NATIONAL FREQUENCY ALLOCATION TABLE 2017

Prepare by the Office of the Regulator

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1. SAMOA NATIONAL FREQUENCY ALLOCATION

Samoa is a member of the International Telecommunication Union (ITU). The International Telecommunication Union (ITU), United Nations organisation, is responsible for regulating the international use of spectrum. The ITU-R Radio Regulation 2015 (RR15) Article 5, contain the international frequency allocation table. This table is important in that it forms the global framework for international, regional and national spectrum planning.

The key features of the ITU Frequency Allocation Table is that it sets out the frequency bands that have been allocated to services and divides the world into three distinctive regions, with introduction of variety of services and applications, ICT sector has evolved over the years and has brought about changes in economic and social aspects of the global society. It is now evident that an effective telecommunication infrastructure is the essential impetus that enables a country to achieve successful social and economic development.

A large amount of evidence is now available which verifies that more and more ICT service provisioning is now relying on wireless medium of service delivery. Underpinning the deployment of these communications systems, is the scarce national resource i.e. the Radio Frequency Spectrum. RF Spectrum is a subset of the electromagnetic waves regulated at multiple levels ranging from global to national level to prevent interference among users and systems. At national level the use of RF spectrum needs to be coordinated to avoid interference problem between licensees. Two radio-communication devices operating on the same frequencies, at the same time and at about the same coverage area will produce interference to the receivers.

The regional and global need for regulation of the RF resource stems from the fact that the Radio waves propagate in space with no regard for national boundaries. This makes harmonization of allocation policies a particularly critical element of national Spectrum Management especially for high power (fixed links, broadcast etc.) and wide coverage systems (cellular mobile systems etc.).

With this aim of Harmonization of spectrum globally, World Radiocommunication Conferences (WRCs) are organized by International Telecommunication Union (ITU) every three to four years. It is the job of WRC to review, and, if necessary, revise the Radio Regulations, the international treaty governing the use of the radio-frequency spectrum and the geostationary-satellite and non-geostationary-satellite orbits. Revisions are made on the basis of an agenda determined by the ITU Council, which takes into account recommendations made by previous World Radiocommunication Conferences.

The last WRC i.e. WRC-15 was held in Geneva from 2 - 27 November 2015, considered for four weeks the results of the detailed studies to review the relevant parts of the international spectrum regulatory framework in line with the evolution of existing, emerging and future applications, systems and technologies. As an outcome WRC-15 also decided on the most

efficient ways to exploit the limited resource of radio-frequency spectrum and manage satellite orbits.

With this global context the administrations of the world tend to update their national strategies after each WRC so as to align them with the updated Radio regulations in order to harness the benefits of the harmonized spectrum allocations.

The Office of The Regulator (OOTR) for the Independent State of Samoa to update its current National Table of Frequency Allocation thereby aligning its national allocation strategies with ITU-R Region 3 Allocations. The content would further the cause of developing a modern Spectrum Management regime in Samoa and complements the activities of OOTR in Managing, allocating and assigning National Radio Spectrum in accordance with section 8 (1) h of the amended Telecommunications Act 2005.

2. Management of Radio Frequency Resource

The Radio Frequencies (RF) can cross geographical borders of countries therefore a harmonisation and coordination is needed in use of the national Radio Spectrum so as not to cause or receive any harmful interference from radio equipment outside (or inside) the boundary of an Administration.

In actual practice, the radio frequency spectrum is managed on a number of levels;

2.1 International level

The international framework for the use of the radio frequency spectrum is set out in a treaty – the Radio Regulations - ratified by the Member States of the International Telecommunication Union (ITU), a specialized UN agency. The Radio Regulations govern the use of the radio-frequency spectrumand the geostationary satellite and non-geostationary-satellite orbits. Article 5 of the Radio Regulations deals with regulations for frequency allocation and contains the (international) Table of Frequency Allocations, together with various definitions concerning frequency allocation. The Table of Frequency Allocations reflects the decisions made at competent level e.g. WRC on the purpose or purposes to which particular frequencies will be put.

