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"programmes". Programmes include film making, advertisements, corporate videos, sporting events, concerts, theatre and similar activities not initially meant for broadcasting to the general public.

NF 11

336 - 366 MHz

Within this frequency range the band 336-344 MHz paired with 356-364 MHz is allocated to fixed services on a primary basis. This spectrum is potentially very useful for providing electronic communications services considering its excellent propagation conditions. The bands 344-346 MHz and 364-366 MHz are allocated to Alarm monitoring and tracking services

NF 12

380 –399.9 MHz

This band has been designated for use by digital trunked mobile radio (CEPT T/R 22-05) for emergency services. The frequency bands 380-385 MHz paired with 390-395 MHz are allocated to Public Protection and Disaster Relief (PPDR) applications in line with the CEPT decision and ITU Resolution 646 (WRC-03). The frequency bands 385-389.9 MHz paired with 395-399.9 MHz are allocated to digital trunking systems.

NF 13

407.625 - 413 / 417.625 - 423 MHz

The frequency bands 407.625 - 410 MHz / 417.625 - 420 MHz are currently used by Government for a variety of fixed and mobile applications. The 2 x 3 MHz immediately above this (i.e. 410 - 413 MHz / 420 - 423 MHz) is currently used for single frequency fixed links. This band will be used primarily for public safety and by local/regional authorities. The use of the band for fixed links will be minimised as far as possible, thus releasing additional spectrum for mobile use.

The bands 407.625 - 413 / 417.625 - 423 MHz will provide spectrum for local and regional authorities for mobile radio (primarily trunked). It is envisaged that the bands 410 - 413 / 420 - 423 MHz will be used primarily for digital trunked radio (the frequencies are within one of the bands designated for TETRA in Europe). A significant number of fixed links have been migrated out of the 410-413/420-423 MHz bands.

NF 14

430 - 440 MHz

This band is allocated to the amateur service in South Africa, as elsewhere in ITU Region 1. The sub-band 433.05 - 434.79 MHz, however, is also designated as an ISM band in Region 1, subject to the special authorisation of the administration

concerned (see RR S5.138). It has effectively been treated as an ISM band in South Africa for a number of years. Furthermore, the regulation in terms of Section 30(9)(a) specifies the use of the band for low power devices on an unlicensed basis, subject to obligatory type approval. The consequence of this is that the amateur service may not claim protection from (in-band) emissions from ISM equipment operating in the band, nor can ISM equipment and low power devices claim protection from amateur users in the band.

NF 15

440 - 450 MHz

This band was used primarily for fixed links. The aim in the medium term is to use this band primarily for mobile services (PMR in particular). A 5 MHz TX/RX separation is to be used, in accordance with the European DSI. Repeater systems and a significant number of fixed links have been migrated out of this band. The band (440 - 441 / 445 - 446 MHz) is allocated to fixed point-to-multipoint data services such as scanning telemetry and dual frequency alarm systems. The band (446 – 446.100 MHz) is now allocated to the PMR446 service. The band (441 – 441.100 MHz) is now used for simplex mobile systems.

NF 16

450 - 470 MHz

Note that ITU. RR 5.286AA, by which this band is identified for IMT implementation, does not apply to South Africa due to the band being used extensively for analogue land mobile radio and Government services.

The Authority will undertake a separate consultative process to determine if South Africa position should stand post WRC-07.

NF 17

790 – 862 MHz

Note that ITU. RR 5.316A, by which this band is allocated to mobile except aeronautical mobile on a primary basis, will be applicable to South Africa after the finalisation of the migration from analogue to digital terrestrial television, planned by 24 November 2011.

The Authority through Government Gazette 29345 of the 31 October 2006, decided that assignments of non-broadcasting services in TV channels 65 (822-830 MHz) and channel 66 (830-838 MHz) will be on a secondary basis. Therefore, the non broadcasting services in the band will not be limited only to fixed services, but will also include mobile services, and the services other than broadcasting services will be introduced on the basis of article 4.4 of the ITU Radio Regulations. There will be no further assignments in the band 790-854

MHz until the migration to digital television has been completed. (24 November 2011)

NF 18

872 - 905 / 917 - 950 MHz

This band is allocated on a shared basis between Wireless Access Service and mobile (primarily GSM and private mobile radio). There are a number of different WAS that could operate in this band, including systems based on TACS, GSM and CDMA.

