GENERAL NOTICE

NOTICE 727 OF 2010

NATIONAL RADIO FREQUENCY PLAN

INDEPENDENT COMMUNICATIONS AUTHORITY OF SOUTH AFRICA

2010

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SECTION 1: TERMS, DEFINITIONS AND ACRONYMS

Terms and Definitions

Aeronautical Fixed Service	A Radiocommunication service between specified fixed points provided primarily for the safety of air navigation and for the regular, efficient and economical operation of air transport
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 (OR)** (Off-Route 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)* (Route 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-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 Mobile-Satellite (R)* (Route 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 (OR)** Off-Route Service	An aeronautical mobile-satellite service intended for communications, including those relating to flight coordination, primarily outside national and international civil air routes
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
Allotment (of a radio frequency or of a 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
Allocation (of a radio 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
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

Amateur	Means someone who is interested in the radio technique solely for a private reason and not for financial gain and to whom the Authority has granted an amateur radio station license
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 Radio Station	Means a radio station for a service of self-tuition, intercommunication and technical investigation that is operated by an amateur
Amateur-Satellite Service	A Radiocommunication service using space stations on earth satellites for the same purpose as those of amateur 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-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
Call sign	The allocation of identification letters and numbers for the purposes of allocating class licenses to amateurs as per Article 19 of the ITU Radio Regulations
Electronic Communications Act	The Electronic Communications Act, 2005 (Act No. 36 of 2005)
Electronic Communication	Any transmission, emission and / or reception of radio waves for a specific communication purposes
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 air-borne 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.
Fixed Service	A Radiocommunication service between specified fixed points

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 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
Inter-Satellite Service	A Radiocommunication service providing links between artificial earth satellites
Land Mobile Service	A mobile service between base stations and land mobile stations or between land mobile stations
Land Mobile-Satellite Service	A mobile-satellite service in which mobile earth stations are located on land
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
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 Service	A Radiocommunication service between mobile and land stations, or between mobile stations
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 using one or more space stations.This service may also include feeder links necessary for its operation
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
Radio Communication Service	An electronic communications service provided by means of radio waves

Radio Astronomy Service	A service involving the use of radio astronomy
Radiodetermination Service	A radiocommunication service for the purpose of radiodetermination
Radiodetermination-Satellite Service	A radiocommunication service for the purpose of radiodetermination involving the use of one of more space stations. This service may also include feeder links necessary for its own operation
Radionavigation Service	A radiodetermination service for the purpose of radionavigation
Radionavigation-Satellite Service	A radiodetermination-satellite service for the purpose 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
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. This service may also include feeder links necessary for its operation
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
Safety Service	Any Radiocommunication service used permanently or temporarily for the safeguarding of human life and property
Space Research Service	A Radiocommunication service in which spacecraft or other objects in space are used for scientific or technological research purposes
Special Service	A Radiocommunication service, not other-wise 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-Satellite Service	A Radiocommunication service using space stations on earth satellites for the same purpose as those of standard frequency and time signal service. This service may also include feeder links necessary for its operations
Suppressed	Suppressed in the national footnotes section refers to footnotes that are no longer applicable

List of Acronyms

AGA	Astronomy Advantage Act, 2007 (Act No. 21 of 2007)
AMSS	Aeronautical Mobile Satellite Service
ARNS	Aeronautical Radionavigation 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 radionavigation 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 radionavigation 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 Trunsking
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.
Radioastronomy	Astronomy based on the reception of radio waves of cosmic origin.
Radiodetermination	The determination of the position, velocity and /or other characteristic of an object, or the obtaining of information relating to these parameters, by means of the propagation properties of radio waves.
Radiolocation	Radiodetermination used for purposes other than those of radionavigation.
Radionavigation	Radiodetermination used for the purposes of navigation including obstruction warning
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.

SECTION 2: PREAMBLE

2.1 Legislative Framework

The aim of the Electronic Communications Act, 2005 (Act No. 36 of 2005), herein after referred to as the Act; is to promote convergence in the broadcasting, broadcasting signal distribution and telecommunications sectors and to provide the legal framework for convergence of these sectors; to make new provisions for the regulation of electronic communications services, electronic communications network services and broadcasting services; to provide the granting of new licenses and new social obligations; to provide for the control of the radio frequency spectrum; to provide for the continued existence of the Universal Service Agency and the Universal Service Fund; and to provide for matters incidental thereto.