World Radiocommunication Conferences (WRCs) are held every three to four years. It is the task of each WRC to review, and, if necessary, revise the Radio Regulations. Revisions are made on the basisof an agenda determined by the ITU Council, which takes into account recommendations made by previous world Radiocommunication conferences. The general scope of the agenda of WRCs is established four to six years in advance, with the final agenda set by the ITU Council two years beforethe conference, with the concurrence of a majority of ITU Member States.

Under the terms of the ITU Constitution and Convention, a WRC can:

- Revise the Radio Regulations;
- Address any Radiocommunication matter of worldwide character;
- Instruct the Radio Regulations Board and the Radiocommunication Bureau, and review theiractivities;

- Identify topics to be studied by the Radiocommunication Assembly and the RadiocommunicationStudy Groups in preparation for future Radiocommunication Conferences.

Preceding the WRCs, usually Radiocommunication Assemblies are conducted. The Radiocommunication Assemblies (RAs) are responsible for the structure, programme and approval ofRadiocommunication studies. The Assemblies can:

- Assign conference preparatory work and other questions to the Study Groups;
- Respond to other requests from ITU conferences;
- Suggest suitable topics for the agenda of future WRCs;
- Approve and issue ITU-R Recommendations and Reports developed by the Study Groups and ITU-R Questions for further studies;
- Set the programme for Study Groups, and disband or establish Study Groups according to need.

In essence, WRCs provide the required an international platform for all decisions related to frequencyuse based on the detailed technical studies carried out by SGs guided by RAs. The structure and workflow can be understood from the following:

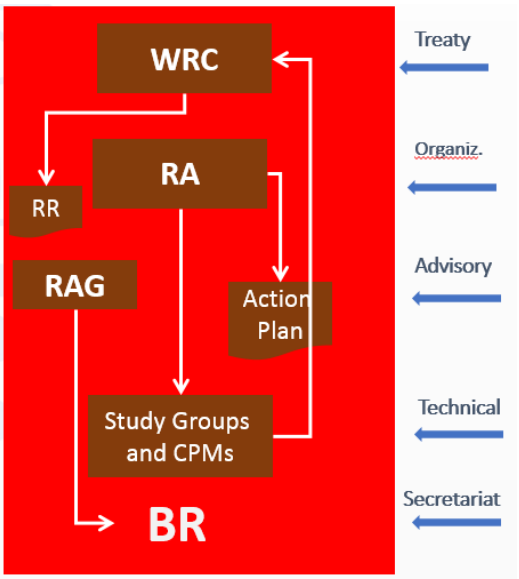

Fig: 1 Role of WRCs, RAs and SGs in International Spectrum Management

2.2 Regional Level (not ITU)

On a lower by still international level RF Management is most commonly done by regional organizations, which act consistently within the ITU framework. Regional Telecommunication Organizations have been established (usually) by administrations to develop harmonization measures intended to facilitate free movement of telecommunication equipment and services within the region and to offer industry and operators the economies of scale through a larger market with common requirements. Harmonization measures may include harmonization of frequency use, common technical requirements and preparation of common proposals to ITU World Radiocommunication Conferences. A detailed description of regional harmonization and regional organizations is given in ITU-R Report SM.2093. For the Asia-Pacific region, Asia Pacific Telecommunity (APT) takes the roles and responsibilities of

the regional harmonization of the spectrum use. In doing so it meets regularly to develop common positions from the regional administrations for WRCs.

2.3 National Level

The primary legislation authorised the Office of the Regulator undertakes its task nationally at three technical levels. These definitions of each level is as per the following table.

