GENERAL NOTICE

NOTICE 1060 OF 2012

INDEPENDENT COMMUNICATIONS AUTHORITY OF SOUTH AFRICA

PURSUANT TO SECTION 34 (5) OF THE ELECTRONIC COMMUNICATIONS ACT 2005, (ACT NO. 36 OF 2005)

HEREBY ISSUES A NOTICE INVITING COMMENTS REGARDING THE DRAFT UPDATE OF THE NATIONAL RADIO FREQUENCY PLAN

1. The Independent Communications Authority of South Africa ("the Authority'), in terms of section 34 (5), of the Electronic Communications Act (Act No. 36 of 2005), hereby gives notice and invites comments on the draft *Update of the National Radio Frequency Plan 2012.*

2. Interested persons are hereby invited to submit written representations, including an electronic version of the representation in Microsoft Word, of their views on the Draft Update of the National Radio Frequency Plan 2012 by no later than 16h00 on Friday, 8th February 2013.

3. Written representations or enquiries may be directed to:

The Independent Communications Authority of South Africa
Pinmill Farm Block A
164 *Katherine Street*
South Africa

Private Bag XI0002
Sandton
2146
Attention:
Mr Manyaapelo Richard Makgotlho
e-mail: rmakgotlho@icasa.org.za

4. All written representations submitted to the Authority pursuant to this notice shall be made available for inspection by interested persons from 11 February 2012 at the ICASA Library or website and copies of such representations and documents will be obtainable on payment of a fee.

5. Where persons making representations require that their representation or part thereof be treated as confidential, then an application in terms of section 4D of the ICASA Act, 2000 (Act No. 13 of 2000) must be lodged with the Authority. Such an application must be submitted simultaneously with the representation on the draft regulations and plan. All confidential material must be pasted onto a separate annexure which is clearly marked as "Confidential". If, however, the request for confidentiality is not granted, the person making the request will be allowed to withdraw the representation or document in question.

Dr SS MNCUBE
CHAIRPERSON

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1. TERMS, DEFINITIONS AND ACRONYMS

1.1 Terms and definitions

adaptive system:	A radiocommunication system which varies its radio characteristics according to channel quality.
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*.
*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.
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.

** (OR): off-route.
* (R): route.

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.
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*.
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*.
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*.
Coordinated Universal Time (UTC):	Time scale, based on the second (SI), as defined in Recommendation ITU-R TF.460-6. (WRC-03) For most practical purposes associated with the Radio Regulations, UTC is equivalent to mean solar time at the prime meridian (0° longitude), formerly expressed in GMT.
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.
emergency position-indicating radiobeacon station:	A *station* in the *mobile service* the *emissions* of which are intended to facilitate search and rescue operations.
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.*
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*.
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.
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	A system of vertical guidance embodied in the *instrument landing*

system glide path:	*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.
inter-satellite service:	A *radiocommunication service* providing links between artificial *satellites*.
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.
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.
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.
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.
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.
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*.
primary radar:	A *radiodetermination* system based on the comparison of reference signals with radio signals reflected from the position to be determined.
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.
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	A service involving the use of *radio astronomy*.

service:	
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.
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*.
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 service:	A *radiocommunication service* for the purpose of *radiodetermination*.
radiodetermination Station:	A *station* in the *radiodetermination service*.
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:	*Radiodetermination* used for purposes other than those of *radionavigation*.
radiolocation service:	A *radiodetermination service* for the purpose of *radiolocation*.
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	A *station* in the *radionavigation service* intended to be used while in

mobile station:	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.
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*.
secondary radar:	A *radiodetermination* system based on the comparison of reference signals with radio signals retransmitted from the position to be determined.
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.
space operation service:	A *radiocommunication service* concerned exclusively with the operation of *spacecraft*, in particular *space tracking, space telemetry* and *space telecommand*.

	These functions will normally be provided within the service in which the *space station* is operating.
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.
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*.
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.*
standard frequency and time signal-satellite service:	A *radiocommunication service* using *space stations* on earth *satellites* for the same purposes as those of the *standard frequency and time signal service*. This service may also include *feeder links* necessary for its operation.
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.
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.
terrestrial station:	A *station* effecting *terrestrial radiocommunication*. In these Regulations, unless otherwise stated, any *station* is a terrestrial station.

1.2 Acronyms

AGA	Astronomy Advantage Act, 2007 (Act No. 21 of 2007)

AMSS	Aeronautical Mobile Satellite Service
ARNS	Aeronautical Radio Navigation Service.
ASDE	Airports Surface Detection Equipment
BFWA	Broadband Fixed Wireless Access
B-GAN	Broadband Global Area Network
BRAN	Broadband Access Network
BSS	Broadcast Satellite Service
BST	Base Station Transmit
BTX	Base Transmit
C band	Frequency band between about 4 and 6 GHz
CAA	Civil Aviation Authority
CB	Citizens' Band.
CCIR	The International Radio Consultative Committee now called ITU-R.
CDMA	Code Division Multiple Access
CEPT	European Conference of Postal and Telecommunications Administrations.
CISPR	The International Radio Interference Committee
CT1	Cordless Telephone System 1.
CT2	Second generation cordless telephones operating to specification MPT1334.
CTCSS	Continuous Tone Controlled Signalling System (or Continuously Tone Controlled Squelch)
dBW	Decibels relative to one Watt of power.
DECT	Digital European Cordless Telecommunication system. ERC Decision ERC/DEC/(94)03 refers.
DF	Duplex Frequency
DME	Distance Measuring Equipment.
DSC	Digital Selective Calling

DSI	Detailed Spectrum Investigation.
DSSS	Direct Sequence Spread Spectrum
DTV	Digital Television
DVB-T	Terrestrial Digital Video Broadcasting
Erp	Equivalent Radiated Power
e.i.r.p	Effective Isotropically Radiated power.
EBU	European Broadcasting Union
EDGE	Enhanced Data Rates for GSM Evolution
EESS	Earth Exploration-Satellite Service
E-GSM	Extended GSM
EMC	Electromagnetic Compatibility
ENG	Electronic News Gathering
ENG/OB	Electronic News Gathering / Outside Broadcasting
EPIRBs	Emergency Position Indicating Radio Beacons.
ERC	European Radiocommunications Committee - the main CEPT committee looking after radio matters.
ERMES	European Radio Messaging System.
ERO	European Radiocommunications Office-a permanent secretariat within the CEPT committee looking after radio matters.
ETS	European Telecommunications Standard.
ETSI	European Telecommunications Standards Institute
FDDA	Field Disturbance and Doppler Apparatus
FHSS	Frequency Hopping Spread Spectrum
FM	Frequency Modulation
FSS	Fixed Satellite Service
FTP	File Transfer Protocol

FWA	Fixed Wireless Access
GAUTRAIN	A high speed train for Gauteng
GLONASS	Global Navigation Satellite System
GMPCS	Global Mobile Personal Communications by Satellite
GMDSS	Global Maritime Distress and Safety System.
GNSS	Global Navigation-Satellite System.
GPRS	General Packet Radio Service
GPS	Global Positioning System - a satellite radio navigation system operated by the US.
GSM	Global System for Mobile communications. Originally Groupe Spécial Mobile. See ERC Decision ERC/DEC/(94)01.
GSM1800	GSM using 1800 MHz frequencies
GSM900	GSM using 900 MHz frequencies
GSM-R	GSM Railways
GSO	Geostationary Orbit
HAP	High Altitude Platform
HDFS	High Density Fixed Service
HDFSS	High Density Fixed Satellite Service
HDTV	High Definition Television
HF	High Frequency (3 to 30 MHz)
HFBC	High Frequency Broadcasting.
HIPERLAN	High Performance Radio Local Area Networks.
HDFS	Hadoop Distributed File System
IARU	International Amateur Radio Union
ICAO	International Civil Aviation Organisation
ICT	Information Communication Technology