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.

No person may transmit any signal by radio or use radio apparatus to receive any signal by radio except under and in accordance with a radio frequency spectrum license granted by the Authority to such person in terms of section 31(1) of the Act.

A radio frequency spectrum license is required in addition to any service license contemplated in Chapter 3 of the Act, where the use of such service entails the use of radio frequency spectrum in terms of section 31(2) of the Act.

The Authority may, taking into account the objects of the Act, prescribe procedures and criteria for awarding radio frequency spectrum licenses for competing applications or instances where there is insufficient spectrum available to accommodate demand as per section 31(3) of the Act.

The normal procedure for applying for spectrum and all other related information can be found on the Authority's website by logging on to www.icasa.org.za.

This revision of the South African Table of Frequency Allocation incorporates the decisions taken by World Radio Communications Conferences including up to WRC 07 that was held in Geneva, 22 October – 16 November 2007. 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 South African Table of Frequency Allocations.

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. All the ITU – R Footnotes that are alpha-numeric are temporary and

will be updated as soon as the relevant footnote numbers are made available by the ITU.

The Authority consulted with the Minister of Comunications 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, aeronautical services and scientific research. The South African Table of Frequency Allocations has been updated to incorporate the outcome of that consultation.

Objectives of the Review and Changes Made

The South African Table of Frequency Allocations (SATFA) allocates the Electromagnetic Spectrum to Radio Services in the Frequency Bands between 9 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 2007, convened by the International Telecommunication Union (ITU).

Revisions of SATFA will occur due to National Spectrum Requirements or when changes to the ITU Table of Frequency Allocations are made as a result of future World Radiocommunication Conferences convened by the International Telecommunication Union.

There have been tremendous developments in the Information Communications Telecommunications (ICT) Sector of the Republic of South Africa since the last publication of the South African Table of Frequency Allocations in 2004. These developments include the repealing of the Telecommunications Act, 1996 (Act No. 103 of 1996) and the introduction of the Act. Chapter 5 of the Act outlines Radio Frequency Spectrum Management in South Africa.

This publication of the Revised South African Table of Frequency Allocations is part of the programme to extend and update information being made available to the public and is aimed at current users, potential users and investors in Electronic Communications Sector of the Republic of South Africa. It outlines the types of radiocommunication services permitted in each frequency band together with some notes on future developments. It takes into account International, Regional and Bilateral agreements on Radio Frequency Spectrum entered into up to the end of World Radiocommunications Conference 2007.

The pattern of radio use is not static. 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 review.

In view of the above, it is the intention of the Authority to issue new editions of the national radio frequency plan regularly, taking account of the introduction of new radiocommunication services and the phasing out of older services. The

spectrum is a finite resource and as the pressure on it constantly grows; its management becomes more complex.

The Authority is mandated to ensure that spectrum is used in the best possible way so as to make spectrum available for new services as well as existing ones. This is accomplished through reviews of spectrum use and implementing a clear strategy for future use of the radio spectrum to provide the essential support required for ongoing economic and social development of the Republic of South Africa. The Authority will gratefully receive any comments and ideas you may have which will assist us in making future editions

The following is the summary of fundamental objectives informing this review:

