.za

(d) any other relevant non-monetary sanction(s).

(2) If a respondent is found guilty of a charge of improper conduct and a hearing in terms of Rule 20 was convened, then the Panel may impose one or more of the following sanctions on the respondent:

(a) caution or reprimand the registered auditor;

(b) a fine which shall not exceed the amount determined by the Minister in the Gazette in terms of section 51B(3)(a)(ii);

(c) a requirement for the respondent to attend appropriate training;

(d) any other relevant non-monetary sanction(s);

(e) the cancellation of the registration of the respondent with the IRBA and the removal of the name of the respondent from the register referred to in section 6; and/or

(f) the disqualification of the respondent from registration as a registered auditor on a temporary or permanent basis.

(3) A sanction imposed in terms of sub-rule (1) or (2) may be suspended for a specific period and/or until the occurrence of a specific event or made subject to any conditions.

(4) A respondent upon whom a sanction is imposed in terms of sub-rule (1) or (2) may be ordered to pay such reasonable costs as have been incurred by the Investigating Committee and/or Disciplinary Committee in connection with the investigation and/or hearing, or such part thereof as may be considered just.

(5) If the Enforcement Committee imposes a sanction in terms of sub-rule (1), then the Enforcement Committee may, if considered appropriate, request the IRBA to publish in the IRBA's website, the name of the respondent, the charge and the sanction imposed in terms of sub-rule (1), and a cost order in terms of sub-rule (4).

(6) If the Disciplinary Committee, through a Panel, imposes a sanction in terms of sub-rule (2), the IRBA must publish in the IRBA's website, and if deemed necessary, in any other appropriate medium, the name of the registered

This gazette is also available free online at **www.gpwonline.co.za**

auditor found guilty, a summary of the charges, the finding and the sanction imposed in terms of sub-rule (1) and the cost order in terms of sub-rule (4)

22. Enforcement of sanctions

(1) The IRBA shall take all steps and do all such things as may be necessary to give effect to the decision(s) of the Enforcement Committee, Disciplinary Committee and/or Panel.

23. Appeals and reviews

(1) The decisions of the Investigating Committee, Enforcement Committee, the Disciplinary Committee and/or the Panel are not subject to any appeal process, whether internal or external, however, such decisions may be susceptible to a review.

(2) Notwithstanding sub-rule (1), should a party file an application for a review of an interlocutory ruling issued by the Panel, such an application shall not stay the proceedings before the Panel, unless otherwise directed by a court order.

This gazette is also available free online at **www.gpwonline.co.za**

PART C: PROCEDURAL MATTERS

24. Computation of time periods in terms of these Rules

(1) For the purpose of calculating any period of time in terms of these Rules:

(a) day means a calendar day; and

(b) the first day is excluded and the last day is included, subject to sub-rule (2).

(2) The last day of any period must be excluded if it falls on a Saturday, Sunday, or public holiday.

25. Service and filing of documents

(1) Unless otherwise provided for in these Rules, a party must serve any notice, process, correspondence or document on the other parties:

(a) by handing a copy thereof, at the address chosen by the person to receive service, to the person concerned, a representative authorised to accept service on behalf of the person or any person found at the address who is apparently older than 16 years; or

(b) emailing a copy thereof, to the email address of the person concerned or a representative authorised to accept service on behalf of the person. (2) Notwithstanding sub-rule (1) above, a charge sheet must, unless otherwise agreed between the parties, be served on the respondent by registered mail and electronic mail.

(3) An address of service chosen in terms of sub-rule (1)(a) must be within the borders of the Republic of South Africa,

(4) Documents may be filed with the IRBA or the Disciplinary Committee by:

(a) Delivering a copy of the document at the offices of the IRBA; or

(b) Emailing a copy of the document to the Committee Secretariat; or otherwise, in respect of matters dealt with under Part A, to the Director:

This gazette is also available free online at www.gpwonline.co.za

Investigations or in respect of matters dealt with under Part B to the Director: Legal.

(5) Service or filing in terms of sub-rule (1)(a) and (4)(a) may only be effected on business days and within business hours.

(6) Service or filing in terms of sub-rule (1)(b) and (4)(b) may be effected on any day and at any time.

(7) Notwithstanding anything contained in these Rules, the parties may agree on an alternative method and time of service.

26. Consolidation of matters

(1) The Chairperson of the Disciplinary Committee or where a Panel has already been constituted, the Chairperson of the Panel, may, of his own accord, by consent of the parties or on application by either of the parties, and on notice to the parties concerned, consolidate one (1) or more disciplinary matters so that the matters may be dealt with in the same proceedings.

(2) Notwithstanding sub-rule (1), consolidation of matters may be effected at any of the following stages:

(a) Investigation, at the instance of the Director: Investigations or CEO and/or Investigating Committee;

(b) Referral of a matter to the Disciplinary Committee, by the Director: Legal or CEO and/or the Enforcement Committee; or

(c) At any time prior to the commencement of a hearing in terms of section 50 by the Chairperson of the Disciplinary Committee or Panel.

(3) Separate investigation or disciplinary matters, may only be consolidated where:

(a) the matters arise from the same cause of action; and/or

(b) the charges preferred in all matters relate to the same respondent, notwithstanding the fact that they might arise from a different cause of actions; and/or

This gazette is also available free online at www.gpwonline.co.za

(c) the issues to be determined by the Enforcement Committee and/or Disciplinary Committee, depend on the determination of similar or substantially the same question(s) of law and fact;

(d) there will be no substantial prejudice on the party or parties to the matters sought to be joined through a consolidation order;

(e) the balance of convenience favours such consolidation; and

(f) the IRBA has jurisdiction on all matters sought to be consolidated.

27. Subpoenas

(1) The IRBA may issue a subpoena under the following circumstances:

(a) At the instance of the Investigating Committee, where books, documents or evidence relevant to an investigation are sought from any person in possession of same.

(b) At the instance of the Panel, where the Panel requires any person with relevant knowledge of any matter to be considered by the Panel to appear before the Panel to be questioned or to produce any such relevant object or information.

(c) Subject to sub-rule (2) and (3), on application by a party to a hearing (including the *pro forma* complainant), requesting the IRBA to subpoena any witness on his behalf to appear before the Panel for the purpose of being questioned and/or producing certain objects or information in his possession and relevant to the proceedings before the Panel.

(2) Any party who requires the IRBA to subpoena a person in terms of sub-rule (1)(c), must file a completed Form DCR 1, together with a written motivation setting out why the evidence of the person to be subpoenaed is necessary to the relevant to the proceedings.

(3) An application in terms of sub-rule (2) must be filed with the Disciplinary Committee Chairperson at least 30 days prior to the disciplinary hearing, or on good cause shown, such shorter period as the Chairperson of the Disciplinary Committee might allow. Except that an application for a

This gazette is also available free online at www.gpwonline.co.za

subpoena in relation to a hearing convened in terms of Rule 20(3)(a) may be filed at least 15 days prior to the hearing.

(4) The Disciplinary Committee Chairperson may refuse to issue a subpoena if:

(a) the party does not establish why the evidence of the person is necessary;

(b) the evidence sought by the requested subpoena is irrelevant or immaterial to the proceedings; or

(c) the evidence sought is intended to delay the conclusion of the proceedings, as opposed to contributing to the resolution of the issues in dispute.

(5) A subpoena may, notwithstanding the scope of the application made in terms of sub-rule (2), be issued on such terms and conditions as the Chairperson of the Disciplinary Committee may determine, including the scope of evidence to be tendered by a witness so subpoenaed.

(6) A subpoena issued pursuant to an application in terms of sub-rule (2) must be served at least 7 days prior to the scheduled date of the hearing and by the person who has requested the issuing of the subpoena or the Sheriff, at the direction of the person who requested the subpoena.

(7) Service of a subpoena issued in terms of this rule must be effected:

(a) by delivering a copy of it to the person subpoenaed personally;

(b) by sending a copy of it by registered post to the subpoenaed person's last known:

(i) residential address; or

(ii) place of business or employment;

(iii) by leaving a copy of it at the subpoenaed person's place of residence or place of business or employment with a person who is apparently older than 16 years and is residing or employed there; or

This gazette is also available free online at www.gpwonline.co.za

(c) in any manner agreed upon between the IRBA or a person requesting the subpoena and the person being subpoenaed.

(8) Any incidental costs incurred by the person subpoenaed in terms of this Rule for providing information and/or attending the disciplinary hearing shall be borne by:

(a) In the case of a subpoena issued pursuant to sub-rule (1)(a) and(b), the IRBA; and

(b) In the case of a subpoena issued in terms of sub-rule (1)(c), by the person who requested the subpoena.

This gazette is also available free online at **www.gpwonline.co.za**

PART D – RULES RELATING TO SEARCH AND SEIZURES

28. Power to conduct a search and seizure

(1) The IRBA may enter premises with the intention of searching for and seizing any information, documentation and/or items that it requires for the purpose of an investigation where there are reasonable grounds[1] to believe that relevant information is being held on the premises[2] of, and/or under the control of, any person.

(2) Notwithstanding sub-rule (1), the IRBA may only enter premises to search for and seize information that is relevant to an investigation, where[3] the Chairperson of the Investigating Committee has, following a decision by the Investigating Committee, issued a certificate authorising entry into the premises, and:

(a) a person apparently in control of the premises consents to the entry, for the purpose of a search and seizure; or

(b) a warrant is issued by a Judge or Magistrate in a court with competent jurisdiction.

(3) The following persons may, with the authority of the Investigating Committee Chairperson, conduct a search and seizure:

(a) An employee of the IRBA[4]; and/or

(b) A person appointed by the IRBA for this purpose, notwithstanding the fact that such a person is not in the employ of the IRBA.

(4) Any persons authorised to conduct a search and seizure may be accompanied and/or assisted by an employee of the IRBA or member of the Investigating Committee during the search and seizure, and where a warrant so authorises, a member of SAPS.

---

[2] In *Zuma v National Director of Public Prosecutions* 2000 BCLR 1079 (CC), the court reiterated that the emphasis is on the existence of "reasonable grounds for believing". In *Powell and Others v Van der Merwe and Others* 2005 1 All SA 149 (SCA) 161 38, the court held that a reasonable suspicion is an impression formed on the basis of diverse factors, including facts and pieces of information falling short of fact, such as allegations and rumours.

[2] This includes any premises, without limitation to the premises of Registered Auditors or Firms, where in there are reasonable grounds to believe that relevant information is being held.

[3] Sections 48A and 48B.

[4] This is any person in the employ of the IRBA and duly authorised by the Investigating Committee Chairperson to enter any premises, for the purpose of searching and seizing relevant information in terms of the Act.

This gazette is also available free online at www.gpwonline.co.za

29. Initiation of a search and seizure operation

(1) When initiating a search and seizure operation, the Director Investigations must prepare a formal request to the Investigating Committee, requesting authority to conduct a search and seizure on the specified premises.

(2) The request to conduct a search and seizure should include the following minimum information:

(a) the purpose of the search and seizure[5];

(b) the addresses and description of the premises to be searched;

(c) the particulars of the person(s) who will conduct the search;

(d) an indication of whether the search poses any safety concerns;

(e) an indication whether an external service provider will be required;

(f) a description of the records sought, if available; and

(g) any other information that might assist the Investigating Committee to make an informed decision[6].

(3) If satisfied that the circumstances justify an approval of the request to conduct a search and seizure, the Investigating Committee Chairperson, on behalf of the Committee, must approve the appointment of the identified person, for the purpose of conducting a search and seizure and/or approaching the court for a warrant, where consent to enter the premises is not granted by the person apparently in control thereof.

(4) The approval to conduct a search and seizure may be approved on parameters and conditions determined as appropriate by the Investigating Committee.

(5) When approving a search and seizure, the Chairperson of the Investigating Committee must issue the person authorised to conduct a search and seizure with a certificate of authority that reflects the following minimum information:

(a) the details of the authorised person;

(b) the premises to be entered and searched, for the purpose of seizing relevant information;

[5] Inclusive of the grounds under which it is believed the information is held at the premises or by any person.

[6] This is not an exhaustive list, and all relevant information must be provided to enable the Investigating Committee to make an informed decision.

This gazette is also available free online at **www.gpwonline.co.za**

(c) the person/s against whom the investigation is being conducted; and,

(d) where applicable, the authority to enlist the assistance of an employee of the IRBA, a member of the Investigating Committee and/or an external service provider in conducting the search and seizure.

(6) The certificate issued in terms of sub-rule (5) must be signed by the Chairperson of the Investigating Committee or, in his absence, a member of the Investigating Committee authorised in writing to do so.

30. Consent to a search and seizure operation

(1) The following persons may consent to the authorised person entering premises, for the purpose of a search and seizure:

(a) In relation to a private residence, a person apparently in control of the business reasonably believed to be conducted at the premises, and the occupant of the private residence or part of the private residence to be entered; or

(b) In the case of any other premises, a person who is or appears to be in control of the relevant premises and who must be 16 years or older.

(2) Consent may be granted upon presentation of a certificate of authority and an explanation by the authorised person of the purpose of the search and seizure.