IEC	International Electrotechnical Committee
IEEE	Institute of Electrical and Electronic Engineers
IEEE 802.11	IEEE Regulatory Advisory Group on Wireless LANs
IFRB	International Frequency Registration Board, now the Radio Regulations Board of ITU-R.
ILS	Instrument Landing System-aeronautical radio navigation system.
IMO	International Maritime Organisation
LPVS	Low Power Video Surveillance
IMT	International Mobile Telecommunications
ISM	Industrial, Scientific and Medical. The use of radio for non-communication purposes such as microwave heating etc.
ISP	Internet Service Provider
ITU	International Telecommunication Union.
Ka band	Part of the frequency band between about 27 and 40 GHz
Ku band	Part of the frequency band between about 11 and 14 GHz
L band	Frequency band around 1.5 GHz
LAN	Local Area Network
LEOs	Low Earth Orbit satellites
LF	Low Frequency (30 to 300 kHz)
LPVS	Low Power Video Surveillance
MF	Medium Frequency (300 to 3000 kHz)
Mob-87	World Administrative Radio Conference for the Mobile Services, Geneva, 1987.
MoU	Memorandum of Understanding
MPT	Mobile Public Trunking
MSS	Mobile Satellite Service
MTX	Mobile Transmit

MVDS	Multipoint Video Distribution System.
NGSO	Non-geostationary Satellite Orbit
NIB	Non Interference Basis. This means that the service in question must not cause interference to, nor claim protection from interference from, other services.
OB	Outside Broadcast.
PAMR	Public Access Mobile Radio.
PCN	Personal Communication Networks (at 1800 MHz)
PLB	Public Locater Beacons
PMR	Private Mobile Radio.
PMSE	Programme Making and Special Events.
PPDR	Public Protection and Disaster Relief
PSTN	Public Switched Telephone Network
R&D	Research & Development.
RFID	Radio Frequency Identification systems
RLAN	Radio Local Area Network
RNSS	Radio Navigation Satellite Service
RSA	Republic of South Africa
RR	Radio Regulation of the International Telecommunication Union
RTT	Road Transport Telematics
SAB	Services Ancillary to Broadcasting
SABRE	South African Band Replanning Exercise
SAP	Services Ancillary to Programme making
SATFA	South African Table of Frequency Allocation
S-DAB	Satellite Digital Audio Broadcasting
SKA	Square Kilometre Array

SNG	Satellite News Gathering
SRBR	Short Range Business Radio
SRDs	Short Range Devices, formerly referred to as Low Power Devices (LPDs).
SSS	Space Science Service
T-DAB	Terrestrial Digital Audio Broadcasting.
TDD	Time Division Duplex
TDMA	Time Division Multiple Access
TETRA	Trans European Trunked Radio System (now called Terrestrial Trunked Radio).
TFTS	Terrestrial Flight Telecommunications System.
UHF	Ultra High Frequency (300 to 3000 MHz)
UMTS	Universal Mobile Telecommunications System
USAL	Under –serviced area Licensees.
UWB	Ultra Wideband technology
VHF	Very High Frequency (30 to 300 MHz)
VLBI	Very Long Baseline Interferometry.
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
WLL	Wireless Local Loop
WRC	World Radiocommunication Conference.

2. PREAMBLE

2.1 Legislative Framework

The Electronic Communications Act, 2005 (Act No. 36 of 2005), herein after referred to as the Act; provides for the control of the radio frequency spectrum.

In carrying out its functions under the Act and the related legislation, the Authority controls, plans, administers and manages the use and licensing of the radio frequency spectrum in terms of section 30(1) of the Act.

Section 34 of the Act is concerned with the national radio frequency plan (NRFP) and this national radio frequency plan (NRFP 2012) has been prepared under Section 34 of the Act.

The national radio frequency plan allocates the Electromagnetic Spectrum to Radio Services in the Frequency Bands between 8.3 kHz and 3000 GHz. SATFA is based on the provisions of the ITU – R Radio Regulations resulting from various World Radiocommunication Conferences, including the WRC 2012, convened by the International Telecommunication Union (ITU).

All frequency assignments must be in accordance with the current version of the national radio frequency plan.

This revision of the national radio frequency plan incorporates the decisions taken by World Radiocommunications Conferences (WRC), including up to WRC 2012 that was held in Geneva in February 2012. The revision reflects the subsequent 2012 version of the ITU Radioregulations, including the frequency allocations relevant to Region 1 and associated footnotes. It also includes updates on the Table of Frequency Allocations extending up to 3000 GHz, South African National Footnotes and corrections of typographical errors of previous editions of the national radio frequency plan (previously termed the South African Table of Frequency Allocations). The revised NRFP further reflects agreements taken at regional level including that of the African Union (AU) and the Southern African Development Community (SADC).

The Authority consulted with senior officials in the Department ofCommunications to incorporate the radio frequency spectrum allocated by the Minister for use by security services taking into account the Government's current and planned use of radio frequency spectrum, including but not limited to, civil aviation, and aeronautical services and scientific research. This updated version of the NRFP incorporates the outcome of that consultation.

A document containing ITU – R and all other relevant Resolutions and Recommendations referred to in this document can be found on the Authority's website. This document contains a list of all ITU – R Footnotes for information purposes.

The pattern of radio use is not static as it is continuously evolving to reflect the many 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 continuous reviews.

In view of the above, it is the intention of the Authority to issue new editions of the national radio frequency plan annually, taking account the introduction of new radiocommunication services,the phasing out of older services and the pressure placed on this limited resource.

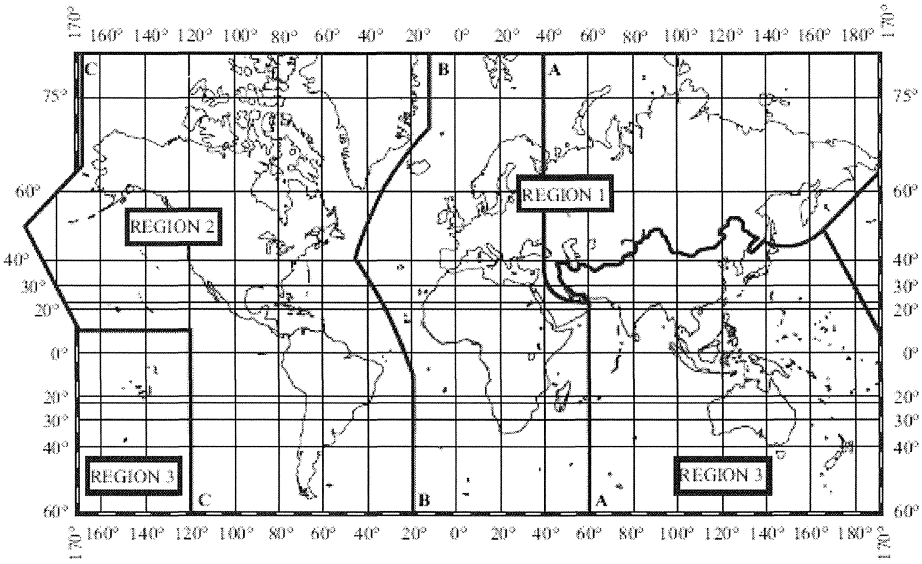
The following changes have been implemented in NRFP 2012:

- National footnotes have been revised.
- The decisions taken by World Radio Communications Conferences 2012 as agreed to by the Republic have been reflected.
- The Astronomy Geographic Advantage Act, 2007 (Act No. 21 of 2007) covered in a separate chapter in view of the award of the Square Kilometre Array (SKA) to South Africa.
- Updated ISM frequency bands in line with GG No. 34172, dated 31 March 2011(Radio Frequency Spectrum Regulations and as amended from time to time).

Added new maritime, aeronautical allocations below 20 MHz and new satellite allocations above 70 GHz.

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:



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 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 appears in the Radio Regulations of the ITU.

The Table of Frequency Allocations covers the frequency range 8.3 kilohertz (kHz) to 3000 Gigahertz. It lists for each frequency range the types of radiocommunications 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

The ITU Radio Regulations divides the spectrum into frequency bands with the allocation of primary and secondary services. Services with the names printed in "capitals" (example: FIXED) are "primary" services; and those with the names printed in "normal characters" (example: Mobile) are "secondary" services.
Secondary services are on a non-interference basis (NIB) to the primary services. 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 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 table below 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 Spectrum usage

This column indicates the range of frequencies associated with services currently used in South Africa (both primary and secondary).
The footnotes from Article 5 of the ITU Radio regulations that are applicable to South Africa are included.