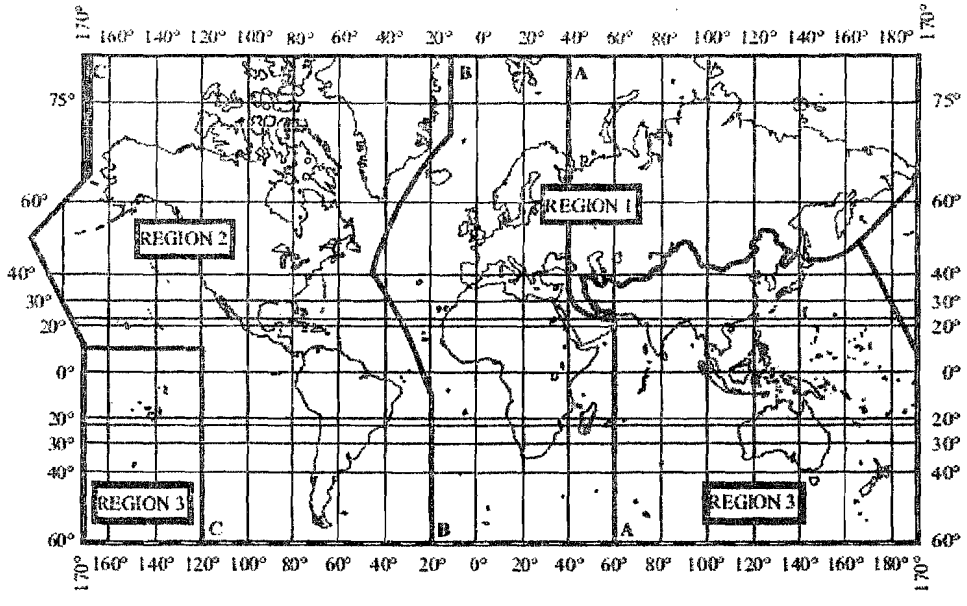
- To effect prescripts of the Act and the 2007 policy directives published in Government Gazette No. 30308 of 17 September 2007 which states that the Authority should take into account the results of WRC 2007 when revising the national radio frequency plan
- To update the table with changes made by WRC 97, WRC 2000, WRC03, and WRC 07
- To allocate spectrum that was previously not allocated by extending the range to cover 9 kHz to 3000 GHz in line with the Act and ITU-R
- To make spectrum available for new radio interfaces such as WIMAX, which were included as the newest member of the IMT family of standards
- To facilitate future identification of spectrum for very low power fixed links in the spectrum below 1 GHz in order to promote small medium and micro enterprises in the communications industry.
- To facilitate developments of the frequency migration strategies and to facilitate migration of high capacity fixed links to higher frequency bands
- To facilitate the development of a framework for usage of ISM frequency bands to support rural development objectives
- To promote access to lower frequency bands for broadband wireless access to support rural development
- To promote access to frequency bands below 1 GHz such as the 790 – 862 MHz band which offers both coverage and capacity to help bridge the "digital gap" between sparsely-populated and densely-populated areas and to increase universal service and access in the country.

The following changes have been implemented in this review:

- Identification and allocation of spectrum for IMT - spectrum has been allocated in line with WRC 07 in the bands 790 – 862 MHz, 2300 – 2400 MHz, 2500 – 2690 MHz, 3400 – 3600 MHz, 1518 – 1525 MHz and 1668 – 1675 MHz. Where there are existing services that need to be protected such provision has been made.
- Allocation of spectrum for amateur radio – spectrum has been allocated in line with WRC 07 and previous WRCs in the bands 135.7 - 137.8 kHz, 2300 – 2450 on secondary basis.
- Addition of a proposal to change DTH from secondary to to primary status in the 10.7 – 11.7 GHz
- National footnote NF 49 of SATFA 2004 has been replaced by national footnote NF 2 addressing the Astronomy Geographic Advantage Act, 2007 (Act No. 21 of 2007)
- Updated ISM frequency bands in line with GG No. 31321 Notice No. 944 of 08 August 2008
- Updated the 5725 - 5850 MHz band in line with GG No. 31290 Notice No. 926 0f 29 July 2008.
- Added allocations for inductive loop and RFID in line with GG No. 31290 Notice No. 926 of 29 July 2008
- Added new maritime, aeronautical allocations below 20 MHz and new satellite allocationsabove 70 GHz

2.2 ITU - R 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 The Structure of SATFA

The South African 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 South African Table of Frequency Allocations covers the frequency range 9 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.

The Table of Frequency Allocations will be updated regularly. The allocations are not static and will change in time as new radio systems are introduced and old ones phased out. Changes will also be made to reflect agreements reached on spectrum utilisation at International level, e.g. at World Radiocommunication Conferences (WRCs) of the ITU or as a consequence of national decisions made to meet our specific national requirements.

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 which appear in the table below the allocated service or services 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).