	Allocation	Allotment	Assignment
Definition	*Allocation (of a frequency band): Entry in the Table of Frequency Allocations of a given frequency band for the purpose of its use by one or more terrestrial or space Radiocommunication services or the radio astronomy service under specified conditions. This term shall also be applied to the frequency band concerned.*	*Allotment (of a radio frequency or radio frequency channel): Entry of a designated frequency channel in an agreed plan, adopted by a competent conference, for use by one or more administrations for a terrestrial or space Radiocommunication service in one or more identified countries or geographical areas and under specified conditions.*	*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.*
Frequency Distribution to	Services	Areas or Countries	Stations

Table1: *Definitions of Allocation, Allotment and Assignment*

2.4 Allocation

A national legislative framework is usually put in place to establish an administration recognised by the ITU as responsible for discharging the obligations undertaken in the Constitution of the International Telecommunication Union, in the Convention of the International Telecommunication Union and in the Administrative Regulations (CS 1002). These obligations include management of the radio spectrum. The administration may be a Government ministry, or an independent regulator operating under a legislative mandate or policy guidelines.

As an essential part of this legislative framework, the Spectrum management Authority establishes a National Table of Frequency Allocations (NTFA) which sets out what radio services can use which frequency bands and under what conditions. The NTFA should be based on the Table of Frequency Allocations in Article 5 of the Radio Regulations as it is a global treaty. Over time, in all countries, changes in technology and user needs require changes to the NTFA. If it is not possible to accommodate these changes in conformity with the allocations of the current International Table, it is necessary for the administration to seek changes to the International Table at a World Radio Conference which may be added as footnote to the Article 5 of the Radio Regulations during the WRC. In practice, it is normal for administrations to co-operate with other (neighbouring and/or regional) administrations in WRC preparations at regional and global (ITU) level to enable their changing requirements to

be co-ordinated and developed in an organised framework. With the current pace of technology development, this is an on-going task and the administrations establish a national consultative procedure to prepare national requirements and positions for presentation at regional preparation meetings and Radiocommunication conferences.

2.5 Assignment Level

Assigning a particular frequency (or groups of frequencies) to users (stations) is the detailed level of national spectrum management. The methods used may be administrative, market-based or some spectrum may be reserved for licence-exempt[1] use that satisfies certain technical or operational conditions, for example restricted power levels and geographic range. For licensed use, this detailed level usually includes establishing policies for technical conditions for frequency use. Conditions of use may vary widely, from reserving particular frequencies for specific uses with detailed technical requirements (for example: channel plans, equipment standards and assignment criteria), to allowing considerable flexibility in spectrum use for particular bands or services with light technical requirements (e.g. a simple spectrum mask). This information on detailed frequency use can be published either as part of the NTFA (e.g. in referenced annexes to the NTFA) or as a separate National Table of Frequency Use.

2.6 Allotment Level

To understand the concept as a whole an example can be made for broadcasting service, broadcasting operators usually lay roll out plans up to 20 years ahead as the service provisioning requires lot of investment and infrastructure. Therefore administrations undertake technical planning especially for areas where interference might be experienced between nation states (or between different regions of the same country as the case may be based on the type of licensing). A plan is drawn up which highlights which frequency is used at which station level based on regional coverage footprint level. Simply put, it results in a framework that allows interference to be managed when the networks are implemented in the future. In this case allotments are made in a plan.

The national basis, the allotment may also be done through assignment of a block of spectrum (instead of particular frequencies or a range of frequencies) to a licensee who will then make specific assignments to stations. A block of spectrum (of any size and possibly comprising two attached blocks to allow frequency division duplex operation) is given to a licensee. This is

[1] *It should be noted that RR No 18.1.1 mandates that: "No transmitting station may be established or operated by a private person or by any enterprise without a licence issued in an appropriate form and in conformity with the provisions of these Regulations by or on behalf of the government of the country to which the station in question is subject". Hence, "license-exempt" and similar expressions (e.g. "unlicensed", etc.), refers to radio devices with transmitting capabilities (emitting radio waves) that can be operated by any person, without previously obtaining a particular authorization for it (particular license). This particular licensing waiving is only possible because of operation of such devices has been previously authorized to all public through a Generic Use Authorization, GUA (also named General License, or equivalent names). GUA always includes a set of detailed technical and operational specifications that must be strictly obeyed when operating such devices, in order to guarantee they can be used with a very low risk of causing interference to other similar devices or other services. Then, when a NTFA includes these license-exemptions, the pertinent GUA (or equivalent) should also be included or referenced.*

particularly common approach taken up by administrations in case of Commercial Mobile cellular service operators.