The national footnote references are indicated as 'NF' and appear in the table on the same basis as the ITU footnotes.

2.3.3 Column 3 – Typical Applications

This column indicates frequency utilisation for existing or new systems relating to the South African allocations. It is not an all-inclusive list of applications, but serves as a quick reference of spectrum availability for service/equipment applications. The blanks on the typical applications and comments column mean that the Authority does not have records of any such typical applications.

2.3.4 Column 4 – Notes and comments

This column indicates items such as the following: Government Gazette Notices pertinent to specific frequency bands, future requirements in specific bands, and ITU Recommendations which require implementation.

2.3.5 ITU and National Footnotes

The ITU footnotes that are applicable to Region 1 and the South African National Footnotes are at the back of the NRFP.

2.3.6 Frequencies

Frequencies are expressed as follows:

- 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 3000 GHz.

Table 1: Band Segmentation

Symbols	Frequency Range
VLF	9 kHz – 30 kHz
LF	30 kHz – 300 kHz
MF	300 kHz – 3 MHz
HF	3 MHz – 30 MHz
VHF	30 MHz – 300 MHz
UHF	300 MHz – 3 GHz
SHF	3 GHz – 30 GHz
EHF	30 GHz - 300 GHz
	300 GHz – 3000 GHz

2.4 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
Pin Mill Farm
164 Katherine Street
Sandton
2146
Phone: +27 11 566 3000
Fax: +27 11 566 3292
URL: http://www.icasa.org.za
E-mail: info@icasa.org.za

3. Table of frequency allocations

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Comments
Below 8.3 kHz (Not allocated) 5.53 5.54	**Below 8.3 kHz** (Not allocated) 5.53 5.54		
8.3-9 kHz METEOROLOGICAL AIDS 5.54A 5.54B 5.54C	**8.3-9 kHz** METEOROLOGICAL AIDS 5.54A 5.54B 5.54C		
9-11.3 kHz METEOROLOGICAL AIDS 5.54A RADIONAVIGATION	**9-11.3 kHz** METEOROLOGICAL AIDS 5.54A RADIONAVIGATION	Nav. Aids Inductive Loop Systems (9 – 135 kHz)	GG No. 34172, dated 31 March 2011 (Annex B) as is or amended
11.3-14 kHz RADIONAVIGATION	**11.3-14 kHz** RADIONAVIGATION	Nav. Aids Inductive Loop Systems (9 – 135 kHz)	GG No. 34172, dated 31 March 2011 (Annex B) as is or amended
14-19.95 kHz FIXED MARITIME MOBILE 5.57 5.55 5.56	**14-19.95 kHz** FIXED MARITIME MOBILE 5.57 5.56	Inductive Loop Systems (9 – 135 kHz)	GG No. 34172, dated 31 March 2011 (Annex B) as is or amended
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)	GG No. 34172, dated 31 March 2011 (Annex B) as is or amended
20.05-70 kHz	**20.05-70 kHz**		

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Comments
FIXED MARITIME MOBILE 5.57 5.56 5.58	FIXED MARITIME MOBILE 5.57 5.56	Inductive Loop Systems (9 – 135 kHz)	GG No. 34172, dated 31 March 2011 (Annex B) as is or amended
70-72 kHz RADIONAVIGATION 5.60	**70-72 kHz** RADIONAVIGATION 5.60	Nav. Aids Inductive Loop Systems (9 – 135 kHz)	GG No. 34172, dated 31 March 2011 (Annex B) as is or amended
72-84 kHz FIXED MARITIME MOBILE 5.57 RADIONAVIGATION 5.60 5.56	**72-84 kHz** FIXED MARITIME MOBILE 5.57 RADIONAVIGATION 5.60 5.56	Nav. Aids Inductive Loop Systems (9 – 135 kHz)	GG No. 34172, dated 31 March 2011 (Annex B) as is or amended
84-86 kHz RADIONAVIGATION 5.60	**84-86 kHz** RADIONAVIGATION 5.60	Nav. Aids Inductive Loop Systems (9 – 135 kHz)	GG No. 34172, dated 31 March 2011 (Annex B) as is or amended
86-90 kHz FIXED MARITIME MOBILE 5.57 RADIONAVIGATION 5.56	**86-90 kHz** FIXED MARITIME MOBILE 5.57 RADIONAVIGATION 5.56	Nav. Aids Inductive Loop Systems (9 – 135 kHz)	GG No. 34172, dated 31 March 2011 (Annex B) as is or amended
90-110 kHz RADIONAVIGATION 5.62 Fixed	**90-110 kHz** RADIONAVIGATION 5.62 Fixed	Nav. Aids	

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Comments
5.64	5.64	Inductive Loop Systems (9 – 135 kHz)	GG No. 34172, dated 31 March 2011 (Annex B) as is or amended
110-112 kHz FIXED MARITIME MOBILE RADIONAVIGATION 5.64	**110-112 kHz** FIXED MARITIME MOBILE RADIONAVIGATION 5.64	Inductive Loop Systems (9 – 135 kHz)	GG No. 34172, dated 31 March 2011 (Annex B) as is or amended
112-115 kHz RADIONAVIGATION 5.60	**112-115 kHz** RADIONAVIGATION 5.60	Nav. Aids Inductive Loop Systems (9 – 135 kHz)	GG No. 34172, dated 31 March 2011 (Annex B) as is or amended
115-117.6 kHz RADIONAVIGATION 5.60 Fixed Maritime mobile 5.64 5.66	**115-117.6 kHz** RADIONAVIGATION 5.60 Fixed Maritime mobile 5.64	Nav. Aids Inductive Loop Systems (9 – 135 kHz)	GG No. 34172, dated 31 March 2011 (Annex B) as is or amended
117.6-126 kHz FIXED MARITIME MOBILE RADIONAVIGATION 5.60 5.64	**117.6-126 kHz** FIXED MARITIME MOBILE RADIONAVIGATION 5.60 5.64	Nav. Aids Inductive Loop Systems (9 – 135 kHz)	GG No. 34172, dated 31 March 2011 (Annex B) as is or amended
126-129 kHz RADIONAVIGATION 5.60	**126-129 kHz** RADIONAVIGATION 5.60	Nav. Aids Inductive Loop Systems (9 – 135 kHz)	GG No. 34172, dated 31 March 2011 (Annex B)

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Comments
			as is or amended
129-130 kHz FIXED MARITIME MOBILE RADIONAVIGATION 5.60 5.64	**129-130 kHz** FIXED MARITIME MOBILE RADIONAVIGATION 5.60 5.64	Nav. Aids Inductive Loop Systems (9 – 135 kHz)	GG No. 34172, dated 31 March 2011 (Annex B) as is or amended
130-135.7 kHz FIXED MARITIME MOBILE 5.64 5.67	**130-135.7 kHz** FIXED MARITIME MOBILE 5.64	Inductive Loop Systems (9 – 135 kHz)	GG No. 34172, dated 31 March 2011 (Annex B as is or amended)
135.7-137.8 kHz FIXED MARITIME MOBILE Amateur 5.67A 5.64 5.67 5.67B	**135.7-137.8 kHz** FIXED MARITIME MOBILE Amateur 5.67A 5.64	Licence Class A1	GG No. 34172, dated 31 March 2011 (Annex I) as is or amended
137.8-148.5 kHz FIXED MARITIME MOBILE 5.64 5.67	**137.8-148.5 kHz** FIXED MARITIME MOBILE 5.64		
148.5-255 kHz BROADCASTING 5.68 5.69 5.70	**148.5-160 kHz** BROADCASTING		
	160-200 kHz FIXED 5.68		