(3) Notwithstanding sub-rule (1) and (2), persons from whom consent is required are not obliged to provide consent and may only give consent voluntarily.

(4) Persons from whom consent is required, may elect to have their legal representative present prior to consenting to the search and seizure.

(5) In the absence of consent, premises may only be accessed on presentation of a warrant that is issued by a court with competent jurisdiction.

31. Information, documentation and/or items subject to a search and seizure operation

(1) The authorised person may only seize information that is relevant or believed to be relevant to an investigation, which may include:

(a) paper records or documentation or any item that may afford evidence of the alleged improper conduct; and

This gazette is also available free online at www.gpwonline.co.za

(b) electronic records stored in a digital format on any computerised systems, networks, storage devices, cloud systems, communication, filing and archiving systems, inclusive of third-party software.

32. Application for a search and seizure warrant

(1) The authorised person may approach a court of competent jurisdiction to request it to issue a warrant authorising the entry and search of the premises, for the purpose of seizing information that is reasonably believed to be relevant to an ongoing investigation, where:

a) Consent to conduct a search and seizure has been withheld;

b) The search and seizure is reasonably believed to be urgent and there are reasonable grounds to believe that consent will be withheld; or

c) Where there are reasonable grounds to believe that prior notice will compromise the search[7].

(2) The authorised person must send an instruction to the Director Legal requesting the initiation of an application for a search and seizure warrant.

(3) The Director Legal must, following consultation with the authorised person and the Investigations Department, cause an application for a warrant to be prepared and filed.

(4) The affidavit supporting the application must be deposed to or include an affirmation by the authorised person.

(5) The application must be issued on an urgent basis, in line with the relevant court rules, unless the information sought is not considered urgent and is not at risk of destruction or relocation. Where the application is not issued on an urgent basis, it must still be filed with the relevant court within fourteen (14) days of receipt of instructions, unless the information required to support the application remains outstanding.

(6) The application must show that there are reasonable grounds for suspecting[8] that improper conduct has occurred, and that entry and search of the premises are likely to yield information pertaining to the improper conduct.

[7] A search may be compromised where information is at risk of destruction or relocation.

[8] This may be a suspicion brought about by a complaint received by the IRBA, or any information coming to the attention of the IRBA through the media or any other publicly available platform.

This gazette is also available free online at www.gpwonline.co.za

The application should therefore address the following:

(a) The purpose of the search and seizure.

(b) The nature of the improper conduct being investigated.

(c) Reasons to believe that entry and search of the premises are likely to yield information pertaining to the improper conduct.

(d) The address and description of the premises sought to be searched.

(e) The relationship between the person under investigation and the premises sought to be searched.

(f) The period within which the proposed search will be conducted.

(g) The particulars of the authorised person who will conduct the search.

(h) Whether the search poses any safety concerns.

(i) Whether law enforcement[9] or an external service provider will be required to assist in the search and seizure, and where an external service provider is required, details pertaining to:

(i) Why the presence of an external service provider is necessary;

(ii) Whether an external service provider brings special expertise or knowledge to the search and seizure operation, and whether such knowledge and/or expertise are not ordinarily available within the IRBA;

(iii) The role that an external service provider is required to play in the search and seizure operation;

(iv) Under whose control and authority an external service provider would operate during the search and seizure operation; and

(v) In what manner the presence and assistance of an external service provider would render the search more effective and compliant, and possibly reduce or limit the incursion into the privacy and other rights of those who are the subject of the search.

(j) A description of the records sought that will intelligibly convey to both the searcher and the searched, the ambit of the search that the warrant

[9] If the assistance of law enforcement is required, the reasons supporting same, as stipulated in paragraph 22, must be outlined.

This gazette is also available free online at www.gpwonline.co.za

authorises[10].

(k) Any other information that might assist the Judge or Magistrate to make an informed decision when granting a warrant.

(7) The application must be issued in a court that has jurisdiction to consider the application and issue the warrant sought, this being the court in the area where the premises sought to be accessed are located.

(8) Should the application be granted, the warrant must be issued and bear the signature of the issuing Judge or Magistrate and may include the following information:

(a) The person / firm / entity to whom it is addressed;

(b) The person / firm / entity's address;

(c) The name of the registered auditor subject to the investigation of alleged improper conduct;

(d) The alleged improper conduct being investigated;

(e) A description of the records that intelligibly conveys to both the searcher and the searched, the ambit of the search that the warrant authorises;

(f) Conditions of the warrant, if any, (e.g., assistance of external service providers, SAPS, time of execution);

(g) Details of the Authorised Person;

(h) Stamp of the Court; and

(i) Date on which the warrant was issued.

33. Search and seizure operation

(1) A search and seizure must be conducted within ordinary business hours.

(2) Notwithstanding sub-rule (1), the search and seizure may be conducted outside ordinary business hours, but as close to ordinary business hours as the circumstances reasonably permit, where:

(a) the authorised person reasonably believes that the purpose for which the entry and search are sought is likely to be defeated by a

[10] *Zuma v National Director of Public Prosecutions 2006 2 All SA 91 (D).*

This gazette is also available free online at **www.gpwonline.co.za**

delay; and/or

(b) the warrant expressly permits the search and seizure to be conducted at night or at any other time specified therein.

(3) On arrival at the premises, the authorised person must:

(a) present the certificate of authority issued by the Investigating Committee Chairperson, supported by his/her identification document, to the person apparently in control of the premises and on request, to any other person affected by the search and seizure.

(b) enquire if the person is in fact in control of the premises intended to be searched;

(c) state the purpose for requesting to enter the premises[11];

(d) in the absence of a warrant, and upon establishing the person in charge of the premises, request permission to enter the premises. When requesting such permission, the authorised person must advise the person apparently in control of the premises that he has the right to refuse access.

(4) Where consent to conduct a search and seizure is granted, the authorised person must request the person granting consent to complete and sign the prescribed consent form.

(5) Where consent to conduct a search and seizure is withheld, the authorised person must leave the premises and initiate processes for obtaining a warrant.

(6) If access is sought on the basis of a warrant, the authorised person must present a copy of the warrant to the person in charge of the premises and advise such a person that failure to allow access to the premises, for the purpose of conducting a search and seizure, would constitute contempt of court, an offence that would be punishable by either a fine or imprisonment or both.

(7) The person apparently in control of the premises must, after consent for a search and seizure is granted or on presentation of a warrant

[11] Specifically, the authorised person must convey that they seek to enter the premises to search the premises and to do anything contemplated by Section 48(A)(7).

This gazette is also available free online at www.gpwonline.co.za

authorising a search and seizure:

(a) Provide full access to the premises, relevant information, documentation and/or items;

(b) Disclose all relevant computer systems or software in use at the premises;

(c) Provide all passwords and access paths to the computer systems or software;

(d) Assist with the navigation of relevant computer systems or software; and

(e) Subject to Rule 34, answer fully and truthfully, all questions posed by the authorised person, as they relate to the search and seizure and its purpose[12];

(8) Upon obtaining consent to enter the premises or presenting a warrant and obtaining access, the authorised person should proceed to enter, search the premises, and seize information, documentation and/or items relevant to the investigation.

(9) Unless warranted, force should not be used to enter the premises, search for information, or seize the required information. Where force is used, it must not be excessive in nature and must be reasonably necessary to ensure access.

(10) When conducting a search and seizure, the authorised person must take cognisance of the affected persons' constitutional rights, including their right to freedom, privacy, security, and dignity. Therefore, the authorised person must:

(a) Conduct the search and seizure in a dignified manner and may not:

(i) Argue with, insult and/or disrespect the person apparently in control of the premises or any person present at the premises at the time; or

[12] Section 48A(9) states that the law relating to privilege – as applicable to a witness subpoenaed to provide a book, document or object in a civil trial before a court – applies, with the necessary changes, in relation to the production of any information, including, but not limited to, any working papers, statements, correspondence, books or other documents, to the investigating committee acting in accordance with this section. In addition to this, information incriminating the person being questioned may not be used in criminal proceedings against them, save for exceptions as set out in subsection (10)(e).

This gazette is also available free online at www.gpwonline.co.za

(ii) Exert authority in a manner that is disrespectful or beyond the powers provided for in the Act.

(b) Conduct the search in a decent and orderly manner, by entering and searching only such areas or objects as are reasonably required for the investigation, conducting the search as discreetly as possible, and causing as little disturbance as possible.

(c) Without compromising the search and seizure, conduct the search expediently and conclude same without undue delay.

(11) During a search and seizure, the authorised person may:

(a) Subject to the limitations set out in the warrant, if a search is conducted on the basis of one, access any part of the premises, as well as any information, documentation or items on the premises that are deemed to be relevant to the investigation.

(b) Open or cause to be opened any strongroom, safe, cabinet, or other container in which the authorised person reasonably suspects there is information, documentation or items that may be relevant to the investigation.

(c) Examine, make extracts from and copy any relevant documentation on the premises.

(d) Question any person on the premises, to find out relevant information or obtain documentation, but only after advising such a person that he has the right to object if information or documents sought might incriminate such a person.

(e) Require a person on the premises to produce any relevant document or item that is in the possession or under the control of such a person.

(f) Require a person on the premises to operate any computer, or similar system, that is on or available through the premises to:

(i) Search any information that is in or available through that system; and

(ii) Produce a record of that information in any media that the authorised person reasonably requires.

This gazette is also available free online at www.gpwonline.co.za

(g) If it is not practical or appropriate to make a request in terms of sub-rule (11)(f), operate any computer or similar system that is on or available through the premises, for the purpose set out in sub-rule (11)(f).

(h) Take possession of and remove from the premises any relevant document or item, excluding documents and/or items in respect of which privilege is asserted, unless privilege has been waived.

(12) Records must be seized in a manner that:

(a) avoids any damage or destruction;

(b) allows for seamless retrieval;

(c) preserves the integrity of the information; and

(d) in accordance with best practices.

(13) The authorised person must give the person apparently in control of the premises:

(a) a reasonable opportunity to make copies of the documents taken, if so requested; and

(b) a written receipt for documents or items taken from the premises during a search and seizure process.

(14) The receipt referred to in sub-rule (13)(b) should, provide the following minimum information:

(c) a brief description of the document or item;

(d) the nature of the document or item; and

(e) details of the storage method.

(15) The person apparently in control of the premises must verify and acknowledge the written receipt of documents seized.

34. Objections to question(s) or disclosure of document(s) and/or information during a search and seizure

(1) A person who is questioned or required to produce documentation or information during a search and seizure may object to answering the questions, or to producing the documentation or information, on the grounds that the answer and/or the contents of the documentation, or

This gazette is also available free online at www.gpwonline.co.za

information may tend to incriminate that person.

(2) Notwithstanding an objection in terms of sub-rule (1), the person who is questioned shall, if the authorised person so decides, answer the question(s) or produce the documentation or information, subject to the limitations on the use of such information and documentation.

(3) A person requested to produce documentation or information may object to the disclosure of such documentation or information on the basis that the documentation or information is protected by legal privilege, in which case the person asserting legal privilege must:

(a) Identify, specifically and in detail, each item of the documentation and/information requested, which he claims is covered by legal professional privilege;

(b) Specify the circumstances in which he obtained the information and/or documentation; and

(c) Identify the author of the information and/or documentation and the capacity in which the author produced the said information and/or documentation.

(4) If the authorised person or the IRBA disputes that the information and/or documentation is covered by legal privilege, then:

(a) The IRBA must appoint a practitioner from its panel of attorneys (who does not act either for the IRBA or the person claiming privilege in respect of the specific investigation) to take receipt of the information and/or documentation;

(b) The person asserting privilege must seal the information and/or documentation and hand it over to the appointed practitioner;

(c) The practitioner must, within ten (10) business days, make a determination, stating his grounds as to whether privilege applies; and

(d) If the party claiming privilege or the IRBA is not satisfied with that determination, then an application may be made to the High Court within fifteen (15) days for a court order to resolve the dispute.

This gazette is also available free online at www.gpwonline.co.za

35. Limitations to a search and seizure operation

(1) The authorised person, may:

(a) In the absence of a warrant, not enter the premises where consent has not been provided or if there is no one present at the premises[13].

(b) Enter and search areas or objects, as are reasonably required for the purposes of the investigation.

(c) Only seize information, documentation and/or items that are reasonably believed to be relevant.

(d) Only ask questions that are relevant to the search and seizure and its purpose.

36. Search and seizure report

(1) No later than three (3) business days after the conclusion of a search and seizure, the authorised person must prepare a report on the outcome of the search and seizure and cause same to be submitted to the Director Investigations and the Investigating Committee Chairperson, together with the handover of the documentation, information and/or items seized to the Director Investigations.

37. Use of police officials during a search and seizure

(1) A police official may be engaged where:

(a) a warrant issued by a competent court authorises the engagement;

(b) a search and seizure request has been met by force, notwithstanding a duly issued and presented warrant; and/or

(c) Full access to the premises and/or information has been denied, notwithstanding the presentation of a warrant.