NF 19

876 - 880 / 921 - 925 MHz

In South Africa; this band offers the possibility to use GSM-based PMR systems. The band might also be one in which TETRA-based equipment is available in the future. There may also be a possibility of WAS sharing these frequencies.

Although the national railway operator does not foresee the future usage of GSM-R, there have been enquiries from other entities that see a possibility of GSM-R use in projects like the GAUTRAIN. The Authority has decided to allocate this band to digital trunking systems on national basis. This does not preclude the use of GSM-R in certain projects where it might be feasible.

NF20

880 - 890 / 925 - 935 MHz

This band is allocated to extend GSM (E-GSM). Assignments have been made to mobile cellular operators.

NF 21

915 - 921 MHz

This is part of ITU Radio Region 2 ISM band 902 - 928 MHz (centre frequency 915 MHz). In South Africa this band is allocated as follows.

- Vehicle location systems in 915.025 -915.200 MHz band on licensed basis.
- Band 915.2 to 915.4 MHz is allocated to single fixed narrowband (25 kHz channel spacing) passive tag RFID systems with power output of the reader not exceeding 4W EIRP.
- Band 915.4 to 919.7 MHz is allocated to passive RFID systems employing Frequency Hopping Spread spectrum (FHSS) with 100 kHz guard band on either side with channels 200 kHz wide.

NF 22

1452 - 1492 MHz (digital audio broadcasting)

This band has been allocated internationally for use for digital broadcasting (S-DAB and T-DAB). Draft ECC decision ECC/DEC/(03)AB is to implement the addition of seven T-DAB blocks, covering the range 1467.5-1479.5 MHz, as decided in June 2002 in Maastricht, in conjunction with the transfer of part of the Wiesbaden plan. The frequency band 1479.5-1492 MHz has been designated for use by satellite DAB systems according to draft decision ECC/DEC/(03)AB. The fixed links that were previously allocated to this band have been migrated to the 1452 - 1464 MHz (paired with 1517.5 - 1529.5 MHz) and some have been migrated to frequencies above 3 GHz.

NF 23

1710 - 1785 / 1805 - 1880 MHz (GSM-1800)

These are the frequencies on which the GSM-1800 system operates (CEPT Recommendation T/R 22-07 refers). Sharing of these frequencies by Wireless Access Services applications is also likely to be possible. This band was also identified for future IMT developments.

NF 24

1880 - 1920 MHz

This band is allocated to Wireless Access Services. No new fixed link assignments are being made within the band. The allocation of this band to Wireless Access Services is important to South Africa.

NF 25

1885 - 2025 and 2110 - 2200 MHz

These bands are used worldwide for the implementation of third generation systems. The bands 1980 - 2010 and 2170 - 2200 MHz are intended for the satellite component of IMT. There are satellite systems operational in these bands.

The frequency bands 1885-1980 MHz, 2010-2025 MHz and 2110-2170 MHz are generally referred to as the terrestrial components of the IMT core bands. There are operators on this band currently.

NF 26

1920 – 2010 MHz

The Authority will no longer issue fixed links assignments on this band as this band has been reserved for the Satellite Component of IMT (WRC 07).

NF 27

2025 - 2110 and 2200 - 2290 MHz

Channel arrangements for the use of these bands for fixed services are described in both ITU-R Recommendation F.1098 and CEPT Recommendation T/R 13-01. These recommendations describe a channel plan in which the band is divided into dual-frequency channels with carrier spacing of 14 MHz and a Tx/Rx separation of 175 MHz. Carrier spacing of 7 MHz, 3.5 MHz and 1.75 MHz are also possible by means of channel subdivision. This channel arrangement is adopted in these bands for fixed services, while a certain portion of the band could be used for Wireless Access Services.

The sub-division of the band is as follows:

- 2025 – 2075 / 2200 - 2250 MHz to be used for Fixed Links;
- 2075 - 2110 / 2250 - 2285 MHz to be used for Fixed Links;
- 2285 - 2290 MHz to be used for WAS.
- 2290 – 2300 to be used for Fixed Links.

NF 28

2300 – 2400 MHz

South Africa supported identification of the band 2 300 – 2 400 MHz for future IMT development at WRC 07. The Authority will undertake a separate consultative process to determine the criteria to access this band.