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Comments
	200-255 kHz AERONAUTICAL RADIONAVIGATION 5.70		
255-283.5 kHz BROADCASTING AERONAUTICAL RADIONAVIGATION 5.70 5.71	**255-283.5 kHz** AERONAUTICAL RADIONAVIGATION 5.70	Nav. Aids	
283.5-315 kHz AERONAUTICAL RADIONAVIGATION MARITIME RADIONAVIGATION (radiobeacons) 5.73 5.74	**283.5-315 kHz** AERONAUTICAL RADIONAVIGATION MARITIME RADIONAVIGATION (radiobeacons) 5.73 5.74		
315-325 kHz AERONAUTICAL RADIONAVIGATION Maritime radionavigation (radiobeacons) 5.73 5.75	**315-325 kHz** AERONAUTICAL RADIONAVIGATION Maritime radionavigation (radiobeacons) 5.73	Nav. Aids Coast Radio Telegraph Stations Radionavigation	
325-405 kHz AERONAUTICAL RADIONAVIGATION	**325-405 kHz** AERONAUTICAL RADIONAVIGATION		
405-415 kHz RADIONAVIGATION 5.76	**405-415 kHz** RADIONAVIGATION 5.76	Nav. Aids	
415-435 kHz MARITIME MOBILE 5.79 AERONAUTICAL RADIONAVIGATION 5.82	**415-435 kHz** MARITIME MOBILE 5.79 AERONAUTICAL RADIONAVIGATION 5.82		

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Comments
435-472 kHz MARITIME MOBILE 5.79 Aeronautical radionavigation 5.77 5.82	**435-472 kHz** MARITIME MOBILE 5.79 Aeronautical radionavigation 5.82		
472-479 kHz MARITIME MOBILE 5.79 Amateur 5.80A Aeronautical radionavigation 5.77 5.80B 5.82	**472-479 kHz** MARITIME MOBILE 5.79 Amateur 5.80A Aeronautical radionavigation 5.82		
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 Article 31 and 32	
495-505 kHz MARITIME MOBILE	**495-505 kHz** MARITIME MOBILE	Distress and calling	
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 Radio Telegraphy NAVTEX service on 518 kHz Article 31 and 32	
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)	 GG No. 34172, dated 31 March 2011 (Annex B) as is or amended

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Comments
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 5.92		
1 625-1 635 kHz RADIOLOCATION 5.93	**1 625-1 635 kHz** RADIOLOCATION	Nav. 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 5.92	Maritime Radio Telephony	
1 800-1 810 kHz RADIOLOCATION 5.93	**1 800-1 810 kHz** RADIOLOCATION	Nav. Aids	
1 810-1 850 kHz AMATEUR 5.98 5.99 5.100	**1 810-1 850 kHz** AMATEUR	Licence Class A1	GG No. 34172, dated 31 March 2011 (Annex I) as is or amended
1 850-2 000 kHz FIXED MOBILE except aeronautical mobile 5.92 5.96 5.103	**1 850-2 000 kHz** FIXED MOBILE except aeronautical mobile 5.92 5.103	Maritime mobile applications	1850-1950 kHz is used for Maritime Coast Stations; 1950-2045 kHz is used by ship stations SSB Radio Telephony
2 000-2 025 kHz FIXED	**2 000-2 025 kHz** FIXED		

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Comments
MOBILE except aeronautical mobile (R) 5.92 5.103	MOBILE except aeronautical mobile (R) 5.92 5.103	Maritime mobile applications	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 5.92 5.103	Maritime mobile applications 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 5.92		
2 160-2 170 kHz RADIOLOCATION 5.93 5.107	**2 160-2 170 kHz** RADIOLOCATION	Nav. Aids	
2 170-2 173.5 kHz MARITIME MOBILE	**2 170-2 173.5 kHz** MARITIME MOBILE	Distress & Watch keeping	
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		
2 190.5-2 194 kHz MARITIME MOBILE	**2 190.5-2 194 kHz** MARITIME MOBILE	Distress & Watch keeping	
2 194-2 300 kHz FIXED MOBILE except aeronautical mobile (R)	**2 194-2 300 kHz** FIXED MOBILE except aeronautical mobile (R)		

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Comments
5.92 5.103 5.112	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	
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) 5.92 5.103 5.114	**2 502-2 625 kHz** FIXED MOBILE except aeronautical mobile (R) 5.92 5.103	Land Mobile and Maritime applications	
2 625-2 650 kHz MARITIME MOBILE MARITIME RADIONAVIGATION 5.92	**2 625-2 650 kHz** MARITIME MOBILE MARITIME RADIONAVIGATION 5.92	Buoys	
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) 5.92 5.103	PTP links	
2 850-3 025 kHz	**2 850-3 025 kHz**		

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Comments
AERONAUTICAL MOBILE (R) 5.111 5.115	AERONAUTICAL MOBILE (R) 5.111 5.115		
3 025-3 155 kHz AERONAUTICAL MOBILE (OR)	**3 025-3 155 kHz** AERONAUTICAL MOBILE (OR)		
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		
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	Sound Broadcasting	
3 230-3 400 kHz FIXED MOBILE except aeronautical mobile BROADCASTING 5.113 5.116 5.118	**3 230-3 400 kHz** FIXED MOBILE except aeronautical mobile BROADCASTING 5.113 5.116	Sound Broadcasting	
3 400-3 500 kHz AERONAUTICAL MOBILE (R)	**3 400-3 500 kHz** AERONAUTICAL MOBILE (R)		
3 500-3 800 kHz AMATEUR FIXED MOBILE except aeronautical mobile 5.92	**3 500-3 800 kHz** AMATEUR FIXED MOBILE except aeronautical mobile 5.92	License Class A1, A2 and B	GG No. 34172, dated 31 March 2011 (Annex I) as is or amended
3 800-3 900 kHz FIXED	**3 800-3 900 kHz** FIXED		

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Comments
AERONAUTICAL MOBILE (OR) LAND MOBILE	AERONAUTICAL MOBILE (OR) LAND MOBILE		
3 900-3 950 kHz AERONAUTICAL MOBILE (OR) 5.123	**3 900-3 950 kHz** AERONAUTICAL MOBILE (OR) BROADCASTING 5.123		
3 950-4 000 kHz FIXED BROADCASTING	**3 950-4 000 kHz** FIXED BROADCASTING	Sound Broadcasting	
4 000-4 063 kHz FIXED MARITIME MOBILE 5.127 5.126	**4 000-4 063 kHz** FIXED MARITIME MOBILE 5.127	Ship Stations Radiotelephony	
4 063-4 438 kHz MARITIME MOBILE 5.79A 5.109 5.110 5.130 5.131 5.132 5.128	**4 063-4 438 kHz** MARITIME MOBILE 5.79A 5.109 5.110 5.130 5.131 5.132	NAVTEX service on 4209.5 kHz Article 31 and 32	
4 438-4 488 kHz FIXED MOBILE except aeronautical mobile (R) Radiolocation 5.132A 5.132B	**4 438-4 488 kHz** FIXED MOBILE except aeronautical mobile (R) Radiolocation 5.132A		
4 488-4 650 kHz FIXED MOBILE except aeronautical mobile (R)	**4 488-4 650 kHz** FIXED MOBILE except aeronautical mobile (R)		
4 650-4 700 kHz AERONAUTICAL MOBILE (R)	**4 650-4 700 kHz** AERONAUTICAL MOBILE (R)		
4 700-4 750 kHz	**4 700-4 750 kHz**		

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Comments
AERONAUTICAL MOBILE (OR)	AERONAUTICAL MOBILE (OR)		
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	Sound Broadcasting	
4 850-4 995 kHz FIXED LAND MOBILE BROADCASTING 5.113	**4 850-4 995 kHz** FIXED LAND MOBILE BROADCASTING 5.113	Sound Broadcasting	
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 STANDARD FREQUENCY AND TIME SIGNAL Space research	**5 003-5 005 kHz** 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	Sound Broadcasting	
5 060-5 250 kHz FIXED Mobile except aeronautical mobile 5.133	**5 060-5 250 kHz** FIXED Mobile except aeronautical mobile		
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		

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Comments
5.133A			
5 275-5 450 kHz FIXED MOBILE except aeronautical mobile	**5 275-5 450 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		
5 480-5 680 kHz AERONAUTICAL MOBILE (R) 5.111 5.115	**5 480-5 680 kHz** AERONAUTICAL MOBILE (R) 5.111 5.115		
5 680-5 730 kHz AERONAUTICAL MOBILE (OR) 5.111 5.115	**5 680-5 730 kHz** AERONAUTICAL MOBILE (OR) 5.111 5.115		
5 730-5 900 kHz FIXED LAND MOBILE	**5 730-5 900 kHz** FIXED LAND MOBILE		
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	Sound Broadcasting	
5 950-6 200 kHz BROADCASTING	**5 950-6 200 kHz** BROADCASTING	Sound Broadcasting	
6 200-6 525 kHz MARITIME MOBILE 5.109 5.110 5.130 5.132	**6 200-6 525 kHz** MARITIME MOBILE 5.109 5.110 5.130 5.132	DSC (GMDSS) Distress Watch keeping Ship-to-Shore radiotelephony. Inter-ship cross band on 6215 kHz and 6312 kHz	Distress watch keeping in Appendix 15 of ITU RR; Radiotelephony channelization as per Appendix 17 of ITU RR