(2) Where the assistance of a police official is sought in terms of sub-rule (1), the Director Investigations shall issue a letter to the SAPS, seeking its

[13] Where a warrant has been obtained and there is no one at the premises, a copy of the warrant must be fixed in a prominent and accessible place on the premises i.e., main gate or door. Where two attempts were made to conduct a search and seizure at a certain premises, however, same could not be carried out due to the premises being unoccupied or due to there being no person apparently in charge of the premises, then the authorised person may approach the court that issued the warrant, on an urgent basis, to obtain the leave of the court to enter the premises notwithstanding the fact that that the premises is unoccupied.

This gazette is also available free online at **www.gpwonline.co.za**

intervention in conducting a search and seizure, enforcing a warrant and/or evading a threat of force or violence. The request must be supported by the warrant.

(3) The authorised person must attend to the offices of the SAPS and present the letter requesting assistance, together with the warrant.

(4) Members of SAPS may use reasonable force, as is necessary, to assist the authorised person in effectively conducting a search and seizure.

38. Retention and/or preservation of documents/information/items seized

(1) Documentation, information and/or items seized during a search and seizure must:

(a) be kept in safe custody and the integrity thereof preserved;

(b) be protected from any loss, tampering and/or destruction;

(c) be properly identified for seamless retrieval; and

(d) only be accessed by IRBA-cleared personnel.

(2) The IRBA shall maintain a register of seized information, documentation and/or items, which shall be updated on receipt of a report contemplated in Rule 36.

39. Use of seized documentation, information and/or items

(1) Information obtained during a search and seizure may only be used for the purpose of conducting an investigation into alleged improper conduct and/or prosecuting a disciplinary process arising therefrom.

(2) Documents or information obtained during a search and seizure may only be disclosed in terms of Section 57A, specifically:

(a) for the purpose of enforcing compliance with the Act or any decision made in terms of the Act;

(b) when required to do so by a court;

(c) at the written request of, and to, any appropriate regulator that requires the documents or information for the institution of an investigation, with a view to the institution of any disciplinary process or criminal prosecution; or

This gazette is also available free online at www.gpwonline.co.za

(d) at the written request of, and to, any appropriate international regulator of audits and auditors that requires such information for the purpose of an investigation or a disciplinary process.

(3) Where information, documentation and/or items are obtained through questioning and the person so questioned had objected to being questioned or to disclose such information or documentation on the basis that the answer, the contents of the document or the information may tend to incriminate the person, then an answer given or a document or information produced during such questioning may only be used for the purposes of an investigation or disciplinary process by the Investigating Committee, Enforcement Committee or the Disciplinary Committee, in terms of the Act, and shall not be admissible as evidence against the person in any criminal proceedings, except in criminal proceedings for perjury or in which that person is tried for a contravention of Section 53, based on the false or misleading nature of the answer.

40. Access to seized documentation, information and/or items

(1) A person, or his/her authorised representative, from whose premises documentation, information and/or items were taken may, during normal office hours and under the supervision of the Investigating Committee Chairperson, access – for the purpose of examining, copying and/or making extracts – the documentation, information and/or items seized.

(2) The person seeking access or his authorised representative, shall engage the Director Investigations to arrange for access to the seized documentation/ information or items.

(3) The access referred to in sub-rule (1) must be on no less than 48 hours written notice on business days.

(4) The notice requesting access to seized documentation, information and/or items must identify the documentation, information and/or items sought to be accessed and the purpose of such access.

(5) The IRBA will provide access to the documentation/information and/or items so required at the time and venue as determined by the IRBA in consultation with the requester.

This gazette is also available free online at **www.gpwonline.co.za**

41. Return of seized documentation, information and/or items

(1) The Investigating Committee Chairperson must ensure that any documentation, information and/or items taken from the premises are returned to the person in charge of the premises when:

(a) it becomes apparent that the seized documentation, information and/or items are not relevant for the purpose of the investigation and/or any subsequent disciplinary processes;[14]

(b) the retention of the documentation, information and/or items is no longer necessary for the purpose of the investigation and/or any subsequent disciplinary processes; and/or

(c) the investigation and/or any subsequent disciplinary proceedings have been finalised.

(2) Despite sub-rule (1), the documentation, information and/or items seized need not be returned, if it is not in the best interest of the public or any member of the public for the documentation, information and/or items to be returned.

[14] See the judgement in *Ndabeni v Minister of Law and Order and Another 1984 (3) SA 500 (D).*

This gazette is also available free online at **www.gpwonline.co.za**

PART E: REFERRAL OF A NON-AUDIT COMPLAINT TO AN ACCREDITED PROFESSIONAL BODY FOR INVESTIGATION AND DISCIPLINARY PROCEEDINGS

42. Referral of a non-audit complaint to an accredited professional body

(1) The Director Investigations or CEO may, if he considers it appropriate, refer a non-audit complaint brought against a registered auditor to an accredited professional body for investigation and disciplinary proceedings.

(2) Notwithstanding sub-rule (1), a non-audit compliant may only be referred to an accredited professional body for investigation and disciplinary proceedings if it falls within the confines of the Constitution and Rules of the accredited professional body.

(3) Upon deciding to refer a non-audit compliant to an accredited professional body, the Director Investigations or the CEO, shall:

(a) cause a referral letter, together with all documents received and/or in the possession of the IRBA relating to or relevant to the non-audit complaint, to be sent to the accredited professional body[15]; and

(b) cause a letter to be sent to the complainant, advising him/her that the complaint has been sent to the accredited professional body for investigation and disciplinary proceedings.

(4) The Director Investigations or CEO must maintain a register of matters referred to an accredited professional body for investigation and disciplinary proceedings.

(5) The Register referred to in sub-rule (4) must be submitted to the Enforcement Committee, on a quarterly basis for noting.

(6) Where an accredited professional body believes that a non-audit complaint referred to it in terms of sub-rule (1) falls outside the confines of its Constitution and Rules, the accredited professional body shall, within ten

[15] Section 57A(2) permits disclosure of information relating to a non-audit complaint referred by the IRBA to an accredited professional body for investigation.

This gazette is also available free online at www.gpwonline.co.za

(10) days of receipt of such referral, object to the referral.

(7) The objection referred to in sub-rule (6) shall be sent to the Director Investigations or the CEO in writing and shall include the following minimum information:

(a) the details of the registered auditor;

(b) the details of the complainant;

(c) the IRBA's reference number;

(d) a summary of the matter; and

(e) reasons why the accredited professional body believes that the referred complaint falls outside of its Constitution and Rules.

(8) The Director Investigations or the CEO shall, within ten (10) days of receipt of the notice of objection, consider the objection and determine how the matter should proceed.

(9) A determination made in terms of sub-rule (8) shall be sent to the accredited professional body and the complainant, within the time period set out therein.

(10) Where a complaint against a registered auditor relates to both an audit and a non-audit matter which cannot be distinctly separated, the Director Investigations or the CEO must cause such a compliant to be Investigated by the IRBA in accordance with part A of these Rules.

(11) Where a complaint has been referred for investigation and disciplinary proceedings to the accredited professional body in term of sub-rule (1), the IRBA shall not investigate and/or perform any other functions in relation to the complaint.

(12) The accredited professional body to whom the matter has been referred, must, unless an objection has been raised in terms of sub-rule (6) and upheld:

(a) within ten (10) days of receipt of the referral of the non-audit compliant, send a letter to the Director Investigations or the CEO acknowledging receipt and registration of the referral;

This gazette is also available free online at www.gpwonline.co.za

(b) liaise directly with the complainant and respondent regarding the investigation of the complaint and/or documents relevant thereto;

(c) initiate and finalise disciplinary proceedings against the respondent in line with its Constitution and Rules;

(d) submit, to the Director Investigations , on an annual basis, a status report on all open complaints referred to it by the IRBA.

(e) Upon finalisation of the investigation and/or disciplinary process, impose an appropriate sanction on the respondent, based on the outcome of the investigation and/or disciplinary proceedings; and

(f) within ten (10) days of the conclusion of the investigation and/or disciplinary proceedings, advise the Director Investigations or the CEO of the outcome thereof, and where applicable, any sanction imposed on the respondent.

43. Outcomes of the accredited professional body's investigation and disciplinary proceedings

(1) The findings and outcomes of the accredited professional body's investigation and disciplinary proceedings on referred non-audit complaints shall be binding on the IRBA.

(2) Where the accredited professional body imposes termination of the respondent's membership as a sanction, the respondent will no longer meet the requirements for registration as a registered auditor, accordingly, the IRBA shall be obliged, in terms of section 39(2)(b), to automatically cancel the respondent's registration.

(3) Where the accredited professional body has imposed sanctions other than termination of the respondent's membership, the IRBA shall:

(a) note the sanction imposed on its records; and

(b) consider the sanction as part of the respondent's annual fit and proper assessment conducted in line with the IRBA's fit and proper policy and annual renewal requirements.

(4) Where an accredited professional body imposes a suspension from practice without termination of membership, the accredited professional body must issue a letter stating that the respondent is not in good standing. The letter

This gazette is also available free online at www.gpwonline.co.za

must be issued at the time of reporting the outcome to the IRBA and on receipt of any third-party enquiries on the respondent's standing.

(5) The IRBA shall not issue a further sanction on the non-audit complaint that was referred to the accredited professional body for investigation and disciplinary proceedings.

(6) Notwithstanding sub-rule (5), any finding(s) issued and sanction(s) imposed by the accredited professional body on the respondent and noted in the IRBA records, may be considered by the IRBA committees during any future investigation or disciplinary processes.

44. Monitoring of the accredited professional body's investigation and disciplinary processes

(1) The IRBA must, on an annual basis, monitor, in line with its accreditation model, the rigor of the accredited professional body's investigation and disciplinary processes, inclusive of sanctions imposed against respondents for improper conduct, so as to satisfy itself on the integrity and fairness of such processes.

(2) A monitoring contemplated in sub-rule (1) may result in action plans for implementation by the accredited professional body and any failure by the accredited professional body to implement any such action plans shall be dealt with in line with the IRBA accreditation model.

This gazette is also available free online at www.gpwonline.co.za

FORM: DCR1

REQUEST FOR A SUBPOENA IN TERMS OF RULE 27(1)(c) OF THE DISCIPLIARY RULES

DISCIPLINARY COMMITTEE OF THE INDEPENDENT REGULATORY BOARD FOR AUDITTORS

In the matter between:

THE INDEPENDENT REGULATORY BOARD FOR AUDITORS **Complainant**

and

_____ **Respondent**

Set down for hearing before the Disciplinary Hearing Panel on: _____

It is hereby requested in terms Rule 27(1)(c) of the Disciplinary Rules, that the chairperson of the Disciplinary Committee Subpoena, in terms of Section 50(4) of the Auditing Profession Act 26 of 2005, as amended:

_____

(Name of Subpoenaed Person)

OF

_____

(Address of Subpoenaed Person)

The above mentioned person should be subpoenaed-

☐ for questioning before the disciplinary hearing panel

☐ to produce any book, document, visual footage or object before the disciplinary hearing panel

☐ to give expert evidence before the disciplinary hearing panel

(Tick appropriate block)

This gazette is also available free online at **www.gpwonline.co.za**

If the person sought to be subpoenaed is required to bring and produce the books, documents, visual footages or objects, please provide a list thereof herein below:

a) _____ b) _____

c) _____ d) _____

e) _____ f) _____

If the person sought to be subpoenaed is required to give expert evidence, please provide a brief description of the issues in respect of which expert evidence is sought:

_____

_____

_____

Requested by: _____ Capacity: _____

_____

(Signature)

_____

(Date)

Kindly note that in terms of Rule 27, this request must be accompanied by a written motivation setting out why the evidence of the person to be subpoenaed is necessary to the relevant to the proceedings. This form should be filed with the IRBA at least 30 days prior to the disciplinary hearing.

This gazette is also available free online at **www.gpwonline.co.za**

FORM: DCR 2

INDEPENDENT REGULATORY BOARD FOR AUDITORS

CERTIFICATE OF AUTHORITY TO CONDUCT A SEARCH AND SEIZURE ISSUED IN TERMS OF SECTION 48A(2) OF THE AUDITING PROFESSION ACT 26 OF 2005, AS AMENDED BY ACT 2 OF 2015 AND ACT 5 OF 2021 [THE ACT]

This certificate authorises

_____, with ID number

_____ (authorised person), to:

a) Enter, in terms of Section 48A(1) of the Act, the premises that are located at:

_____

(premises), with the consent of the person apparently in charge of the premises;

b) For the purpose of searching for and seizing any documentation, items and/or information that is considered relevant to an investigation of improper conduct against:

_____

_____ in relation to:

_____

c) Exercise any powers contemplated in Section 48A(7)(a-c) and (8) of the Act while performing a search and seizure;

d) Question, in terms of Section 48A(10), any person found at the premises on any issue relating to the investigation and/or search and seizure; and

e) In the event of the person apparently in charge of the premises refusing to consent to the search and seizure, to approach the IRBA Legal Department for the purpose of initiating appropriate processes to obtain a warrant of search and seizure, as contemplated in Section 48B of the Act.