NF 29

2400 - 2500 MHz

The sub-band 2483.5 – 2500 MHz is allocated for mobile-satellite systems in the space-to-Earth direction. The band 2400 – 2500 is also allocated to ISM (Industrial, Scientific and Medical) equipment and has primary status over the other applications within the band.

NF 30

2500 - 2700 MHz

The use of this band by MMDS has been discontinued. Part of this band 2500 – 2690 MHz is allocated to Broadband Wireless Access services. The Authority undertook an enquiry to determine criteria to access this band. The results of this will be made available in due course in a separate process.

NF 31

3400 – 3600 MHz

South Africa supported identification of the band 3 400 – 3 600 MHz for IMT developments at WRC 07. The Authority undertook an enquiry to determine criteria to access this band. The results of this will be made available in due course in a separate process.

NF 32

3600 – 4200 MHz

The band 3600 – 4200 MHz is used on a national basis for high capacity, core network telecommunication services under the fixed service using point to point (PTP) topologies over long hop lengths.

The band 3625 – 4200 MHz, part of the C-band, is used extensively for FSS (space-to-Earth) applications. This band is shared with FSS (space-to-Earth) on a strictly co-ordinated basis.

The decision of WRC-07 was that 200 of bandwidth in the sub-band 3.4 – 3.6 GHz will be reserved for future development of IMT. However, South Africa does not support the use of 3600 – 4200 GHz for IMT due to the fact that studies show that FS services are not compatible with IMT.

NF 33

4400 – 5000 MHz

The band 4400 – 5000 MHz is allocated to electronic news gathering (ENG)/ outside broadcasting (OB) services under the FS and will be shared with Government Services.

NF 34

5725 – 5875 MHz

The band 5725 – 5875 MHz is designated as an ISM band (S5.150). Industrial, Scientific and Medical Apparatus (ISM) equipment operating in this band shall observe International Special Committee on Radio Interference (CISPR) 11 and its amendments

NF 35

5850 – 6425 MHz

The band 5850 – 6425 MHz, part of the C-band, is used extensively for FSS (Earth-to-space) applications. This band is also shared with FS.

The C-band is also used for satellite news gathering (SNG) operations, which will require will require frequency co-ordination on a case-by-case basis. As far as it is possible users are encouraged to use the Ku-band for SNG operations in South Africa in order to avoid the interference problems associated with C-band SNG operations.

The deployment of large earth station antennas (greater than 2.4 metres diameter) in the C-band should be concentrated in selected suitable sites, known as "Teleports", to allow coordination between the services. This approach would ensure interference control, efficient use of the spectrum, adherence to environmental ethics and increased reliability of the services.

NF 36

5850 – 5925 MHz (6 GHz ENG/OB)

The band 5850 – 5925 MHz is allocated for temporary deployments (ENG/OB) under the FS. This band is also used for FSS (Earth-to-space)

NF 37

5925 – 6425 MHz (Lower 6 GHz band)

This band is used on a national basis for high capacity, core network telecommunication services under the FS using a PTP topology over long hop lengths. The channelization arrangement for this band is ITU-R Recommendation F.383. This band is shared with FSS (Earth-to-space)

NF 38

6425 – 7110 MHz (Upper 6 GHz band)

This band is used on a national basis for high capacity, core network telecommunication services under the FS using a PTP topology over long hop lengths.

The channelization arrangement for this band is ITU-R Recommendation F.384.

This band is shared between FS, NGSO MSS (space-to-Earth) feeder links and geo-stationary satellite orbit (GSO) FSS (Earth-to-space) systems under a strictly controlled and co-ordinated basis.

NF 39

7110 – 7425 MHz (Lower 7 GHz band)

This band is used on a national basis for medium to high capacity telecommunication services under the FS using a PTP topology over long hop lengths.

Analogue systems utilise the channelization arrangement according to International Radio Consultative Committee (CCIR) Report 934 Annex V. The channelization arrangement for new systems in this band is ITU-R Recommendation F.385 Annex 3.

NF 40

7425 – 7750 MHz (Upper 7 GHz band)

This band is used on a national basis for medium to high capacity telecommunication services under the FS using a PTP topology over long hop lengths.

Analogue systems utilise the channelization arrangement according to CCIR Report 934 Annex V. The channelization arrangement for new systems in this band is ITU-R Recommendation F.385 Annex 3.