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Comments
5.137	5.137		
6 525-6 685 kHz AERONAUTICAL MOBILE (R)	**6 525-6 685 kHz** AERONAUTICAL MOBILE (R)		
6 685-6 765 kHz AERONAUTICAL MOBILE (OR)	**6 685-6 765 kHz** AERONAUTICAL MOBILE (OR)		
6 765-7 000 kHz FIXED MOBILE except aeronautical mobile (R) 5.138 5.138A 5.139	**6 765-7 000 kHz** FIXED MOBILE except aeronautical mobile (R) 5.138 5.138A	Inductive Loop Systems (6765 – 6795 kHz)	GG No. 34172, dated 31 March 2011 (Annex B)
7 000-7 100 kHz AMATEUR AMATEUR-SATELLITE 5.140 5.141 5.141A	**7 000-7 100 kHz** AMATEUR AMATEUR-SATELLITE	License Class A1, A2 and B	GG No. 34172, dated 31 March 2011 (Annex I) as is or amended
7 100-7 200 kHz AMATEUR 5.141A 5.141B 5.141C 5.142	**7 100-7 200 kHz** AMATEUR 5.141C 5.142	License Class A1, A2 and B	GG No. 34172, dated 31 March 2011 (Annex I) as is or amended
7 200-7 300 kHz BROADCASTING	**7 200-7 300 kHz** BROADCASTING	Sound Broadcasting	
7 300-7 400 kHz BROADCASTING 5.134 5.143 5.143A 5.143B 5.143C 5.143D	**7 300-7 400 kHz** BROADCASTING 5.134 Fixed 5.143 (7300-7350 kHz) Land mobile 5.143 (7300-7350 kHz) 5.143B	Sound Broadcasting	 Non Interference basis to broadcasting Non Interference basis to broadcasting
7 400-7 450 kHz BROADCASTING 5.143B 5.143C	**7 400-7 450 kHz** BROADCASTING 5.143B	Inductive Loop Systems (7400 – 8800 kHz)	GG No. 34172, dated 31 March 2011 (Annex B) as is or amended

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Comments
7 450-8 100 kHz FIXED MOBILE except aeronautical mobile (R) 5.143E	**7 450-8 100 kHz** FIXED MOBILE except aeronautical mobile (R) 5.143E	Inductive Loop Systems (7400 – 8800 kHz)	GG No. 34172, dated 31 March 2011 (Annex B) as is or amended
8 100-8 195 kHz FIXED MARITIME MOBILE	**8 100-8 195 kHz** FIXED MARITIME MOBILE	Inductive Loop Systems (7400 – 8800 kHz)	GG No. 34172, dated 31 March 2011 (Annex B) as is or amended
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	DSC (GMDSS) Distress Watch keeping on 8414.5 kHz Radiotelephony Distress on 8291 kHz used on ship-to-shore and inter-ship cross band Inductive Loop Systems (7400 – 8800 kHz)	Distress watch keeping in Appendix 15 of ITU RR Radiotelephony distress channelization in Appendix 17 of ITU RR GG No. 34172, dated 31 March 2011 (Annex B) as is or amended
8 815-8 965 kHz AERONAUTICAL MOBILE (R)	**8 815-8 965 kHz** AERONAUTICAL MOBILE (R)		
8 965-9 040 kHz AERONAUTICAL MOBILE (OR)	**8 965-9 040 kHz** AERONAUTICAL MOBILE (OR)		
9 040-9 305 kHz FIXED	**9 040-9 305 kHz** FIXED		
9 305-9 355 kHz FIXED Radiolocation 5.145A 5.145B	**9 305-9 355 kHz** FIXED Radiolocation 5.145A		

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Comments
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	Sound Broadcasting	
9 500-9 900 kHz BROADCASTING 5.147	**9 500-9 900 kHz** BROADCASTING 5.147	Sound Broadcasting	
9 900-9 995 kHz FIXED	**9 900-9 995 kHz** FIXED		
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	
10 005-10 100 kHz AERONAUTICAL MOBILE (R) 5.111	**10 005-10 100 kHz** AERONAUTICAL MOBILE (R) 5.111		
10 100-10 150 kHz FIXED Amateur	**10 100-10 150 kHz** FIXED Amateur	License Class A1	GG No. 34172, dated 31 March 2011 (Annex I) as is or amended
10 150-11 175 kHz FIXED	**10 150-11 175 kHz** FIXED		

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Comments
Mobile except aeronautical mobile (R)	Mobile except aeronautical mobile (R)		
11 175-11 275 kHz AERONAUTICAL MOBILE (OR)	**11 175-11 275 kHz** AERONAUTICAL MOBILE (OR)		
11 275-11 400 kHz AERONAUTICAL MOBILE (R)	**11 275-11 400 kHz** AERONAUTICAL MOBILE (R)		
11 400-11 600 kHz FIXED	**11 400-11 600 kHz** FIXED		
11 600-11 650 kHz BROADCASTING 5.134 5.146	**11 600-11 650 kHz** BROADCASTING 5.134 5.146	Sound Broadcasting	
11 650-12 050 kHz BROADCASTING 5.147	**11 650-12 050 kHz** BROADCASTING 5.147	Sound Broadcasting	
12 050-12 100 kHz BROADCASTING 5.134 5.146	**12 050-12 100 kHz** BROADCASTING 5.134 5.146	Sound Broadcasting	
12 100-12 230 kHz FIXED	**12 100-12 230 kHz** FIXED		
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		
13 200-13 260 kHz AERONAUTICAL MOBILE (OR)	**13 200-13 260 kHz** AERONAUTICAL MOBILE (OR)		
13 260-13 360 kHz AERONAUTICAL MOBILE (R)	**13 260-13 360 kHz** AERONAUTICAL MOBILE (R)		
13 360-13 410 kHz FIXED RADIO ASTRONOMY	**13 360-13 410 kHz** FIXED RADIO ASTRONOMY		

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Comments
5.149	5.149		
13 410-13 450 kHz FIXED Mobile except aeronautical mobile (R)	**13 410-13 450 kHz** FIXED Mobile except aeronautical mobile (R)		
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		
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)	GG No. 34172, dated 31 March 2011 (Annex B)
13 570-13 600 kHz BROADCASTING 5.134 5.151	**13 570-13 600 kHz** BROADCASTING 5.134 5.151	Sound Broadcasting	
13 600-13 800 kHz BROADCASTING	**13 600-13 800 kHz** BROADCASTING	Sound Broadcasting	
13 800-13 870 kHz BROADCASTING 5.134 5.151	**13 800-13 870 kHz** BROADCASTING 5.134 5.151	Sound Broadcasting	
13 870-14 000 kHz FIXED Mobile except aeronautical mobile (R)	**13 870-14 000 kHz** FIXED Mobile except aeronautical mobile (R)		
14 000-14 250 kHz AMATEUR	**14 000-14 250 kHz** AMATEUR	License Class A1 and A2	GG No. 34172, dated 31 March 2011 (Annex I)

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Comments
AMATEUR-SATELLITE	AMATEUR-SATELLITE		as is or amended
14 250-14 350 kHz AMATEUR 5.152	**14 250-14 350 kHz** AMATEUR	License Class A1 and A2	GG No. 34172, dated 31 March 2011 (Annex I) as is or amended
14 350-14 990 kHz FIXED Mobile except aeronautical mobile (R)	**14 350-14 990 kHz** FIXED Mobile except aeronautical mobile (R)		
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)		
15 100-15 600 kHz BROADCASTING	**15 100-15 600 kHz** BROADCASTING	Sound Broadcasting	
15 600-15 800 kHz BROADCASTING 5.134 5.146	**15 600-15 800 kHz** BROADCASTING 5.134 5.146	Sound Broadcasting	
15 800-16 100 kHz FIXED	**15 800-16 100 kHz** FIXED		
16 100-16 200 kHz FIXED Radiolocation 5.145A	**16 100-16 200 kHz** FIXED Radiolocation 5.145A		