_____

CHAIRPERSON OF THE IRBA INVESTIGATING COMMITTEE

DATE: _____

This gazette is also available free online at **www.gpwonline.co.za**

FORM: DCR 3

INDEPENDENT REGULATORY BOARD FOR AUDITORS

CONSENT TO SEARCH AND SEIZURE
Granted in terms of Section 48A(1)(a) of the Auditing Profession Act 26 of 2005, as amended by Act 2 of 2015 and Act 5 of 2021

I, the undersigned,

_____
(Full names)

_____
(Identity number)

In my capacity as:

_____

(For example, the person in control of the business premises, or the occupant of the private residence premises)

do hereby consent that _____ and/or any persons assisting him/her, may enter the premises, being _____, and search same for any information, documentation and/or items that are relevant to an investigation currently being conducted by the IRBA against _____ in relation to _____ and to seize all information, documentation and/or items considered relevant to such an investigation, including, operating any computer system that is available at the premises, for the purpose of searching for and seizing relevant information.

I confirm that I have been duly advised of my right to refuse access and, notwithstanding such right, consent to the search and seizure freely, without any form of undue influence and/or duress.

SIGNED ON THIS _____ DAY OF _____, 20_____.

AS WITNESS:

_____ _____

Name **Signature**

This gazette is also available free online at **www.gpwonline.co.za**

FORM: DCR 4

INDEPENDENT REGULATORY BOARD FOR AUDITORS
INVENTORY/RECIEPT OF DOCUMENTS OR ITEMS SEIZED DURING A SEARCH AND SEIZURE OPERATION
Issued in terms of Section 48A(7)(c)

No.	DESCRIPTION OF DOCUMENT OR ITEM SEIZED	NATURE OF DOCUMENTS OR ITEMS[1]	COMMENT
1.			
2.			
3.			
4.			
5.			

I, _____,
having been duly authorised to conduct a search and seizure at the premises located at _____,
confirm that following a search, I seized the above listed information, documentation and/or items from the premises.

SIGNATURE: _____

DATE: _____

I, _____,
being _____ (capacity),
confirm that the search and seizure was conducted in my presence and that I have verified the documents and/or items listed above as documents and/or items seized by the authorised person during the search and seizure process. I also confirm receipt of a copy of this inventory list.

SIGNATURE: _____

DATE: _____

[1] Examples are paper records, laptops, USBs, etc.

This gazette is also available free online at **www.gpwonline.co.za**

BOARD NOTICE 228 OF 2022



Building 2 Greenstone Hill Office Park Emerald Boulevard Modderfontein
PO Box 8237 Greenstone 1616 Johannesburg South Africa
Tel 087 940 8800 **Fax** 087 940 8873 **E-mail** board@irba.co.za
Docex DX008 Edenvale **Internet** www.irba.co.za

THE PROMOTION OF ACCESS TO INFORMATION ACT 2 OF 2000 – MANUAL IN TERMS OF SECTION 14 OF THE PROMOTION OF ACCESS TO INFORMATION ACT 2 OF 2000

The Independent Regulatory Board for Auditors publishes the following Manual on the Promotion of Access to Information Act with effect from 1 April 2022.

For further information, kindly direct your enquiries to:

Nadine Kemp
Professional Manager: Legal
Independent Regulatory Board for Auditors
Email: nkemp@irba.co.za

Imre Nagy
Acting Chief Executive Officer



MANUAL ON THE PROMOTION OFACCESS TO INFORMATION

Document Ref.	6
Version No.	5
Custodian	Legal
Approved by	Board
Effective date	1 April 2022

Promotion of Access to Information Act 2 of 2000
Manual_2022

MANUAL IN TERMS OF SECTION 14 OF THE PROMOTION OF ACCESS TO INFORMATION ACT, 2000

PREAMBLE

Section 32 of the Constitution of South Africa enshrines the right of access to information held by both public and private bodies. As a result, the Promotion of Access to Information Act (the Act) was enacted to give effect to the right of access to information by detailing the ways in which information from public and private bodies can be accessed.

On the other hand, Protection of Personal Information Act 4 of 2013 (POPIA), seeks to give effect to the right to privacy in section 14 of the Constitution, specifically, as it relates to personal information. POPIA reasserts every person's right to data privacy and to have their personal data or information only used for a specific and defined purpose and not to be disclosed to third parties without consent or a legitimate purpose.

In balancing the demands of the right to privacy and the right to access to information, there are limitations to the public's realisation of the rights stipulated in Section 36 and 14 of the Constitution and Sections 33-45 of the Act, as well as those set out in the POPIA. To this end, the Act sets out the grounds on which a public or private body can refuse access to information, while POPIA sets out the grounds on which personal information may be collated, used and/or transmitted to third parties.

Section 10 of the Act requires the South African Human Rights Commission (SAHRC) to compile and publish an easy-to-understand guide to assist people to access records and documents and exercise their right to information. The guide, which is updated at least once every two years, provides users with the information required to access any records.

In addition to the Section 10 guide, the Act requires both public and private bodies to produce a manual with information on how members of the public can use the Act to access their records.

Specifically, Section 14 of the Act requires every public body to publish a manual in at least three official languages to assist information requesters in requesting information from the body concerned.

The Independent Regulatory Board for Auditors (the IRBA) is a public entity, as contemplated in Section 14 of the Act, and has compiled this Manual in compliance with that section and as a mechanism to facilitate public access to information/record(s) in its custody.

In addition to the above, the IRBA hopes, through its commitment to the letter and spirit of the Act, to contribute to the promotion of transparency, accountability, and effective governance within the public sector.

A. PARTICULARS IN TERMS OF SECTION 14 OF THE ACT

1. FUNCTIONS OF THE IRBA *[Section 14(1)(a)]*

The IRBA is a juristic person, established in terms of Section 3 of the Auditing Profession Act 26 of 2005 (APA).

1.1 **General functions**

The IRBA is mandated to:

1.1.1 Take steps to promote the integrity of the auditing profession, including:

1.1.1.1 Investigating alleged improper conduct;

1.1.1.2 Conducting disciplinary hearings;

1.1.1.3 Imposing sanctions for improper conduct; and

1.1.1.4 Conducting inspections.

1.1.2 Take steps it considers necessary to protect the public in their dealings with registered auditors (RAs).

1.1.3 Prescribe standards of professional competence, ethics and conduct of registered auditors.

1.1.4 Encourage education in connection with, and research into, any matter affecting the auditing profession.

1.1.5 Prescribe auditing standards.

1.2 **Functions regarding the accreditation of professional bodies**

The IRBA, subject to the APA:

1.2.1 Prescribes minimum requirements for the accreditation of professional bodies, in addition to those provided in the APA;

1.2.2 Considers applications for accreditation and decides whether or not to grant such applications;

1.2.3 Prescribes the period of validity of the accreditation;

1.2.4 Keeps a register of accredited professional bodies; and

1.2.5 Terminates the accreditation of professional bodies in accordance with the APA.

1.3 **Functions with regard to the registration of auditors**

The IRBA, subject to the APA:

1.3.1 Prescribes minimum qualifications, competency standards and requirements for the registration of auditors and candidate auditors, in addition to those provided for in the APA.

1.3.2 Considers and decides on any application for the registration of auditors and candidate auditors.

CONTINUES ON PAGE 642 OF BOOK 6

Printed by and obtainable from the Government Printer, Bosman Street, Private Bag X85, Pretoria, 0001
Contact Centre Tel: 012-748 6200. eMail: info.egazette@gpw.gov.za
Publications: Tel: (012) 748 6053, 748 6061, 748 6065

This gazette is also available free online at **www.gpwonline.co.za**



Government Gazette
Staatskoerant

REPUBLIC OF SOUTH AFRICA
REPUBLIEK VAN SUID AFRIKA

Vol. 681 25 March Maart 2022 No. 46088

PART 6 OF 6

N.B. The Government Printing Works will not be held responsible for the quality of "Hard Copies" or "Electronic Files" submitted for publication purposes

ISSN 1682-5845

9 771682 584003 46088

AIDS HELPLINE: 0800-0123-22 Prevention is the cure

1.3.3 Prescribes the period of validity of the registration of a registered auditors (RAs) and registered candidate auditors (RCAs).

1.3.4 Keeps a register of RAs and RCAs;

1.3.5 Ensures that the register of RAs and RCAs is at all reasonable times open to inspection by any member of the public.

1.3.6 Terminates the registration of RAs and RCAs in accordance with the APA.

1.3.7 Prescribes minimum requirements for the renewal of registration and re-registration.

1.4 **Functions with regard to education, training and professional development**

The IRBA:

1.4.1 In full or in part, recognises and/or withdraws its recognition of the educational qualifications or programmes or continued education, training, and professional development programmes in the auditing profession of educational institutions and accredited professional bodies.

1.4.2 Recognises and/or withdraws the recognition of any accredited professional body to conduct any qualifying examination contemplated in Section 37 of the APA or any such examinations.

1.4.3 Prescribes requirements for and conditions relating to the nature and extent of continued education, training, and professional development.

1.4.4 Prescribes training requirements, including, but not limited to, the period of training and the form of training contracts.

1.4.5 Approves and registers training contracts entered into by prospective registered auditors.

1.4.6 Prescribes competency requirements.

1.4.7 Either conditionally or unconditionally, recognises or withdraws the recognition of RAs as training officers.

1.5 **Functions with regard to fees and charges**

The IRBA prescribes:

1.5.1 Accreditation, registration, registration renewal and re-registration fees.

1.5.2 Annual fees.

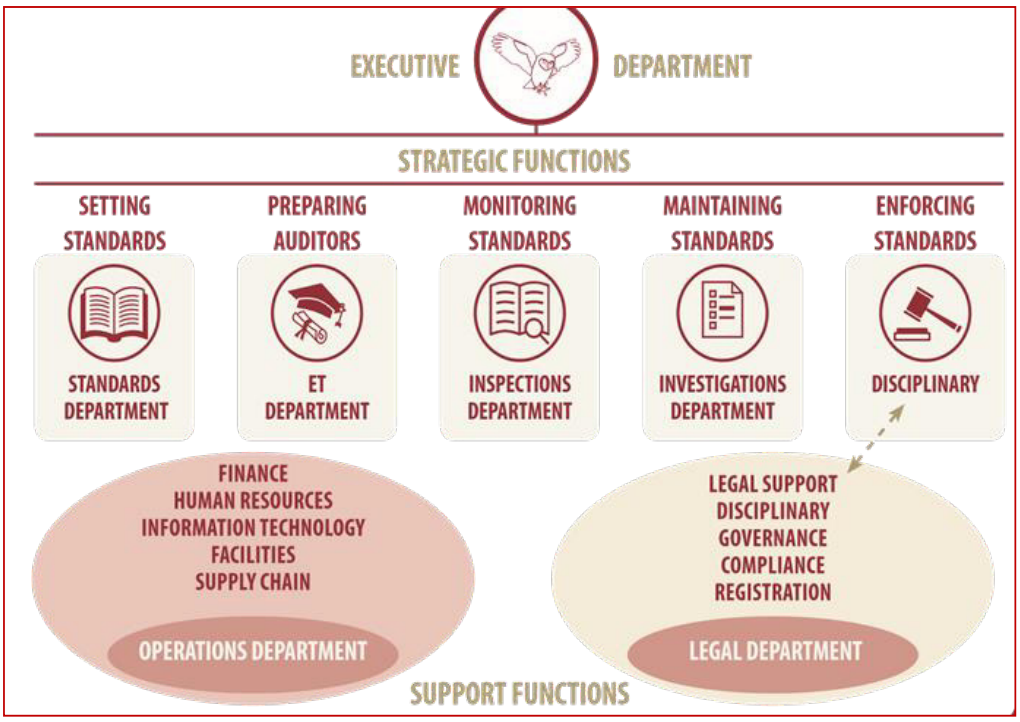
1.5.3 The date on which any fee is payable.

1.5.4 The basis for assurance fees payable as per the APA.

1.5.5 Fees payable for any other service rendered by the IRBA (including administrative fees).

1.5.6 The IRBA may grant an exemption from payment of any fees referred to above.

2. STRUCTURE OF THE IRBA *[Section 14(1)(a)]*



3. CONTACT DETAILS FOR INFORMATION OFFICERS *[Section 14(1)(b)]*

The IRBA's CEO is the regulator's designated Information Officer, in terms of the Act.

In terms of Section 17, the IRBA has designated its Director Legal as a Deputy Information Officer, who shall attend to requests for access to records.

If you wish to make a request for access to IRBA records, your request should be addressed to the Deputy Information Officer. Escalations may be directed to the InformationOfficer.

Information Officer

Name: Imre Nagy

Tel: 087 940 8826

Email: board@irba.co.za

Deputy Information Officer

Name: Rebecca Motsepe

Tel: 087 940 8803

Email: paia@irba.co.za

The IRBA's Information Officer and Deputy Information Officer share the same physical and postal address.

Physical Address	**Postal Address**
Building 2	PO Box 8237
Greenstone Hill Office Park	Greenstone Hill
Greenstone Hill	1616
1609	

Website: www.irba.co.za

4. GUIDE IN TERMS OF SECTION 10 OF THE ACT *[Section 14(1)(c)]*

4.1 A Guide containing information to assist you in understanding how to exercise your rights under PAIA ("the Guide") is available in all the South African official languages. The Guide is currently available on the following site:

Guide on How to Use the Promotion of Access to Information

4.2 If you have any queries, or need a copy of the Guide, please contact the Information Regulator directly at:

The Information Regulator (South Africa)

JD House, 27 Stiemens Street, Braamfontein, Johannesburg, 2001

P.O Box 31533, Braamfontein, Johannesburg, 2017

Complaints email: complaints.IR@justice.gov.za

General enquiries email: inforeg@justice.gov.za.