NF 41

7725 – 8275 MHz (Lower 8 GHz band)

This band is used on a national basis for high capacity electronic communication services under the FS using a PTP topology, mainly for core networks over long hop lengths.

The channelization arrangement for this band is ITU-R Recommendation F.386 Annex 1.

NF 42

8275 – 8500 MHz (Upper 8 GHz band)

This band is used on a national basis for low to medium capacity electronic communication services under the FS using a PTP topology over long hop lengths. As per national agreement users will have access to this band using the concept of one or two reserved channels. As other services are introduced into this band appropriate sharing and co-ordination procedures will be established.

The channelization arrangement for this band is ITU-R Recommendation F.386 Annex 3.

NF 43

10.7 – 11.7 GHz

The band 10.7 – 11.7 GHz is used on a national basis for high capacity, core network and access network electronic communication services under the FS using a PTP topology over medium hop lengths.

The channelization arrangement for the band 10.7 – 11.7 GHz is ITU-R Recommendation F.387.

The bands 10.95 – 11.2 GHz and 11.45 – 11.7 GHz are also shared with FSS (space-to-Earth)

NF 44

12.75 – 13.25 GHz

The band 12.75 – 13.25 GHz is used on a national basis for low, medium and high capacity access and core networks under the FS using a PTP topology, over medium hop lengths, subject to rainfall.

The channelization arrangement for the band 12.75 – 13.25 GHz is ITU-R Recommendation F.497.

NF 45

14. – 14.5 GHz

The band 14.0 – 14.5 GHz, part of the Ku-band, is used extensively for FSS (Earth-to-space) applications.

The bands 10.95 – 11.2 GHz, 11.45 – 11.7 GHz and 12.5 – 12.75 GHz, part of the Ku-band, is used extensively for FSS (space-to-Earth) applications. The bands 10.95 – 11.2 GHz and 11.45 – 11.7 GHz are also shared with FS.

The Ku-band is the preferred band for SNG operations.

For reasons of efficient spectrum use by all services in the Ku-band, as well as environmental ethics, the deployment of large earth station antennas (greater than 1.8 metres diameter) should be concentrated at selected suitable sites, in order to avoid interference between the services sharing the spectrum. This approach would additionally ensure increased reliability of these services. These selected sites are known in most parts of the world as "Teleports".

Space segments from a range of satellites are currently available, while additional space segments will become available for use by South African operators.

NF 46

14.5 – 15.35 GHz

The band 14.5 – 15.35 GHz is used on a national basis for low and medium capacity access networks under the FS using a PTP topology, over medium hop lengths, subject to rainfall.

The channelization arrangement for the band 14.5 – 15.35 GHz is ITU-R Recommendation F.636.

ITU-R Recommendation F.636 is the ITU recommended channelization arrangement for systems operating in this band satisfying the capacity requirements.

NF 47

17.7 – 19.7 GHz

The band 17.7 – 19.7 GHz is used on a national basis for low, medium and high capacity access networks under the FS using a PTP topology, over short hop lengths, subject to rainfall.

The channelization arrangement for the band 17.7 – 19.7 GHz is ITU-R Recommendation F.595 Annex 1.

NF 48

The band 21.2 – 23.6 GHz is used on a national basis for low, medium and high capacity access networks under the FS using a PTP topology, over short hop lengths, subject to rainfall.

The current channelization arrangement for the band 21.2 – 23.6 GHz is ITU-R Recommendation F.637 Annex 1. As part of ITU-R Recommendation F.637 Annex 1 the band 21.2 – 23.6 GHz is subdivided into ten sub-bands. In a unique South African approach the ten sub-bands channelization arrangement was further specified as follows:

Sub-band	**Go:** **Band edges (GHz)**	**Return:** **Band edges (GHz)**	**Subdivision**
1	21.224 - 21.336	22.456 - 22.568	13 x 7 MHz + 6 x 3.5 MHz
2	21.336 - 21.448	22.568 - 22.680	13 x 7 MHz + 6 x 3.5 MHz
3	21.448 - 21.560	22.680 - 22.792	13 x 7 MHz + 6 x 3.5 MHz