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Comments
5.145B			
16 200-16 360 kHz FIXED	**16 200-16 360 kHz** FIXED		
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	DSC (GMDSS) Distress Watch keeping on 16 804.5 kHz Radiotelephony Distress on 16 240 kHz used on ship-to-shore and inter-ship cross band	Distress watch keeping channelization in Appendix 15 of ITU RR of the Maritime Safety Information channelized in Appendix 17 of ITU RR
17 410-17 480 kHz FIXED	**17 410-17 480 kHz** FIXED		
17 480-17 550 kHz BROADCASTING 5.134 5.146	**17 480-17 550 kHz** BROADCASTING 5.134 5.146	Sound Broadcasting	
17 550-17 900 kHz BROADCASTING	**17 550-17 900 kHz** BROADCASTING		
17 900-17 970 kHz AERONAUTICAL MOBILE (R)	**17 900-17 970 kHz** AERONAUTICAL MOBILE (R)		
17 970-18 030 kHz AERONAUTICAL MOBILE (OR)	**17 970-18 030 kHz** AERONAUTICAL MOBILE (OR)		
18 030-18 052 kHz FIXED	**18 030-18 052 kHz** FIXED		
18 052-18 068 kHz FIXED Space research	**18 052-18 068 kHz** FIXED Space research		
18 068-18 168 kHz AMATEUR AMATEUR-SATELLITE 5.154	**18 068-18 168 kHz** AMATEUR AMATEUR-SATELLITE	License Class A1	GG No. 34172, dated 31 March 2011 (Annex I) as is or amended

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Comments
18 168-18 780 kHz FIXED Mobile except aeronautical mobile	**18 168-18 780 kHz** FIXED Mobile except aeronautical mobile		
18 780-18 900 kHz MARITIME MOBILE	**18 780-18 900 kHz** MARITIME MOBILE		
18 900-19 020 kHz BROADCASTING 5.134 5.146	**18 900-19 020 kHz** BROADCASTING 5.134 5.146		
19 020-19 680 kHz FIXED	**19 020-19 680 kHz** FIXED		
19 680-19 800 kHz MARITIME MOBILE 5.132	**19 680-19 800 kHz** MARITIME MOBILE 5.132		
19 800-19 990 kHz FIXED	**19 800-19 990 kHz** FIXED		
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	**21 000-21 450 kHz** AMATEUR	License Class A1 and A2	GG No. 34172, dated 31 March 2011 (Annex I)

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Comments
AMATEUR-SATELLITE	AMATEUR-SATELLITE		as is or amended
21 450-21 850 kHz BROADCASTING	**21 450-21 850 kHz** BROADCASTING	Sound Broadcasting	
21 850-21 870 kHz FIXED 5.155A 5.155	**21 850-21 870 kHz** FIXED		
21 870-21 924 kHz FIXED 5.155B	**21 870-21 924 kHz** FIXED 5.155B		
21 924-22 000 kHz AERONAUTICAL MOBILE (R)	**21 924-22 000 kHz** AERONAUTICAL MOBILE (R)		
22 000-22 855 kHz MARITIME MOBILE 5.132 5.156	**22 000-22 855 kHz** MARITIME MOBILE 5.132		
22 855-23 000 kHz FIXED 5.156	**22 855-23 000 kHz** FIXED		
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)		
23 350-24 000 kHz FIXED MOBILE except aeronautical mobile 5.157	**23 350-24 000 kHz** FIXED MOBILE except aeronautical mobile 5.157		
24 000-24 450 kHz	**24 000-24 450 kHz**		

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Comments
FIXED LAND MOBILE	FIXED LAND MOBILE		
24 450-24 600 kHz FIXED LAND MOBILE Radiolocation 5.132A 5.158	**24 450-24 600 kHz** FIXED LAND MOBILE Radiolocation 5.132A		
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	License Class A1	GG No. 34172, dated 31 March 2011 (Annex I) as is or amended
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 FIXED MOBILE except aeronautical mobile	**25 010-25 070 kHz** FIXED MOBILE except aeronautical mobile		
25 070-25 210 kHz MARITIME MOBILE	**25 070-25 210 kHz** MARITIME MOBILE		
25 210-25 550 kHz FIXED MOBILE except aeronautical mobile	**25 210-25 550 kHz** FIXED MOBILE except aeronautical mobile		

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Comments
25 550-25 670 kHz RADIO ASTRONOMY 5.149	**25 550-25 670 kHz** RADIO ASTRONOMY 5.149		
25 670-26 100 kHz BROADCASTING	**25 670-26 100 kHz** BROADCASTING	Sound Broadcasting	
26 100-26 175 kHz MARITIME MOBILE 5.132	**26 100-26 175 kHz** MARITIME MOBILE 5.132		
26 175-26 200 kHz FIXED MOBILE except aeronautical mobile	**26 175-26 200 kHz** FIXED MOBILE except aeronautical mobile	Single Frequency Mobile ~~Inductive loop system; Non-specific SRD's; Surface model control...~~	~~Includes freq assignments for low power paging in the 26.957....~~
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 ~~Inductive loop system; Non-specific SRD's; Surface model control...~~	~~Includes freq assignments for low power paging in the 26.957....~~
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)	GG No. 34172, dated 31 March 2011 (Annex B) as is or amended GG No. 34172, dated 31 March 2011 (Annex B) as is or amended

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Comments
			Includes freq assignments for low power paging in the 26.957....
27.5-28 MHz METEOROLOGICAL AIDS FIXED MOBILE	**27.5-28 MHz** METEOROLOGICAL AIDS FIXED MOBILE	Radio Sounding	
28-29.7 MHz AMATEUR AMATEUR-SATELLITE	**28-29.7 MHz** AMATEUR AMATEUR-SATELLITE	License Class A1, A2 and B	GG No. 34172, dated 31 March 2011 (Annex I) as is or amended
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
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** MOBILE	Single Frequency Mobile (32 – 32.325 MHz) Mobile 1 MTX (32.325 – 33.675 MHz) Single Frequency Mobile (33.675 – 34.175 MHz)	Government Services Paired with 41.65 – 43 MHz

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Comments
		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 40.625 – 41.25 MHz Exclusive use by Model Aircraft Control GG No. 34172, dated 31 March 2011 (Annex B) Paired with 38.5 – 39.825 MHz Government Services
37.5-38.25 MHz FIXED MOBILE Radio astronomy 5.149	**37.5-38.25 MHz** MOBILE Radio astronomy 5.149	Single Frequency Mobile (36.825 – 38.5 MHz)	Government Services
38.25-39 MHz FIXED MOBILE	**38.25-39 MHz** MOBILE	Single Frequency Mobile (36.825 – 38.5 MHz) Mobile 3 MTX (38.5 – 39.825 MHz))	Government Services Paired with 35.5 – 36.825 MHz
39-39.5 MHz FIXED MOBILE Radiolocation 5.132A 5.159	**39-39.5 MHz** MOBILE Radiolocation 5.132A	Mobile 3 MTX (38.5 – 39.825 MHz) Single Frequency Mobile (39.825-40.625 MHz	Paired with 35.5 – 36.825 MHz
39.5-39.986 MHz FIXED MOBILE	**39.5-39.986 MHz** MOBILE	Mobile 3 MTX (38.5 – 39.825 MHz) Single Frequency Mobile (39.825 –	Paired with 35.5 – 36.825 MHz

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Comments
		40.625 MHz)	
39.986-40.02 MHz FIXED MOBILE Space research	**39.986-40.02 MHz** MOBILE Space research	 Single Frequency Mobile (39.825 – 40.625 MHz)	
40.02-40.98 MHz FIXED MOBILE 5.150	**40.02-40.98 MHz** 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)	 Paired with 34.175 – 35 MHz GG No. 34172, dated 31 March 2011 (Annex B) GG No. 34172, dated 31 March 2011 (Annex B) GG No. 34172, dated 31 March 2011 (Annex B)
40.98-41.015 MHz FIXED MOBILE Space research 5.160 5.161	**40.98-41.015 MHz** MOBILE Space research	 Mobile 2 BTX (40.625 – 41.45 MHz)	 Paired with 34.175 – 35 MHz)
41.015-42 MHz FIXED MOBILE	**41.015-42 MHz** MOBILE	 Mobile 2 BTX (40.625 – 41.45 MHz) Single Frequency Mobile (41.45 – 41.65 MHz) Mobile 1 BTX (41.65 – 43 MHz)	 Paired with 34.175 – 35 MHz Paired with 32.325 – 33.675 MHz