5. PROCEDURES TO REQUEST ACCESS TO INFORMATION/RECORDS *[Section 14(1)(d)]*

5.1 Any person, whether natural or juristic, may make a request under the Act for access to information.

5.2 The requester may make a request on his/her behalf or on behalf of any other person.

5.3 The requester must use the prescribed form, attached hereto under Part C and marked ***Form A***, to makea request for access to information.

5.4 The request must include the following minimum information:

INFORMATION REQUIRED	DESCRIPTION
Details of the requester	Enough information about the requester so as to ensure that the requester is easily identifiable. The information should include the requester's contact details, i.e. *postal address, email address, fax and/or telephone number.*
Details of the record requested	Enough information about the record to make it reasonably easy to identify.
Manner of access to the	A description of the form or manner in which the record

record	should be provided or made accessible.
Manner in which to inform the requester of access	The manner in which the requester wishes to be informed about the IRBA's decision in relation to the request.
Language choice	The language in which the requester wishes to receive the requested record[1].
Capacity of the authorised person making the request	When a request is made on behalf of someone else, proof of the capacity in which the request is made and/or authority to make such a request.

5.5 Requesters who are unable to read or write can make verbal requests to the Deputy Information Officer, who shall complete Form A on behalf of the requester.

5.6 The request must be directed to the Deputy Information Officer, whose contact details are set out in paragraph 3 above.

5.7 The request may either be hand-delivered, posted, faxed or sent via email.

5.8 Telephonic and informal requests will only be accepted in respect of records set out in paragraph 7 below.

5.9 The information on the prescribed form must be provided to the satisfaction of the Deputy Information Office or Information Officer, failing which, the request will be delayed until such time that the information is complete.

5.10 A requester is required to pay the fee set out under Section B, in respect of a request for a record.

5.11 Notwithstanding the request fee payable in terms of paragraph 5.10 above, the requester may, if granted access to the requested record, be required to pay additional fees set out in Section B for the reproduction, search and preparation of the records or transactions related to the record that has been requested.

5.12 The Deputy Information Officer will notify the requester to pay the prescribed fee (if any) before any further processing of the request.

5.13 The Deputy Information Officer will inform the requester of the IRBA's decision within 30 days after receipt of the request, which period may be extended, on notice to the requester, by a further period not exceeding 30 days.

5.14 The period within which the Deputy Information Officer has to inform the requester of the decision will be subject to such extension, over and above the period mentioned in paragraph 5.13 above, as may be required to give a third party a chance to make representations to the Deputy Information Officer where the record requested is with regard to the records of that third party.

5.15 The time periods prescribed by the Act will not commence until such time as the Deputy Information Officer and/or the Information Officer is satisfied that all pertinent information has been furnished to the IRBA by the requester.

5.16 Notwithstanding a request for access to any record listed in paragraph 6 below, access to the requested record, or any part thereof, may be refused on the grounds set out in the Act.

[1] Notwithstanding the language of preference indicated, the IRBA will only furnish the record in the requested language, if the record exists in that language.

6. SUBJECTS ON WHICH THE IRBA HOLDS RECORDS AND THE CATEGORIES OF RECORDS HELD *[Section 14(1)(d)]*

The IRBA holds the following records in its possession:

6.1 **Executive**

SUBJECTS	CATEGORIES OF INFORMATION
Board and Board Meetings	Particulars of Board members.
	Agendas.
	Attendance registers.
	Decisions taken.
	Minutes of meetings.
	Opinions obtained.
	Correspondence, memoranda, submissions.
Committees of the Board and Committee Meetings	Particulars of committee members.
	Agendas.
	Attendance registers.
	Decisions taken.
	Minutes of meetings.
	Opinions obtained.
	Correspondence, memoranda, submissions.
Newsletters	IRBA Newsletter.
Website	**Member search** – how to search for RAs and registered audit firms.
	Legal – APA, disciplinary rules, rules regarding improper conduct, Policy regarding Postponements of Disciplinary Hearings.
	Investigations – how to lodge a complaint
	Registration – how to register as an RA and as a firm, including application forms, how to apply as a tax practitioner for recognition, how to change status to assurance.
	Education & Transformation – general information on the path to becomingan RA and how to register as an RCA, including assessment details and regulations.
	Inspections – details on various aspects of inspections, including administrative matters, communications and Public Inspections Reports.
	Auditing Pronouncements – Status and Authority of Auditing Pronouncements. CFAS Due Process Policy, other auditing pronouncements, exposure drafts, meeting dates, illustrative regulatory reports, communiques and the strategy, industry specific guides, practice alerts and Audit Quality Indicators information.

	Rules Regarding Improper Conduct and the Code of Professional Conduct for Registered Auditors (Revised 2014) and communiques.
	The Tenure Rule, including communiques.
	Mandatory Audit Firm Rotation Rule, including communiques.
	Reportable Irregularities – Reportable Irregularities Guide (2006), template letters and communiques.
	News – various items of interest, including press reports and electronic copies of IRBA News.
	Contact details for the directorate.
	Requirements for continued education, training and professional development – the 2014 Continued Professional Development (CPD) Policy and the new CPD Policy.
	Audit Development Programme (ADP) webpage, containing the following information: • The path to become an RA; • The ADP process; • Assessment details; and • Application forms.
	Manual on the Accreditation Model of professional bodies.
	Details of accredited professional bodies.
	Application form for the accreditation of professional bodies.
	POPI Act – • Protection of Personal Information Act 4 of 2013 • Regulations relating to the Protection of Personal Information • Processing Notices: Board Secretariat Processing Notice; HR Processing Notice; Procurement and Marketing Processing Notice; Processing Notice for Auditors and Professional Bodies; Security Processing Notice • Operator Agreements • Data Subject Forms
Electronic Manual of Information for Registered Auditors Issued by the IRBA	APA
	Changes to the Accreditation Model and accreditation requirements.
	ADP
	Disciplinary rules.
	Policy regarding Postponements of Disciplinary Hearings.
	Rules Regarding Improper Conduct.
	Code of Professional Conduct.
	Inspections.
	Auditing standards, auditor ethics and reportable irregularities.
	Guidance on signing authority, naming conventions and stationery.
	General circulars.
Annual Reports	Board members and Executive information.
	Message from the Minister of Finance.

	Foreword by the Chairman of the Board.
	CEO's overview.
	Strategic overview.
	Organisational structure.
	Statistics – RAs, trainee accountants.
	Feedback from statutory committee chairmen.
	Audited annual financial statements.
Integrated Reports	Board responsibility.
	CEO's overview.
	Strategic overview.
	Material issues.
	Board members and Executive information.
	Feedback on activities in departments.
	Financial highlights.
	Future activities of the IRBA.
Finances of the IRBA	Budgets.
	Accounting records.
	Management accounts.
	Fixed asset register.
	Bank account particulars.
Procurement/ SupplyChain	Bid documents.
	Requests for quotations and responses thereto.
	Bid opening registers.
	Minutes of the various Bid Committee meetings.
	Letters to unsuccessful bidders.
	Letters of award for various contracts.
Administration	Insurance policies.
	Organisational policies.
	Lease agreements.
	Tax status of the IRBA and returns.
	Particulars of suppliers of various services rendered contracts and licenceagreements.
Library and Archive Material	Bound copies of various professional journals.
	Files containing information on legislation that might impact the IRBA or theprofession.
	Working files regarding amendments to the APA, the Code of ProfessionalConduct and the Disciplinary Rules.
	Miscellaneous photographs of people and places of relevance to the IRBA'shistory.
	A slim volume on the history of the IRBA, as published on the 50th anniversary of the PAAB.

Human Resources	Personal particulars of individual staff members, salaries and benefitspayable, travel claims, disciplinary profile.
	Pension fund rules.

6.2 **Investigations**

Complaints	Complaints from members of the public and supporting documentation.
	Correspondence between the IRBA and complainants.
Investigations	Correspondence between the IRBA and RAs.
	Documents relevant to investigations.
	Internal documentation.
	Charge sheets.
	Imposition of sanctions through monetary fines.
	Invoices to RAs for monetary fines.
Investigating Committee	Letters of appointment for committee members.
	Particulars of the committee members.
	Meeting agendas.
	Attendance registers.
	Minutes of committee meetings.
	Decisions taken.
Disciplinary Advisory Committee / Enforcement Committee	Particulars of the committee members.
	Meeting agendas.
	Attendance registers.
	Minutes of committee meetings.
	Decisions taken.

6.3 **Registry/Disciplinary Hearings/Reportable Irregularities and Legal**

SUBJECT	**CATEGORIES OF INFORMATION**
Registered Firms	Registered auditors linked to firms.
	Applications for the registration of new firms and branches.
	Contact details.
	Correspondence.
	Practice numbers.
	Share registers and certificates.
	COR39s.
	Firm classification by race, size and assurance status.
	Branches of firms.
	Assurance Work Declarations.
	Firm name changes.

	Statistical information.
Individual RAs	Firms in which RAs are employed and/or are partners.
	Contact details.
	Registration numbers.
	Applications for the registration and the amendment of the status toassurance.
	Correspondence.
	Assurance status.
	Annual returns.
	Request for the appointment of an RA by a third party.
	Age, race, gender and assurance information.
	Surname changes.
	Statistical information.
Disciplinary Processes	Charge sheets.
	Pleas.
	Notification of hearings.
	Evidence bundles.
	Correspondence between the parties.
	Internal correspondence.
	Disclosures by Disciplinary Committee members.
	Hearing attendance registers.
	Outcomes of hearings.
	Hearing transcripts.
	Minute books.
Disciplinary Committee	Letters of appointment for committee members.
	Particulars of the committee members.
	Meeting agendas (other than hearings).
	Minutes of committee meetings other than hearings.
	Code of conduct signed by Disciplinary Committee members.
Holding Out	Particulars of persons who are allegedly holding themselves out or previously held themselves out to be RAs in contravention of Section 41 of the APA, as well as correspondence and documentation relating thereto.
Reportable Irregularities	Particulars of all reportable irregularities reported to the IRBA by RAs in terms of Section 45 of the APA and correspondence relating thereto.
	List of stakeholders.
	Correspondence with stakeholders.
Litigation *[litigation instituted by or against theIRBA]*	Court papers and processes.
	Internal and external correspondence.
	Evidence bundles/records.

	Court judgements and/or orders.
Legal	Various legal opinions and research papers.
Debtors	Memorandum of Instruction.
	Invoices and statements.
	Internal and external correspondence.

6.4 **Education, Training and Professional Development**

SUBJECT	CATEGORIES OF INFORMATION
ADP	Career guidance information on how to become an RA.
	Application forms to register on the ADP.
	Guidance on the ADP.
	ADP Competency Framework.
	Registered candidate auditors.
	Oversight registered auditors.
	Contact details.
	Firms in which registered candidate auditors are completing the ADP.
	Relevant correspondence with registered candidate auditors.
	Applications for registration.
	Confirmation of completion.
	Six-monthly reports and Portfolios of Evidence (PoEs).
	Assessment of PoEs by the panel.
	Firm monitoring reports.
	Career guidance information on how to become an RA.
	Application forms to register on the ADP.
Public Practice Examination	Candidates' results (pass/fail).
Accreditation	Accreditation Model, including the Competency Framework.
	Details of the accredited professional body.
	Application form for accreditation.
	Applications for accreditation and monitoring submissions by professionalbodies.
	Relevant correspondence with professional bodies.
Continuing Professional Development	CPD Policy (the 2014 and 2020 policies, respectively).
	Guidance to the 2020 CPD Policy.
	Relevant correspondence with RAs selected for the monitoring of CPD.

Training	Details of candidates completing, or those who have completed, their training contracts.
Critical Skills	Relevant correspondence with foreign nationals relating to their confirmation of intention to study towards becoming an RA, for the purposes of visa applications.
Education Committee and Sub-committees	Letters of appointment for committee members.
	Particulars of committee members.
	Agendas.
	Attendance registers.
	Decisions taken.
	Minutes of meetings.

6.5 **Inspections**

SUBJECT	CATEGORIES OF INFORMATION
Individual RAs and Firms	Inspection dates.
	Inspection files.
	Inspection reports.
	Risk/Business Intelligence information.
	Remedial action information.
Workshops on Inspections and Auditing Standards	Handouts and slides.
Inspections Committee	Letters of appointment for committee members.
	Particulars of committee members.
	Agendas.
	Attendance register.
	Decisions taken.
	Minutes of meetings.

6.6 **Standards**

SUBJECT	CATEGORIES OF INFORMATION
Auditing Pronouncements Issued	Status and Authority of Pronouncements and Due Process Policy.
	Committee for Auditing Standards Strategy and membership.
	IAASB Handbook of International Quality Control, Auditing, Review, Other Assurance, and Related Services Pronouncements – Volumes I and II.
	South African Standards on Assurance Engagements.
	South African Auditing and Assurance Engagements Practice Statements.
	Guides.
	Staff Audit Practice Alerts.