Sub-band	Go: Band edges (GHz)	Return: Band edges (GHz)	Subdivision
4	21.560 - 21.672	22.792 - 22.904	13 x 7 MHz + 6 x 3.5 MHz
5	21.672 - 21.784	22.904 - 23.016	8 x 14 MHz
6	21.784 - 21.896	23.016 - 23.128	8 x 14 MHz
7	21.896 – 22.008	23.128 - 23.240	4 x 28 MHz (4 x 28 MHz or 3 x 28 MHz and 8 x 3.5 MHz)
8	22.008 – 22.120	23.240 - 23.352	4 x 28 MHz
9	22.120 – 22.232	23.352 - 23.464	1 x 112 MHz (16 x 7 MHz or 8 x 14 MHz)
10	22.232 – 22.344	23.464 - 23.576	1 x 112 MHz

European Conference of Postal and Telecommunications (CEPT) Recommendation T/R 13-02 Annex A provides the channelization arrangement for the band 22 – 22.6 GHz paired with 23.0 – 23.6 GHz (part of current 23 GHz band, which is not affected by HDTV).

The band 21.4 – 22 GHz is allocated to the Broadcast Satellite Services (BSS) high definition television (HDTV) from 1 April 2007 on a primary basis.

NF 49

24.5 – 26.5 GHz

The band 24.5 – 26.5 GHz is allocated to low, medium and high capacities under the FS using PTP and PTMP topologies over short hop lengths, subject to rainfall.

The channelization arrangement for the band 24.5 – 26.5 GHz is in accordance with CEPT Recommendation T/R 13-02 Annex B.

It is anticipated that an unmanned receive only earth station, forming part of the National Polar-orbiting Operational Environmental Satellite System (NPOESS), will be located in South Africa, and that this system will operate within the 25.5 to 27 GHz frequency range within the Earth Exploration Satellite (space-to-earth) service."

NF 50

27.5 – 28.35 GHz

The bands 27.5 – 28.35 GHz (base station to subscriber) and 29.1 – 29.25 GHz (subscriber to base station) are allocated to broadband service - local multipoint distribution services (LMDS) under the FS using a PTMP topology over short hop lengths, subject to rainfall.

NF 51

37.0 – 39.5 GHz

The band 37.0 – 39.5 GHz is allocated to low, medium and high capacity PTP systems under the FS over very short hop lengths, subject to rainfall.

The channelization arrangement for the band 37.0 – 39.5 GHz is in accordance with ITU-R Recommendation F.749 Annex 1.

NF 52

71 – 76 GHz

The band 71 – 76 GHz & 81 – 86 GHz is allocated to very high capacity Broadband Fixed Wireless Systems in the higher millimetre wave bands, with 1 – 2 km hop lengths (line-of-sight conditions). "Radio Frequency Channel Arrangements for Fixed Service Systems Operating in the Bands 71-76 GHz and 81-86 GHz" shall be according to CEPT Rec. (05)07). Maximum power levels are also specified with an EIRP limit of 55dBW and a transmit power limit (at the antenna port) of +30dBm.

ANNEX B: TERMS AND DEFINITION

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 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 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 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 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 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.

Allocation of a Frequency Band

Entry in the Table of Frequency Allocations of a given frequency band for the purpose of its use by one or more terrestrial or space radiocommunication services or the radio astronomy service under specified conditions. This term shall also be applied to the frequency band concerned.

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 Radio Station

Means a radio station for a service of self-tuition, intercommunication and technical investigation that is operated by an amateur.

Amateur Service

A Radiocommunication service for the purpose of self-training, intercommunication and technical investigations carried out by amateurs that are by duly authorized persons interested in radio technique solely with a personal aim and without pecuniary interest.

Amateur-Satellite Service

A Radiocommunication service using space stations on earth satellites for the same purpose as those of amateur service.

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.

Broadcasting Service

Means any service which consists of broadcasting and which service is conveyed by means of an electronic communications network.

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 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 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

ANNEX C: LIST OF ACRONYMS

AMSS	Aeronautical Mobile Satellite Service
ARNS	Aeronautical Radionavigation Service.
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.