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Comments
5.160 5.161		Government Services	
42-42.5 MHz FIXED MOBILE Radiolocation 5.132A 5.160 5.161B	**42-42.5 MHz** MOBILE Radiolocation 5.132A	Mobile 1 BTX (41.65 – 43 MHz) Government Services	Paired with 32.325 – 33.675 MHz
42.5-44 MHz FIXED MOBILE 5.160 5.161	**42.5-44 MHz** MOBILE	Mobile 1 BTX (41.65 – 43 MHz) Government Services	Paired with 32.325 – 33.675 MHz
44-47 MHz FIXED MOBILE 5.162	**44-47 MHz** FIXED MOBILE	Meteor Burst (45.3 – 46.9 MHz) CT0 Cordless Telephones BTX (46.61 – 46.97 MHz) Government Services	Paired with 47.5 – 49.1 MHz 10 frequency pairs assigned to CT0; paired with 49.67 – 49.97 MHz; GG No. 34172, dated 31 March 2011 (Annex B)
47-68 MHz BROADCASTING	**47-50 MHz** BROADCASTING LAND MOBILE 5.164	CT0 Cordless Telephones MTX (49.67 – 49.97 MHz)	Paired with 46.61 – 46.97 MHz. GG No. 34172, dated 31 March 2011 (Annex B)
	50-54 MHz AMATEUR 5.169	License Class A1 and A2 Wireless microphones (53 – 54 MHz)	GG No. 34172, dated 31 March 2011 (Annex I) as is or amended

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Comments
			GG No. 34172, dated 31 March 2011 (Annex B)
	54-68 MHz BROADCASTING FIXED 5.171 MOBILE except aeronautical mobile 5.171	Government Services Model control (54.45 – 54.55 MHz) 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) Sport Stadium Communications (62.8 – 62.85 MHz) National Emergency Alarm Radio (NEAR) (66 – 68 MHz)	GG No. 34172, dated 31 March 2011 (Annex B) 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
5.162A 5.163 5.164 5.165 5.169 5.171			
68-74.8 MHz FIXED MOBILE except aeronautical mobile	**68-74.8 MHz** MOBILE except aeronautical mobile	Single Frequency Mobile (68 – 69.25 MHz) Mobile 1 BTX (69.25 – 70 MHz) 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)	Paired with 76.175 – 76.925 MHz 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
	Amateur (70 – 70.3 MHz) NF2 Radio Astronomy (73 – 74.6 MHz)	License Class A1, A2 and B	... GG No. 34172, dated 31 March 2011 (Annex I) as is or amended

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Comments
5.149 5.175 5.177 5.179	5.149		
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	
75.2-87.5 MHz FIXED MOBILE except aeronautical mobile 5.175 5.179 5.187	**75.2-87.5 MHz** 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) 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)	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 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
87.5-100 MHz BROADCASTING 5.190	**87.5-100 MHz** BROADCASTING	FM Sound Broadcasting	
100-108 MHz	**100-108 MHz**		

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Comments
BROADCASTING 5.194	BROADCASTING	FM Sound Broadcasting	
108-117.975 MHz AERONAUTICAL RADIONAVIGATION 5.197 5.197A	**108-117.975 MHz** AERONAUTICAL RADIONAVIGATION 5.197A	ILS localiser (108 – 112 MHz) VOR (VHF Omni-directional Range) (112 – 117.975 MHz)	
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		
137-137.025 MHz SPACE OPERATION (space-to-Earth) 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 5.208	**137-137.025 MHz** SPACE OPERATION (space-to-Earth) METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) 5.208A 5.208B 5.209 SPACE RESEARCH (space-to-Earth) Mobile except aeronautical mobile (R) 5.208	MET SAT	
137.025-137.175 MHz SPACE OPERATION (space-to-Earth) METEOROLOGICAL-SATELLITE (space-to-Earth) SPACE RESEARCH (space-to-Earth) Fixed Mobile-satellite (space-to-Earth) 5.208A	**137.025-137.175 MHz** SPACE OPERATION (space-to-Earth) METEOROLOGICAL-SATELLITE (space-to-Earth) SPACE RESEARCH (space-to-Earth) Mobile-satellite (space-to-Earth) 5.208A 5.208B		

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Comments
5.208B 5.209 Mobile except aeronautical mobile (R) 5.204 5.205 5.206 5.208	5.209 Mobile except aeronautical mobile (R) 5.208		
137.175-137.825 MHz SPACE OPERATION (space-to-Earth) 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 5.208	**137.175-137.825 MHz** SPACE OPERATION (space-to-Earth) METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) 5.208A 5.208B 5.209 SPACE RESEARCH (space-to-Earth) Mobile except aeronautical mobile (R) 5.208	NOAA meteorological satellite (137.5 – 137.62 MHz)	
137.825-138 MHz SPACE OPERATION (space-to-Earth) 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 5.208	**137.825-138 MHz** SPACE OPERATION (space-to-Earth) METEOROLOGICAL-SATELLITE (space-to-Earth) SPACE RESEARCH (space-to-Earth) Mobile-satellite (space-to-Earth) 5.208A 5.208B 5.209 Mobile except aeronautical mobile (R) 5.208		

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Comments
138-143.6 MHz AERONAUTICAL MOBILE (OR) 5.210 5.211 5.212 5.214	**138-143.6 MHz** FIXED MOBILE 5.212	 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)	 Paired with 141.5 - 144 MHz. Allocation includes MTX assignments at 138 - 138.425 MHz and 138.475 - 138.95 MHz Paired with 138 – 140.5 MHz. Allocation includes BTX assignments at 142.8 – 143.275 MHz and 143.325 – 143.975 MHz GG No. 34172, dated 31 March 2011 (Annex B) as is as modified
143.6-143.65 MHz AERONAUTICAL MOBILE (OR) SPACE RESEARCH (space-to-Earth) 5.211 5.212 5.214	**143.6-143.65 MHz** FIXED MOBILE 5.212	 Mobile 1 BTX (141.5 – 144 MHz)	 Paired with 138 – 140.5 MHz. Allocation includes BTX assignments at 142.8 – 143.275 MHz and 143.325 - 143.975 MHz
143.65-144 MHz AERONAUTICAL MOBILE (OR)	**143.65-144 MHz** FIXED MOBILE	 Mobile 1 BTX (141.5 – 144 MHz)	 Paired with 138 – 140.5 MHz. Allocation includes BTX assignments at 142.8 – 143.275 MHz and 143.325 - 143.975 MHz

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Comments
5.210 5.211 5.212 5.214	5.212		
144-146 MHz AMATEUR AMATEUR-SATELLITE	**144-146 MHz** AMATEUR AMATEUR-SATELLITE		
146-148 MHz FIXED MOBILE except aeronautical mobile (R)	**146-148 MHz** MOBILE except aeronautical mobile (R)	 Mobile 2 MTX (146 – 148.95 MHz)	 Paired with 153.05 – 156 MHz
148-149.9 MHz FIXED MOBILE except aeronautical mobile (R) MOBILE-SATELLITE (Earth-to-space) 5.209 5.218 5.219 5.221	**148-149.9 MHz** MOBILE except aeronautical mobile (R) MOBILE-SATELLITE (Earth-to-space) 5.209 NF3 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 GG No. 34172, dated 31 March 2011 (Annex B) Systems are paired with either 137 – 138 MHz or 400.15 – 401 MHz
149.9-150.05 MHz MOBILE-SATELLITE (Earth-to-space) 5.209 5.224A RADIONAVIGATION-SATELLITE 5.224B 5.220 5.222 5.223	**149.9-150.05 MHz** MOBILE-SATELLITE (Earth-to-space) 5.209 5.224A NF3 RADIONAVIGATION-SATELLITE 5.224B 5.220 5.222 5.223	Low Earth Orbit systems	
150.05-153 MHz FIXED MOBILE except aeronautical mobile	**150.05-153 MHz** FIXED MOBILE except aeronautical mobile	Single frequency alarms (152.05 – 152.55 MHz) Alarms, Single Frequency Mobile and Load Shedding (148.950 – 151 MHz)	 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