	Illustrative auditor's and assurance reports.
	Communiques.
	Exposure drafts issued for comment and comment letters received.
Ethics Pronouncements Issued	Rules Regarding Improper Conduct.
	IRBA Code of Professional Conduct for Registered Auditors.
	Committee for Auditor Ethics membership.
	IESBA Handbook of the International Code of Ethics for ProfessionalAccountants.
	Communiques.
	Exposure drafts issued for comment and comment letters received.
Reportable Irregularities	Reportable Irregularities Guide.
	Template letters.
Committee for AuditingStandards and Committee for Auditor Ethics	Letters of appointment for committee members.
	Particulars of committee members.
	Agendas.
	Attendance register.
	Decisions taken.
	Minutes of meetings.

6.7 **Other**

SUBJECT	CATEGORIES OF INFORMATION
Various Records Held in Accordance with Legislative Requirements	Auditing Profession Act 26 of 2005, as amended.
	Public Finance Management Act 1 of 1999
	Employment Equity Act 55 of 1998, as amended.
	Basic Conditions of Employment Act 75 of 1997, as amended.
	Skills Development Act 97 of 1998, as amended.
	Unemployment Insurance Fund Act 63 of 2001, as amended.
	Unemployment Insurance Contributions Act, No. 4 of 2002, as amended.
	Occupational Health and Safety Act 85 of 1993, as amended.
	Broad-Based Black Economic Empowerment Act 53 of 2003, as amended.

6.8 **Information Related to POPIA**

In terms of POPIA the IRBA is required to provide Data Subjects[2] with a description of the personal information which we process, why it is processed, and who it may share this information with, which detail is set out below:

[2] The individual or juristic person owning personal information.

6.8.1 **Personal information processed by the IRBA**

The type of personal information that is processed by the IRBA will depend on the purpose for which it is collected.

The IRBA will disclose to data subjects why the personal information is being collected and will process the personal information for that purpose only, which is done under specific and detailed processing notices housed on the IRBA website.

Below is a listing of the personal information that is processed by the IRBA, including the category of data subjects that it belongs to. The information provided under this section refers to broad categories of information and is not exhaustive.

Natural persons	Names; contact details; physical and postal addresses; date of birth; ID number; tax related information; nationality; gender; confidential correspondence.
Juristic persons / entities	Names of contact persons; names of legal entities; physical and postal addresses and contact details; financial information; registration numbers; founding documents; tax related information; authorised signatories; details relating to the management and ownership of entities
Foreign persons / entities	Names; contact details; physical and postal, financial information addresses; date of birth; passport numbers; tax related information; nationality; gender; confidential correspondence; registration numbers; founding documents; tax related information; authorised signatories, details relating to the management and ownership of entities
RA's	Natural persons: names; contact details; physical and postal addresses; date of birth; ID numbers; tax related information; nationality; gender; confidential correspondence, employment history, qualifications, criminal behaviour and/or criminal records
Audit Firms	Juristic persons / entities: names of contact persons; name of legal entity; physical and postal address and contact details; financial information; registration number; founding documents; tax related information; authorised signatories; details relating to the management and ownership of entities
Board Members, Executives, Committee members, Employees and related parties	Names, contact details; physical and postal addresses; date of birth, ID number gender, pregnancy; marital status; race, age, language, education information; financial information; employment history; next of kin; children's name, gender, age, physical and postal address; opinions, criminal behaviour and/or criminal records; well-being; external commercial interests; medical information

Website end-users / Application end-users	Names, electronic identification data: IP address; log-in data, cookies, electronic localization data; cell phone details, GPS data

6.8.2 **Sharing of personal information**

The IRBA may supply personal Information to the following potential recipients, which list is not exhaustive:

a) IRBA Board and Committees;

b) IRBA Management;

c) IRBA Employees;

d) IRBA Operators;

e) IRBA Stakeholders;

f) IRBA Executive Authority;

g) Regulators and governmental bodies; and

h) Other third-party recipients

6.8.3 **Cross border exchanges**

The IRBA may disclose personal information processed by it to any of its associate entities or third-party service providers outside of South Africa, with whom it engages in business or whose services or products it elects to use, including cloud services hosted in international jurisdictions.

Personal information may also be disclosed where the IRBA has a legal duty or a legal right to do so.

The IRBA will, in this regard, endeavour to enter into written agreements to ensure that other parties comply with the POPIA and the IRBA's confidentiality and privacy requirements.

6.8.4 **General description of information security measures**

IRBA employs appropriate, reasonable technical and organisational measures to prevent loss of, damage to, or unauthorised destruction of personal information and unlawful access to or processing of personal information. These measures include:

a) Firewalls;

b) Virus protection software and update protocols;

c) Logical and physical access control;

d) Secure setup of hardware and software making up the IRBA information technology infrastructure; and

Outsourced service providers who are contracted to implement security controls and/or provide secure records storage facilities.

6.8.5 **Requests**

Data Subjects have the right to:

a) request the correction, deletion or destruction of their personal information, in the prescribed form, which form is attached hereto attached hereto under part C and marked Form 2.

b) object to the processing of their personal information using the prescribed form, attached hereto under part C and marked Form 2.

Any request for access to personal information as per the provisions of POPIA, must be made in accordance with the provisions set out under this PAIA Manual. (See paragraph 5 above)

7. AUTOMATIC DISCLOSURE IN TERMS OF SECTION 15 OF THE ACT

The following categories of information are automatically available from the IRBA, without a person having to formally request access in terms of the Act.

7.1 Executive

Information	Cost
Manual of Information (electronic copy)	Free of charge
IRBA News	Free of charge
Annual Reports and Integrated Reports	Free of charge

7.2 Legal

Information	Cost
Membership registers (extract from)	Free of charge
Firm register (extract from)	Free of charge
Letters of confirmation of registration	Free of charge
Reportable Irregularities Guide and template letters	Free of charge

7.3 Education and Training

Information	Cost
Accreditation Model	Free of charge
Candidates Guide to ADP and the RA career path	Free of charge
Competency Framework	Free of charge
CPD Policy and Guidance on the application of the CPD Policy	Free of charge

7.4 Standards

Information	Cost
Auditing pronouncements and exposure drafts	Free of charge
Ethics pronouncements and exposure drafts	Free of charge

8. DESCRIPTION OF SERVICES AVAILABLE TO MEMBERS OF THE PUBLIC AND HOW TO GAIN ACCESS TO THESE *[section 14(1)(f)]*

The following services are available to the public from the IRBA:

DEPARTMENT	SERVICE	HOW TO ACCESS THE SERVICE
8.1 Executive	Assistance to members of the public on how to obtain various publications of the *Board (i.e., the Annual Report, the Integrated Report, IRBA News).*	Requests can be made in writing; alternatively approach the office directly or access these on the IRBA website.
8.2 Legal	Assistance to members of the public with enquiries of a general nature regarding the registration status of RAs and RA firms.	Enquiries can be made verbally in person or telephonically. Alternatively, enquiries may be made in writing or information can be accessed on the IRBA website.
	The prosecution of complaints of improper conduct by RAs.	Disciplinary hearings are open to the public. Dates of scheduled hearings can be accessed on the IRBA website.
	Holding out complaints	Any RA, firm, member of the public, an association or an organisation may**, in writing,** lodge a complaint if they believe anyone who is not registered as an auditor is holding out as such
	Assistance to members of the public with queries of a general nature regarding reportable irregularities.	Enquiries can be made verbally in person or in writing via email.
8.3 Investigations	Assistance to members of the public with enquiries of a general nature regarding the conduct of an RA.	Enquiries can be made telephonically or via email.

	The investigation of complaints of improper conduct by RAs.	Any member of the public, an association or an organisation may lodge a complaint against an RA, if they believe that the RA is guilty of improper conduct. This must be by way of an original affidavit. The complaints are then investigated and presented to the Investigations Committee, which deliberates and recommends outcomes to the Enforcement Committee . The Enforcement Committee makes the final decisions on outcomes which are then communicated to the parties concerned.
8.4 Education, Training and professional Development	Assistance to members of the public with enquiries of a general nature regarding education, training and Assessment requirements for registration as an RCA or RA.	Enquiries may be addressed telephonically, in writing, or by accessing the IRBA website.
	Confirmation of intention to study towards and register as an RA for the purposes of visa applications (non-residents).	Requests can only be made in writing by non- resident individuals intending to pursue the RA career path to confirm the stage of the programme they have completed and the remaining requirements to register as an RA, for the purpose of their visa applications.
8.5 Standards	Issue Audit Pronouncements.	Enquiries may be addressed telephonically, by appointment, in writing, or by accessing the IRBA website.
	Assistance to members of the public with enquiries of a general nature regarding auditing standards, auditor ethics (queries regarding the Code of Professional Conduct).	Enquiries may be addressed telephonically, by appointment, in writing, or by accessing the IRBA website.

9. PARTICIPATION IN THE FORMULATION OF THE POLICY/EXERCISE OF POWERS/PERFORMANCE OF DUTIES *[Section 14(1)(g)]*

9.1 The IRBA, with the support of the relevant committees, adopts, develops, issues and prescribes auditing pronouncements that comprise standards of professional competence, rules regarding improper conduct and the Code of Professional Conduct for registered auditors. The IRBA also prescribes Rules.

9.2 Prior to the prescription of the above pronouncements and/or Rules, the IRBA publishes the proposed documents for comments by interested and/or affected parties. It is through this publication process that interested persons may make representations or participate in or influence the formulation of the policy, the exercise of IRBA powers or the performance by the IRBA of its duties.

10. DESCRIPTION OF REMEDIES AVAILABLE IN RESPECT OF AN ACT OR A FAILURE TO ACT BY THE IRBA *[Section 14(1)(h)]*

10.1 The requester may lodge an internal appeal with the IRBA Information officer, where any of the following decisions were taken by the Deputy Information Officer:

10.1.1 A decision not to grant access to a record;

10.1.2 A decision to extend the time period to deal with the request;

10.1.3 Fee charged;

10.1.4 The refusal to grant the requester any part of the record sought; and/or

10.1.5 The refusal to grant the requested access to the record in the requested format.

10.2 The following procedures will apply to appeals:

10.2.1 The requester must complete the relevant appeal Form C, attached hereto under Part C, within 60 days of receiptof the decision sought to be appealed.

10.2.2 After completing the form, the requester must send it to the Information Officer.

10.2.3 The requester may request to be informed of the outcome of the appeal in any manner other than a written reply, for example, telephonically.

10.2.4 The person appealing must supply their contact details.

10.2.5 The Information Officer will respond to the appeal within 10 working days; and if the appealfailed, reasons will be provided in terms of the Act.

10.3 In the event that an internal appeal fails, or the decision set out in 10.1 was taken by the Information Officer, the requester retains the right to approach a court of competent jurisdictions for:

10.3.1 An order reviewing and setting aside the decision of the IRBA; or

10.3.2 In the case of non-compliance by the IRBA, an order compelling the IRBA to comply with the relevant provisions of the Act.

11. OTHER INFORMATION AS PRESCRIBED IN TERMS OF THE ACT *[Section 14(1) (l)]*

There is currently no information available from the Minister of Justice and Constitutional Development, in terms of Section 92 of the Act, to be disclosed hereunder.

12. UPDATING OF THE MANUAL *[Section 14(2)]*

The IRBA will update and publish this Manual as and when required, but at least once a year.

13. AVAILABILITY OF THE MANUAL *[Section 14(3)]*

13.1 This Manual is available in three official languages, namely, English, Afrikaans and isiZulu.

13.2 The Manual is available on the IRBA website or at the IRBA offices.

14. EXEMPTION FROM ANY PROVISION OF SECTION 14 OF THE ACT *[Section 14(5)]*

The IRBA has not been exempted by the Minister of Justice and Constitutional Development from complying with any of the provisions of Section 14 of the Act for either security, administrative or financial reasons.

15. PAYMENT METHOD

15.1 All payments shall be made through deposits in the IRBA's bank account. The banking details will be provided on application.

15.2 No request may be processed unless the request fee, where applicable, has been paid (Section 22(1)).

B. PRESCRIBED FEES FOR RECORDS HELD BY A PUBLIC BODY, AS STIPULATED IN THE CURRENT REGULATIONS TO THE ACT

The fees payable for access to records in terms of Regulation 8 of the PAIA Regulations 2021, are as follows:

Description	Amount
The request fee payable by every requester	R100.00
Photocopy of A4-size page	R1.50 per page or part thereof.
Printed copy of A4-size page	R1.50 per page or part thereof.
For a copy in a computer-readable form on: (i) Flash drive (to be provided by requestor) (ii) Compact disc •If provided by requestor •If provided to the requestor	 R40.00 R40.00 R60.00
For a transcription of visual images per A4-size page	Service to be outsourced. Will depend on quotation from Service provider.
Copy of visual images	
Transcription of an audio record, per A4-size page	R24.00
Copy of an audio record on: (i) Flash drive (to be provided by requestor) (ii) Compact disc •If provided by requestor •If provided to the requestor	 R40.00 R40.00 R60.00
To search for and prepare the record for disclosure for each hour or part of an hour, excluding the first hour, reasonably required for such search and preparation. To not exceed a total cost of	R100.00 R300.00
Deposit: If search exceeds 6 hours	One third of amount per request calculated in terms of items 2 to 8.
Postage, e-mail or any other electronic transfer	Actual expense, if any.