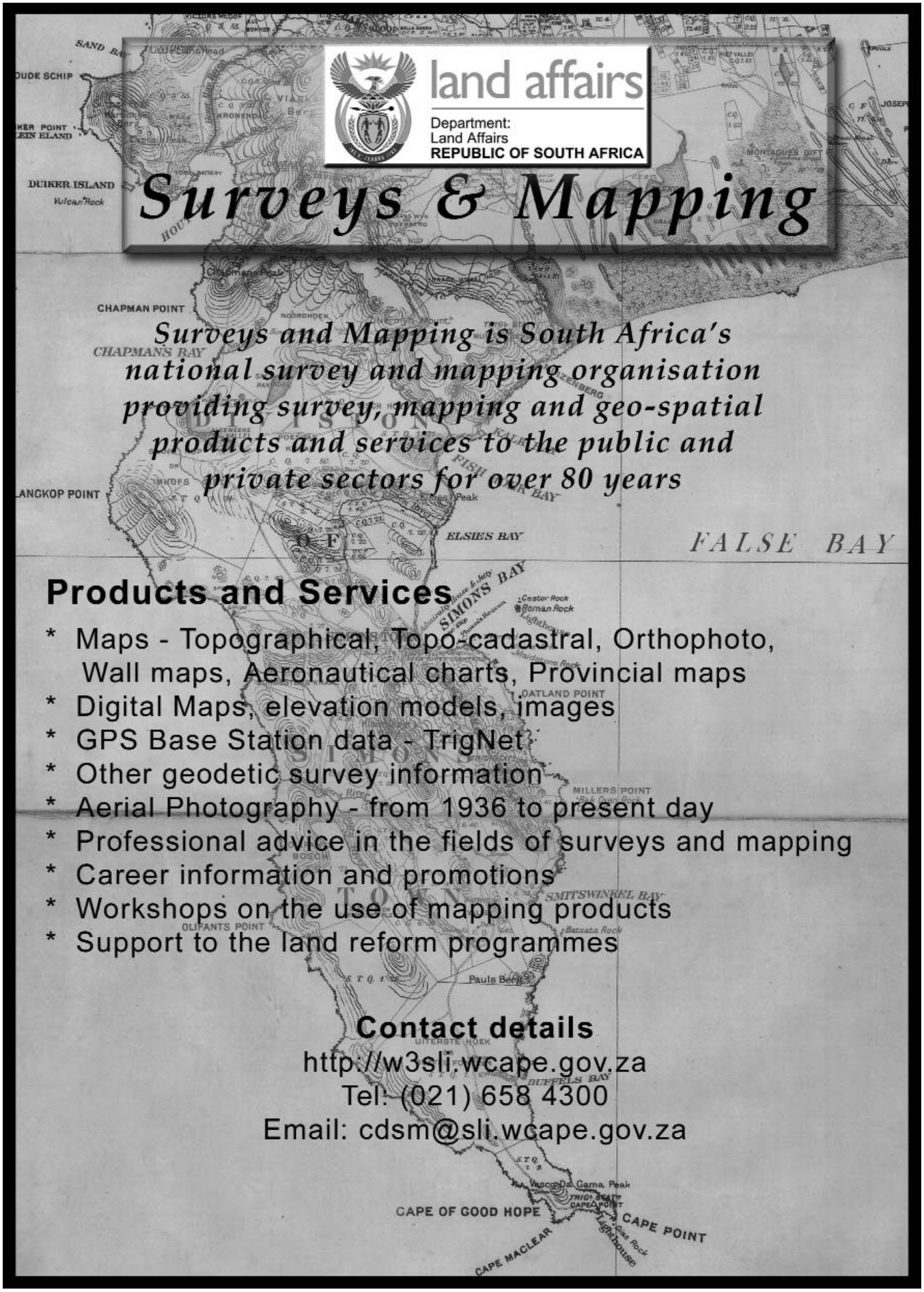
ETSI	European Telecommunications Standards Institute
FHSS	Frequency Hopping Spread Spectrum
FM	Frequency Modulation
FSS	Fixed Satellite Service
FTP	File Transfer Protocol
FWA	Fixed Wireless Access
GAUTRAIN	A high speed train for Gauteng
GLONASS	Global Navigation Satellite System
GMPCS	Global Mobile Personal 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.
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
IMT-2000	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)
MF	Medium Frequency (300 to 3000 kHz)
Mob-87	World Administrative Radio Conference for the Mobile Services, Geneva, 1987.
Mobile	Mobile service - a radiocommunication service between mobile land stations, or between mobile stations.
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 - developed from DRIVE.
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.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