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Comments
			paging
		Government Services	
		Wildlife Telemetry Tracking (148 – 152 MHz)	GG No...
		Single Frequency Mobile (152.55 – 153.05 MHz)	
RADIO ASTRONOMY 5.149	RADIO ASTRONOMY 5.149		
153-154 MHz FIXED MOBILE except aeronautical mobile (R) Meteorological aids	**153-154 MHz** MOBILE except aeronautical mobile (R) Meteorological aids	Single Frequency Mobile (152.55 – 153.05 MHz) Mobile 2 BTX (153.05 – 156 MHz)	 Paired with 146 – 148.95 MHz
154-156.4875 MHz FIXED MOBILE except aeronautical mobile (R) 5.225A 5.226	**154-156.4875 MHz** MOBILE except aeronautical mobile (R) 5.226	Mobile 2 BTX (153.05 – 156 MHz) Mobile 3 MTX (156 – 156.7625 MHz) Single Frequency Mobile (156.375 – 156.7625 MHz)	 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
156.4875-156.5625 MHz MARITIME MOBILE (distress and calling via DSC)	**156.4875-156.5625 MHz** MARITIME MOBILE (distress and calling via DSC) FIXED 5.227	 Maritime Radionavigation and location (Radar)	The use of this band by the maritime services shall be in accordance with ITU Appendix 18. Non-interference and Non-Protection basis

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Comments
5.111 5.226 5.227	LAND MOBILE 5.227 5.111 5.226	Single Frequency Mobile (156.375 – 156.7625 MHz)	(NINP) basis to Maritime Mobile Service Limited to inland areas; NINP basis to Maritime Mobile Service
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		
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	Maritime Radionavigation and Location (RADAR)	
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		
156.8125-156.8375 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) 5.111 5.226 5.228		
156.8375-161.9625 MHz FIXED MOBILE except aeronautical mobile	**156.8375-161.9625 MHz** MOBILE except aeronautical mobile NF4	Sonobuoy (161.875 – 173.875) Mobile 1 MTX-DF (161.475 – 165.0375 MHz) Single Frequency Mobile (160.45 – 161.4625 MHz) Single Frequency Mobile (156.8375 – 156.875 MHz)	 Paired with Mobile 1 BTX-DF (156.875 – 160.4375 MHz) Inland areas only

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Comments
5.226	5.226	Private Maritime MTX (157.45 – 157.95 MHz)	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** 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)	Paired with Mobile 1 BTX-DF (156.875 – 160.4375 MHz)
161.9875-162.0125 MHz FIXED MOBILE except aeronautical mobile 5.226 5.229	**161.9875-162.0125 MHz** MOBILE except aeronautical mobile NF4 5.226	Mobile 1 MTX-DF (161.475 – 165.0375 MHz)	Paired with Mobile 1 BTX-DF (156.875 – 160.4375 MHz)
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** 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)	Paired with Mobile 1 BTX-DF (156.875 – 160.4375 MHz)
162.0375-174 MHz FIXED MOBILE except aeronautical mobile	**162.0375-174 MHz** MOBILE except aeronautical mobile NF4	Mobile 1 MTX-DF (161.475 – 165.0375 MHz) Mobile 2 MTX-DF (165.05 – 165.5375 MHz) Single Frequency Mobile (168.95 – 170.0375 MHz) Mobile 3 MTX-DF (165.55 – 167.4875 MHz)	Paired with Mobile 2 BTX-DF (170.50 – 170.5375 MHz) Paired with Mobile 3 BTX-DF (172.05 –

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Comments
			173.9875 MHz)
		Single Frequency Mobile (172 – 172.0375 MHz)	
		Mobile 4 MTX-DF (167.5 – 168.9375 MHz)	Paired with Mobile 4 BTX (170.55 – 171.9875 MHz)
		Meter Reading (169.4 – 169.475 MHz)	GG No. 34172, dated 31 March 2011 (Annex B)
		Non-specific SRD's – Telecommand only (173.2125 – 173.2375 MHz)	GG No. 34172, dated 31 March 2011 (Annex B)
		Non-specific SRD's (173.2375 – 173.2875 MHz)	GG No. 34172, dated 31 March 2011 (Annex B)
		Wireless microphones and assistive listening devices (173.7 – 175.1 MHz)	GG No. 34172, dated 31 March 2011 (Annex B)
5.226 5.229	5.226 NF5		
174-223 MHz BROADCASTING 5.235 5.237 5.243	**174-223 MHz** BROADCASTING NF5	Television Broadcasting (174 – 238 MHz) Wireless microphones (173.7 – 175.1 MHz)	Broadcasting Allotments in accordance with GE89 Plan in the process of conversion to GE06
223-230 MHz BROADCASTING Fixed Mobile 5.243 5.246 5.247	**223-230 MHz** BROADCASTING	Television broadcasting (174 – 238 MHz)	Broadcasting Allotments in accordance with GE89 Plan in the process of conversion to GE06
230-235 MHz FIXED MOBILE 5.247 5.251 5.252	**230-238 MHz** BROADCASTING 5.252	Television broadcasting (174 – 238 MHz)	Broadcasting Allotments in accordance with GE89 Plan in the process of conversion to GE06

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Comments
235-267 MHz FIXED MOBILE 5.111 5.252 5.254 5.256 5.256A	5.254		
	238-246 MHz MOBILE 5.111 5.252 5.254 5.256	International Distress Frequency at 243 MHz (242.95 – 243.05 MHz)	
	246-254 MHz BROADCASTING 5.252	Television broadcasting (246-254 MHz)	Broadcasting Allotments in accordance with GE89 Plan in the process of conversion to GE06
	254-267 MHz MOBILE 5.254	Public Trunking (MPT1327) BTX (254 – 259.4 MHz) Public Trunking (MPT1327) MTX (262 – 267.4 MHz) Government Services	Paired with 262 – 267.4 MHz Paired with 254 – 259.4 MHz
267-272 MHz FIXED MOBILE Space operation (space-to-Earth) 5.254 5.257	**267-272 MHz** MOBILE Space operation (space-to-Earth) 5.254 5.257	Public Trunking (MPT1327) MTX (262 – 267.4 MHz)	Paired with 254 – 259.4 MHz
272-273 MHz SPACE OPERATION (space-to-Earth) FIXED MOBILE 5.254	**272-273 MHz** MOBILE 5.254	Government Services	
273-312 MHz	**273-312 MHz**		

ITU Region 1 allocations and footnotes	South African allocations and footnotes	Typical Applications	Comments
FIXED MOBILE 5.254	 MOBILE 5.254	 Government Services Single Frequency Mobile (278 – 286 MHz)	
312-315 MHz FIXED MOBILE Mobile-satellite (Earth-to-space) 5.254 5.255	**312-315 MHz** MOBILE Mobile-satellite (Earth-to-space) 5.254 5.255	 Government Services	
315-322 MHz FIXED MOBILE 5.254	**315-322 MHz** MOBILE 5.254	 Government Services	
322-328.6 MHz FIXED MOBILE RADIO ASTRONOMY 5.149	**322-328.6 MHz** MOBILE RADIO ASTRONOMY 5.149	 Government Services	
328.6-335.4 MHz AERONAUTICAL RADIONAVIGATION 5.258 5.259	**328.6-335.4 MHz** AERONAUTICAL RADIONAVIGATION 5.258	 ILS Glide Path	
335.4-387 MHz FIXED MOBILE 5.254	**335.4-387 MHz** FIXED NF6 MOBILE NF7 5.254	 FWA (336 – 346 MHz) FWA (356 – 366 MHz) Digital Trunking (Emergency) (380 – 387 MHz) PPDR (380 – 385 MHz)	 Paired with 356 – 366 MHz Paired with 336 – 346 MHz Paired with 390 – 397 MHz Paired with 390 – 395 MHz
387-390 MHz	**387-390 MHz**		