For the purposes of Section 22(2) of the Act, the following applies:

If the IRBA's Information Officer or Deputy Information Officer believes that the collection and reproduction of the requested records will take longer than six hours, a third of the access fee may be payable upfront as a deposit, and the requester will be notified accordingly.

If the record is not provided in the originally requested format, the access fee charged will not exceed the fee that would have been charged had access been granted in the originally requested format.

C: PAIA FORMS

FORM 2 - REQUEST FOR ACCESS TO RECORD
FORM 3 - OUTCOME OF REQUEST AND OF FEES PAYABLE
FORM 4 - LODGING OF AN INTERNAL APPEAL
FORM 5 - LODGING OF A COMPLAINT

FORM 2- REQUEST FOR ACCESS TO RECORD

[Regulation 7.]

Note:					
1.Proof of identity must be attached by the requester.					
2.If requests made on behalf of another person, proof of such authorisation, must be attached to this form.					
TO: The information officer					
(Address)					
E-mail address:					
Fax number:					
Mark with an "X"					
□ Request is made in my own name	□ Request is made on behalf of another person.				
PERSONAL INFORMATION					
Full names:					
Identity number:					
Capacity in which request is made (*when made on behalf of another person*)*:*					
Postal Address:					
Street Address:					
E-mail Address:					
Contact numbers:	Tel. (B):		Facsimile:		
	Cellular:				
Full names of person on whose behalf request is made (*if applicable*)*:*					
Identity number:					
Postal Address:					
Street Address:					
E-mail Address:					
Contact numbers:	Tel. (B):		Facsimile		
	Cellular:				

PARTICULARS OF RECORD REQUESTED *Provide full particulars of the record to which access is requested, including the reference number if that is known to you, to enable the record to be located.* (*If the provided space is inadequate, please continue on a separate page and attach it to this form. All additional pages must be signed.*)	
Description of record or relevant part of the record:	
Reference number, if available:	
Any further particulars of record:	

TYPE OF RECORD (*Mark the applicable box with an "X"*)	
Record is in written or printed form	
Record comprises virtual images (*this includes photographs, slides, video recordings, computer-generated images, sketches, etc*)	
Record consists of recorded words or information which can be reproduced in sound	
Record is held on a computer or in an electronic, or machine-readable form	

FORM OF ACCESS (*Mark the applicable box with an "X"*)	
Printed copy of record (*including copies of any virtual images, transcriptions and information held on computer or in an electronic or machine-readable form*)	
Written or printed transcription of virtual images (*this includes photographs, slides, video recordings, computer-generated images, sketches, etc*)	
Transcription of soundtrack (*written or printed document*)	
Copy of record on flash drive (*including virtual images and soundtracks*)	
Copy of record on compact disc drive (*including virtual images and soundtracks*)	
Copy of record saved on cloud storage server	

MANNER OF ACCESS (*Mark the applicable box with an "X"*)	
Personal inspection of record at registered address of public/private body (*including listening to recorded words, information which can be reproduced in sound, or information held on computer or in an electronic or machine-readable form*)	
Postal services to postal address	
Postal services to street address	
Courier service to street address	
Facsimile of information in written or printed format (*including transcriptions*)	
E-mail of information (*including soundtracks if possible*)	
Cloud share/file transfer	
Preferred language: (*Note that if the record is not available in the language you prefer, access may be granted in the language in which the record is available*)	

PARTICULARS OF RIGHT TO BE EXERCISED OR PROTECTED *If the provided space is inadequate, please continue on a separate page and attach it to this Form. The requester must sign all the additional pages.*	
Indicate which right is to be exercised or protected:	
Explain why the record requested is required for the exercise or protection of the aforementioned right:	

FEES	
a)*A request fee must be paid before the request will be considered.* *b*)*You will be notified of the amount of the access fee to be paid.* *c*)*The fee payable for access to a record depends on the form in which access is required and the reasonable time required to search for and prepare a record.* *d*)*If you qualify for exemption of the payment of any fee, please state the reason for exemption*	
Reason:	

You will be notified in writing whether your request has been approved or denied and if approved the costs relating to your request, if any. Please indicate your preferred manner of correspondence:

Postal address	Facsimile	Electronic communication (*Please specify*)

Signed at ..... this ..... day of ..... 20 .....

.....

Signature of requester / person on whose behalf request is made

.....

FOR OFFICIAL USE

Reference number:	
Request received by: (*state rank, name and surname of information officer*)	
Date received:	
Access fees:	
Deposit (if any):	

.....

Signature of information officer

FORM 3- OUTCOME OF REQUEST AND OF FEES PAYABLE

[Regulation 8.]

Note:
1.If your request is granted the—

(*a*)*amount of the deposit,* (*if any*)*, is payable before your request is processed; and*

(*b*)*requested record/portion of the record will only be released once proof of full payment is received.*

2.Please use the reference number hereunder in all future correspondence.

Reference number: .....

TO:

.....
.....
.....
.....

Your request dated ....., refers.

1.You requested:	
Personal inspection of information at registered address of public/private body (*including listening to recorded words, information which can be reproduced in sound, or information held on computer or in an electronic or machine-readable form*) is free of charge. You are required to make an appointment for the inspection of the information and to bring this Form with you. If you then require any form of reproduction of the information, you will be liable for the fees prescribed in Annexure B.	

OR

2.You requested:

Printed copies of the information (*including copies of any virtual images, transcriptions and information held on computer or in an electronic or machine-readable form*)	
Written or printed transcription of virtual images (*this includes photographs, slides, video recordings, computer-generated images, sketches, etc*)	
Transcription of soundtrack (*written or printed document*)	
Copy of information on flash drive (*including virtual images and soundtracks*)	
Copy of information on compact disc drive (*including virtual images and soundtracks*)	
Copy of record saved on cloud storage server	

3. To be submitted:

Postal services to postal address	
Postal services to street address Courier service to street address	
Facsimile of information in written or printed format (*including transcriptions*)	
E-mail of information (*including soundtracks if possible*)	
Cloud share/file transfer	
Preferred language: (*Note that if the record is not available in the language you prefer, access may be granted in the language in which the record is available*)	

Kindly note that your request has been:

☐ Approved

☐ Denied, for the following reasons:

4. Fees payable with regards to your request:

Item	Cost per A4-size page or part thereof/item	Number of pages/items	Total
Photocopy			
Printed copy			
For a copy in a computer-readable form on: (i) Flash drive •To be provided by requestor	R40.00		
(ii) Compact disc •If provided by requestor •If provided to the requestor	R40.00 R60.00		
For a transcription of visual images per A4-size page	Service to be outsourced. Will depend on the quotation of the service provider		
Copy of visual images			
Transcription of an audio record, per A4-size	R24.00		
Copy of an audio record (i)Flash drive •To be provided by requestor (ii)Compact disc •If provided by requestor •If provided to the requestor	R40.00 R40.00 R60.00		
Postage, e-mail or any other electronic transfer:	Actual costs		
TOTAL:			

5.Deposit payable (if search exceeds six hours):

☐ Yes ☐ No

Hours of search		Amount of deposit (*calculated on one third of total amount per request*)	

The amount must be paid into the following Bank account: Name of Bank: _____

Name of account holder: _____

Type of account: _____

Account number: _____

Branch Code: _____

Reference Nr: _____

Submit proof of payment to:

Signed at ..... this ..... day of ..... 20 .....

.....

Information officer

FORM 4- LODGING OF AN INTERNAL APPEAL

[Regulation 9.]

Reference number: .....

PARTICULARS OF PUBLIC BODY					
Name of public body:					
Name and surname of information officer:					
PARTICULARS OF COMPLAINANT WHO LODGES THE INTERNAL APPEAL					
Full names:					
Identity number:					
Postal address:					
Contact numbers:	Tel. (B):		Facsimile:		
	Cellular:				
E-mail Address:					
Is the internal appeal lodged on behalf of another person?		Yes		No	
If answer is "yes", capacity in which an internal appeal on behalf of another person is lodged: (*Proof of the capacity in which appeal is lodged, if applicable, must be attached.*)					
PARTICULARS OF PERSON ON WHOSE BEHALF THE INTERNAL APPEAL IS LODGED (*If lodged by a third party*)					
Full names:					
Identity number:					
Postal address:					
Contact numbers:	Tel. (B):		Facsimile:		
	Cellular:				
E-mail Address:					
DECISION AGAINST WHICH THE INTERNAL APPEAL IS LODGED (*mark the appropriate box with an "X"*)					
Refusal of request for access:					
Decision regarding fees prescribed in terms of section 22 of the Act:					
Decision regarding the extension of the period within which the request must be dealt with in terms of section 26 (1) of the Act:					
Decision in terms of section 29 (3) of the Act to refuse access in the form requested by the requester:					
Decision to grant request for access:					

GROUNDS FOR APPEAL (*If the provided space is inadequate, please continue on a separate page and attach it to this form, all the additional pages must be signed.*)	
State the grounds on which the internal appeal is based:	
State any other information that may be relevant in considering the appeal:	

You will be notified in writing of the decision on your internal appeal. Please indicate your preferred manner of notification:

Postal address	Facsimile	Electronic communication (*Please specify*)

Signed at ..... this ..... day of ..... 20 .....

.....

Signature of appellant/Third party

.....

FOR OFFICIAL USE **OFFICIAL RECORD OF INTERNAL APPEAL**			
Appeal received by: (*state rank, name and surname of Information officer*)			
Date received:			
Appeal accompanied by the reasons for the information officer's decision and, where applicable, the particulars of any third party to whom or which the record relates, submitted by the information officer:	Yes		
	No		
OUTCOME OF APPEAL			
Refusal of request for access. Confirmed?	Yes No	New decision (*if not confirmed*)	
Fees (Sec 22). Confirmed?	Yes No	New decision (*if not confirmed*)	
Extension (Sec 26 (1)). Confirmed?	Yes No	New decision (*if not confirmed*)	
Access (Sec 29 (3)). Confirmed?	Yes No	New decision (*if not confirmed*)	
Request for access granted. Confirmed?	Yes No	New decision (*if not confirmed*)	

Signed at ..... this ..... day of ..... 20 .....

.....

Relevant authority

FORM 5 - LODGING OF A COMPLAINT

[Regulation 10.]

Note:
1.This form is designed to assist the Requester (hereinafter referred to as "the Complainant") in requesting a review of a public or private body's response or non-response to a request for access to records under the Promotion of Access to Information Act, 2000 (Act No. 2 of 2000) ("PAIA"). Please fill out this form and send it to the Information Regulator or complete the online complaint form available at https://www.justice.gov.za/inforeg/.
2.PAIA gives a member of the public a right to file a complaint with the Information Regulator about any of the nature of complaints detailed in part E of this complaint form.
3.It is the policy of the Information Regulator to defer investigating or to reject a complaint if the Complainant has not first given the public or private body (herein after referred to as "the Body") an opportunity to respond to and attempt to resolve the issue. To help the Body address your concerns prior to approaching the Information Regulator, you are required to complete the prescribed PAIA form and submit it to the Body.
4.A copy of this form will be provided to the Body that is the subject of your complaint. The information you provide on this form, attached to this form or that you supply later, will only be used to attempt to resolve your dispute, unless otherwise stated herein.
5. The Information Regulator will only accept your complaint once you confirm having complied with the prerequisites below.