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 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 Stree
Sandton
2146
Phone +27 11 566 3000
Fax +27 11 566 3292
URL: http://www.icasa.org.za
E-mail:info@icasa.org.za

SECTION 3: TABLE OF FREQUENCY ALLOCATIONS

PART A: 9 kHz - 30 MHz

9 - 110 kHz

ITU Region 1 Allocations	South African Allocations	Typical Applications	Comments
Below 9 (Not allocated) 5.53 5.54	(Not Allocated) 5.53 5.54		
9 - 14.00 RADIONAVIGATION	RADIONAVIGATION	Nav. Aids	
14.00 - 19.95 FIXED MARITIME MOBILE 5.57 5.55 5.56	FIXED MARITIME MOBILE 5.57 5.56		

19.95 - 20.05 STANDARD FREQUENCY AND TIME SIGNAL (20 kHz)	STANDARD FREQUENCY AND TIME SIGNAL (20 kHz)		
20.05 – 70 FIXED MARITIME MOBILE 5.57 5.56 5.58	FIXED MARITIME MOBILE 5.57 5.56	59.75 - 60.25 kHz Inductive Loop System including RFID	Government Gazette No 31127, Notice No 713 0f 2008 and Government Gazette No 31290, Notice No 926 of 2008 refer.
70 – 72 RADIONAVIGATION 5.60	RADIONAVIGATION 5.60	Nav. Aids 70 - 119 kHz Inductive Loop System including RFID	Government Gazette No 31127, Notice No 713 0f 2008 and Government Gazette No 31290, Notice No 926 of 2008 refer

72 – 84 FIXED	FIXED		
MARITIME MOBILE 5.57 RADIONAVIGATION 5.60 5.56	MARITIME MOBILE 5.57 RADIONAVIGATION 5.60 5.56	Nav. Aids 70 - 119 kHz Inductive Loop System including RFID	Government Gazette No 31127, Notice No 713 0f 2008 and Government Gazette No 31290, Notice No 926 of 2008 refer.
84 – 86 RADIONAVIGATION 5.60	RADIONAVIGATION 5.60	Nav. Aids 70 - 119 kHz Inductive Loop System including RFID	Government Gazette No 31127, Notice No 713 0f 2008 and Government Gazette No 31290, Notice No 926 of 2008 refer.

86 – 90 FIXED MARITIME MOBILE 5.57 RADIONAVIGATION 5.60 5.56	FIXED MARITIME MOBILE 5.57 RADIONAVIGATION 5.60 5.56	Nav. Aids 70 - 119 kHz Inductive Loop System including RFID	Government Gazette No 31127, Notice No 713 0f 2008 and Government Gazette No 31290, Notice No 926 of 2008 refer.
90 – 110 RADIONAVIGATION 5.62 Fixed	RADIONAVIGATION 5.62 Fixed	Nav. Aids 70 - 119 kHz Inductive Loop System including RFID	Government Gazette No 31127, Notice No 713 0f 2008 and Government Gazette No 31290, Notice No 926 of 2008 refer.

110 - 255 kHz

ITU Region 1 Allocations	South African Allocations	Typical Applications	Comments
110 – 112 FIXED MARITIME MOBILE RADIONAVIGATION	FIXED MARITIME MOBILE RADIONAVIGATION	70 - 119 kHz Inductive Loop System including RFID.	Government Gazette No 31127, Notice No 713 0f 2008 and Government Gazette No 31290, Notice No 926 of 2008 refer.
112 – 115 RADIONAVIGATION 5.60	RADIONAVIGATION 5.60	Nav Aids 70 - 119 kHz Inductive Loop System including RFID	Government Gazette No 31127, Notice No 713 0f 2008 and Government Gazette No 31290, Notice No 926 of 2008 refer.

115 - 117.6 RADIONAVIGATION 5.60 Fixed Maritime mobile 5.66	RADIONAVIGATION 5.60 Fixed Maritime Mobile	Nav Aids 70 - 119 kHz Inductive Loop System including RFID	Government Gazette No 31127, Notice No 713 of 2008 and Government Gazette No 31290, Notice No 926 of 2008 refer
117.6 – 126 FIXED MARITIME MOBILE RADIO NAVIGATION 5.60	FIXED MARITIME MOBILE RADIO NAVIGATION 5.60	Nav Aids	

5.64		119 - 135 kHz Inductive Loop System including RFID	Government Gazette No 31127, Notice No 713 0f 2008 and Government Gazette No 31290, Notice No 926 of 2008 refer
126 – 129 RADIONAVIGATION 5.60	RADIONAVIGATION 5.60	Nav Aids	
129 – 130 FIXED MARITIME MOBILE RADIONAVIGATION 5.60	FIXED MARITIME MOBILE RADIONAVIGATION 5.60	Nav Aids 119 - 135 kHz Inductive Loop System including RFID	Government Gazette No 31127, Notice No 713 0f 2008 and Government Gazette No 31290, Notice No 926 of 2008 refer.