6.Please attach copies of the following documents, if you have them:
•Copy of the form to the Body requesting access to records; •The Body's response to your complaint or access request; •Any other correspondence between you and the Body regarding your request; •Copy of the appeal form, if your compliant relate to a public body; •The Body's response to your appeal; •Any other correspondence between you and the Body regarding your appeal; •Documentation authorizing you to act on behalf of another person (if applicable); •Court order or court documents relevant to your complaint, if any.
7.If the space provided for in this Form is inadequate, submit information as an Annexure to this Form and sign each page.
TO: The Information Regulator P.O Box 31533 Braamfontein, 2017 E-mail address: inforeg@justice.gov.za Tel number: +27 (0) 10 023 5200

CAPACITY OF PERSON/PARTY LODGING A COMPLAINT
(Mark with an "X")

	Complainant personally
	Representative of complainant
	Third party

PREREQUISITES				
Did you submit request (PAIA form) for access to record of a public/private body?	Yes		No	
Has 30 days lapsed from the date on which you submitted your PAIA form?	Yes		No	
Did you exhaust all the internal appeal procedure against a decision of the Information officer of a public body?	Yes		No	
Have you applied to Court for appropriate relief regarding this matter?	Yes		No	

FOR INFORMATION REGULATOR'S USE ONLY				
Received by: (Full names)				
Position:				
Signature:				
Complaint accepted:	Yes		No	
Reference Number:				
Date stamp				

Postal address	Facsimile	Other electronic communication (*Please specify*)

PART A **PERSONAL INFORMATION OF COMPLAINANT**				
Full names:				
Identity number:				
Postal Address:				
Street Address:				
E-mail Address:				
Contact numbers:	Tel. (B):		Facsimile	
	Cellular			
PART B **REPRESENTATIVE INFORMATION** (*Complete only if you will be represented. A Power of Attorney must be attached if complainant is represented, failing which the complaint will be rejected*)				
Full names of representative:				
Nature of representation:				
Identity number/Registration number:				
Postal Address:				
Street Address:				
E-mail Address:				
Contact numbers:	Tel. (B):		Facsimile	
	Cellular			
PART C **THIRD PARTY INFORMATION** (*Please attach letter of authorisation*)				
Type of body:	Private		Public	
Name of *public/private body:				
Registration number (if any):				
Name, surname and title of person authorised to lodge complaint:				
Postal Address:				
Street Address:				
E-mail Address:				
Contact numbers:	Tel. (B):		Facsimile	
	Cellular			

PART D BODY AGAINST WHICH THE COMPLAINT IS LODGED				
Type of body:	Private		Public	
Name of *public/private body:				
Registration number (if any):				
Name, surname and title of person you dealt with at the public or private body to try to resolve your complaint or request to access of information:				
Postal Address:				
Street Address:				
E-mail Address:				
Contact numbers:	Tel. (B):		Facsimile	
	Cellular			
Reference number given (*if any*):				

PART E COMPLAINT *Tell us about the steps you have taken to try to resolve your complaint* (*Complaints should first be submitted directly to the public body for response and possible resolution; there are limited exceptions*)				
Date on which request for access to records submitted:				
Please specify the nature of the right(s) to be exercised or protected, if a compliant is against a private body:				
Have you attempted to resolve the matter with the organisation?	Yes		No	
If yes, when did you receive it? (Please attach the letter to this application.)				
Did you appeal against a decision of the information officer of the public body?	Yes		No	
If yes, when did you lodge an appeal?				

Have you applied to Court for appropriate relief regarding this matter?			Yes		No
If yes, please indicate when was the matter adjudicated by the Court? Please attach Court Order, if there is any.					
PART F **DETAILED TYPE OF ACCESS TO RECORDS** (*Please select one or more of the following to describe your complaint to the Information Regulator*)					
Unsuccessful appeal: (Section 77A (2) (*a*) or section 77A (3) (*a*) of PAIA)	*I have appealed against the decision of the public body and the appeal is unsuccessful.*				
Unsuccessful application for condonation: (Sections 77A (2) (*b*) and 75 (2) of PAIA)	*I filed my appeal against the decision of the public body late and applied for condonation. The condonation application was dismissed.*				
Refusal of a request for access: (Section 77A (2) (*c*) (i) or 77A (2) (*d*) (i) or 77A (3) (*b*) of PAIA)	*I requested access to information held by a body and that request was refused or partially refused.*				
The body requires me to pay a fee and I feel it is excessive: (Sections 22 or 54 of PAIA)	*Tender or payment of the prescribed fee.*				
	The tender or payment of a deposit.				
Repayment of the deposit: (Section 22 (4) of PAIA)	*The information officer refused to repay a deposit paid in respect of a request for access which is refused.*				
Disagree with time extension: (Sections 26 or 57 of PAIA)	*The body decided to extend the time limit for responding to my request, and I disagree with the requested time limit extension or a time extension taken to respond to my access request.*				
Form of access denied: (Section 29 (3) or 60 (*a*) of PAIA)	*I requested access in a particular and reasonable form and such form of access was refused.*				
Deemed refusal: (Section 27 or 58 of PAIA)	*It is more than 30 days since I made my request and I have not received a decision.*				
	Extension period has expired and no response was received.				
Inappropriate disclosure of a record: (Mandatory grounds for refusal of access to record)	*Records (that are subject to the grounds for refusal of access) have inappropriately/unreasonable been disclosed.*				
No adequate reasons for the refusal of access: (Section 56 (3) (*a*) of PAIA)	*My request for access is refused, and no valid or adequate reasons for the refusal, were given, including the provisions of this Act which were relied upon for the refusal.*				
Partial access to record: (Section 28 (2) or 59 (2) of PAIA)	*Access to only a part of the requested records was granted and I believe that more of the records should have been disclosed.*				

Fee waiver: (Section 22 (8) or 54 (8) of PAIA)	*I am exempt from paying any fee and my request to waive the fees was refused.*	
Records that cannot be found or do not exist: (Section 23 or 55 of PAIA)	*The Body indicated that some or all of the requested records do not exist and I believe that more records do exist.*	
Failure to disclose records:	*The Body decided to grant me access to the requested records, but I have not received them.*	
No jurisdiction (exercise or protection of any rights): (Section 50 (1) (*a*) of PAIA)	*The Body indicated that the requested records are excluded from PAIA and I disagree.*	
Frivolous or vexatious request: (Section 45 of PAIA)	*The Body indicated that my request is manifestly frivolous or vexatious and I disagree.*	
Other: (*Please explain*)*:*		

PART G
EXPECTED OUTCOME

How do you think the Information Regulator can assist you? Describe the result or outcome that you seek.

PART H
AGREEMENTS

The legal basis for the following agreements is explained in the Privacy Notice on how to file your complaint document. In order for the Information Regulator to process your complaint, you need to check each one of the checkboxes below to show your agreement:

☐ *I agree that the information Regulator may use the information provided in my complaint to assist it in researching issues relating to the promotion of the right of access to information as well as the protection of the right to privacy in South Africa. I understand that the Information Regulator will never include my personal or other identifying information in any public report, and that my personal information is still protected by the Protection of Personal Information Act, 2013* (*Act No. 4 of 2013*)*. I understand that if I do not agree, the Information Regulator will still process my complaint.*

☐ *The information in this Complaint Form is true to the best of my knowledge and belief.*

☐ *I authorize the Information Regulator to collect my personal complaint information* (*such as the information about me in this complaint form*) *and use it to process my human rights complaint relating to the right of access to information and / or the protection of the right to privacy.*

☐ *I authorise anyone* (*such as an employer, service provider, witness*) *who has information needed to process my complaint to share it with the information Regulator. The Information Regulator can obtain this information by talking to witnesses or asking for written records. Depending on the nature of the complaint, these records could include personnel files or employer data, medical or hospital records, and financial or taxpayer information.*

☐ *If any of my contact information changes during the complaint process, it is my responsibility to*

inform the Information Regulator; otherwise my complaint could experience a delay or even be closed.

Signed at ..... this ..... day of ..... 20 .....

.....

Complainant/Representative/Authorised person of Third party

RELEVANT POPIA FORMS

FORM 1 – OBJECTION TO THE PROCESSING OF PERSONAL INFORMATION
FORM 2 – REQUEST FOR CORRECTION OF DELETION OF PERSONAL INFORMATION

FORM 1

OBJECTION TO THE PROCESSING OF PERSONAL INFORMATION IN TERMS OF SECTION 11 (3) OF THE PROTECTION OF PERSONAL INFORMATION ACT, 2013 (ACT NO. 4 OF 2013)

REGULATIONS RELATING TO THE PROTECTION OF PERSONAL INFORMATION, 2018

[Regulation 2.]

Note:		
1.Affidavits or other documentary evidence as applicable in support of the objection may be attached.		
2.If the space provided for in this Form is inadequate, submit information as an Annexure to this Form and sign each page.		
3.Complete as is applicable.		
A	**DETAILS OF DATA SUBJECT**	
Name(s) and surname/ registered name of data subject:		
Unique Identifier/ Identity Number		
Residential, postal or business address:		
	Code ( )	
Contact number(s):		
Fax number / E-mail address:		
B	**DETAILS OF RESPONSIBLE PARTY**	
Name(s) and surname/ Registered name of responsible party:		
Residential, postal or business address:		
	Code ( )	
Contact number(s):		
Fax number/ E-mail address:		
C	**REASONS FOR OBJECTION IN TERMS OF SECTION 11 (1) (*d*) to (*f*) (***Please provide detailed reasons for the objection***)**	
Signed at_____ this_____ day of ____ 20___		
		Signature of data subject/designated person

FORM 2

REQUEST FOR CORRECTION OR DELETION OF PERSONAL INFORMATION OR DESTROYING OR DELETION OF RECORD OF PERSONAL INFORMATION IN TERMS OF SECTION 24 (1) OF THE PROTECTION OF PERSONAL INFORMATION ACT, 2013 (ACT NO. 4 OF 2013)

REGULATIONS RELATING TO THE PROTECTION OF PERSONAL INFORMATION, 2018

[Regulation 3.]

Note:
1.Affidavits or other documentary evidence as applicable in support of the request may be attached.
2.If the space provided for in this Form is inadequate, submit information as an Annexure to this Form and sign each page.
3.Complete as is applicable.
Mark the appropriate box with an "x".

Request for:

	Correction or deletion of the personal information about the data subject which is in possession or under the control of the responsible party.
	Destroying or deletion of a record of personal information about the data subject which is in possession or under the control of the responsible party and who is no longer authorised to retain the record of information.

A	**DETAILS OF THE DATA SUBJECT**
Name(s) and surname/ registered name of data subject:	
Unique identifier/ Identity Number:	
Residential, postal or business address:	
	Code ( )
Contact number(s):	
Fax number/E-mail address:	
B	**DETAILS OF RESPONSIBLE PARTY**
Name(s) and surname / registered name of responsible party:	
Residential, postal or business address:	
	Code ( )
Contact number(s):	
Fax number/ E-mail address:	
C	**INFORMATION TO BE CORRECTED/DELETED/ DESTRUCTED/ DESTROYED**

D	REASONS FOR *CORRECTION OR DELETION OF THE PERSONAL INFORMATION ABOUT THE DATA SUBJECT IN TERMS OF SECTION 24 (1) (*a*) WHICH IS IN POSSESSION OR UNDER THE CONTROL OF THE RESPONSIBLE PARTY; and or REASONS FOR *DESTRUCTION OR DELETION OF A RECORD OF PERSONAL INFORMATION ABOUT THE DATA SUBJECT IN TERMS OF SECTION 24 (1) (*b*) WHICH THE RESPONSIBLE PARTY IS NO LONGER AUTHORISED TO RETAIN (*Please provide detailed reasons for the request*)
Signed at _____ this _____ day of ____ 20__	
	.....
	Signature of data subject/designated person

3

BOARD NOTICE 229 OF 2022

Building 2 Greenstone Hill Office Park Emerald Boulevard Modderfontein
PO Box 8237 Greenstone 1616 Johannesburg South Africa
Tel 087 940 8800 **Fax** 087 940 8873 **E-mail** board@irba.co.za
Internet www.irba.co.za

PROPOSED AMENDMENTS TO THE CODE OF PROFESSIONAL CONDUCT FOR REGISTERED AUDITORS

In accordance with the provisions of Section 10(1)(a) of the Auditing Profession Act, 2005 (Act No. 26 of 2005) (the Act), the Independent Regulatory Board for Auditors (IRBA) publishes, pursuant to the provisions of Section 4(1)(c) of the Act, the following for public information and comment:

1. PROPOSED REVISIONS TO THE IRBA CODE RELATING TO THE DEFINITION OF ENGAGEMENT TEAM AND GROUP AUDITS

To ensure that all relevant stakeholders are consulted and to streamline the consultation process, interested and affected stakeholders are invited to submit their written comments to the IRBA by **10 May 2022**.

Please be advised that the Exposure Draft for the proposed revisions to the IRBA Code of Professional Conduct for Registered Auditors (Revised November 2018) relating to the definition of Engagement Team and Group Audits are available and may be downloaded from the IRBA website at https://www.irba.co.za/guidance-to-ras/technical-guidance-for-auditors/exposure-drafts-and-comment-letters.

2. PROPOSED TECHNOLOGY-RELATED REVISIONS TO THE IRBA CODE

To ensure that all relevant stakeholders are consulted and to streamline the consultation process, interested and affected stakeholders are invited to submit their written comments to the IRBA by **23 May 2022**.

Please be advised that the Exposure Draft for the proposed Technology-related revisions to the IRBA Code of Professional Conduct for Registered Auditors (Revised November 2018) are available and may be downloaded from the IRBA website at https://www.irba.co.za/guidance-to-ras/technical-guidance-for-auditors/exposure-drafts-and-comment-letters.

Following the submissions, the IRBA's Committee for Auditor Ethics will then consider the comments received on the proposed amendments. All comments received will be regarded as a public record, unless confidentiality is specifically requested.

Please submit your written comments, in both Word and PDF formats, by email to:

The Director: Standards
Independent Regulatory Board for Auditors
Attention: Mr I Vanker
Email: standards@irba.co.za

For any enquiries, please contact Ms. L du Preez using the abovementioned email address or call her directly on +27 76 425 2690.

Mr I Nagy

Acting Chief Executive Officer

Printed by and obtainable from the Government Printer, Bosman Street, Private Bag X85, Pretoria, 0001
Contact Centre Tel: 012-748 6200. eMail: info.egazette@gpw.gov.za
Publications: Tel: (012) 748 6053, 748 6061, 748 6065

This gazette is also available free online at **www.gpwonline.co.za**