3. Spectrum Management in Samoa

3.1 Legal Framework

The Telecommunications sector in Samoa is governed through the Telecommunication Act 2005. In-line with the section 8(1) h of the Act the Office of the Regulator (OOTR) in Samoa is charged with the responsibility to manage spectrum resource in Samoa. According to the mentioned clause the OOTR is entrusted to

"… establish a radio spectrum plan and manage radio spectrum allocated to the telecommunications sector"

In order to regulate the increasing competitive demand for spectrum in Samoa, OOTRadopted Spectrum Management Policy and Guidelines for the sector in 2010 with the last revision to this document made in March 2011. The purpose of this Policy document was to set forth the policies and guidelines for the use of the radio spectrum in Samoa for a fair andtransparent process for the issuing of spectrum licenses, allocations and assignments based on marketplace demands and promote competition and to ensure that spectrum is availableto provide important public benefits.

The guidelines ensure that the principles of good spectrum management would be achieved in order to maximize the efficient use of radio spectrum while assuring that spectrum is made available for new technologies and services through flexibility to new market trends. They documents set forth the national policy on issues related to, amongst others:

- Frequency sharing
- Frequency Planning and allocation
- Frequency Authorization
- Universal access
- Frequency License and usage Fees with eligibility for Fees Exemption
- Short Range Devices
- Frequency Monitoring

The frequency allocation plan from 285 kHz to 40.5 GHz and technical band planning of major bands for broadband wireless access have also been defined.

In line with the regulatory framework and clauses 23 and 24 of the Telecomm Act, OOTR has given licenses of use of national RF resource for different services. These include:

Category	Apparatus Type
Fixed Links	Point to point links carrying data for example into telecommunications networks or between broadcasting studios and transmitters
Maritime	Apparatus on commercial trading vessels (vessels over and under 25 meters in length); apparatus making use of dedicated frequencies and

	assigned channels (vessels over and under 25 meters in length); tourist passenger vessels; private pleasure craft; small inter-island water taxis and small locally registered/owned fishing craft. Coastal stations servicing vessels
Aeronautical Services	Aeronautical stations serving aircraft; commercial aircraft; private aircraft not used for commercial purposes
PMR	Private mobile radio networks including land mobile networks
Broadcast Stations	Broadcast radio and TV networks
Amateur Stations	Amateur unrestricted; novice; and visitor's permit
VSAT	Receive only; Transmit and receive (for commercial communication purposes)
Telemetry and beacons	Civil aviation beacon, signals or indicators.
Telecom Cellular	Number of commercial cellular mobile operators *(Current RF allocations are detailed in Annex-D)*

Table 2: *Statistics of RF License given in Samoa*

It may also be noted that class license regime has been adopted for the SRDs.

In addition to this Spectrum policy and guidelines, a detailed specific document on policy related issues related to TV broadcast in VHF and UHF band had also been adopted in June 2008.

4. Considerations on Development of National Table of Frequency Allocations (NTFA)

A National Table of Frequency Allocations is a method for presenting the national spectrum plan in an easily understandable (tabular) format. NTFA is a national level document guiding the frequency assignment procedures in the country. Preparing or updating the NTFA requires giving due regard to the requirements of the Government, Industry, public, International treaties and other users of the radio frequency. Therefore while developing a NTFA table due consideration has been given to:

- The current Telecommunications Law;

- The efficient use of radio frequency spectrum while accommodating all requirements of national spectrum users;
- The impact on existing licensees and users of radio frequency; and
- The applicable international conventions, standards and agreements concerning frequency spectrum including the management of radio frequency issues with neighbouring countries.
- Spectrum Policy, Guidelines or any other relevant secondary level legislations.

While discussion has been made in section 2 on the current national considerations for preparing/updating the NTFA, the requirement of international harmonization is explained in the upcoming subsection.

4.1 International Considerations

In order to achieve non-interference based use of radio resource globally, ITU-R, the Radiocommunication Sector of ITU, has divided the world into three Regions as shown on the inFigure 5:

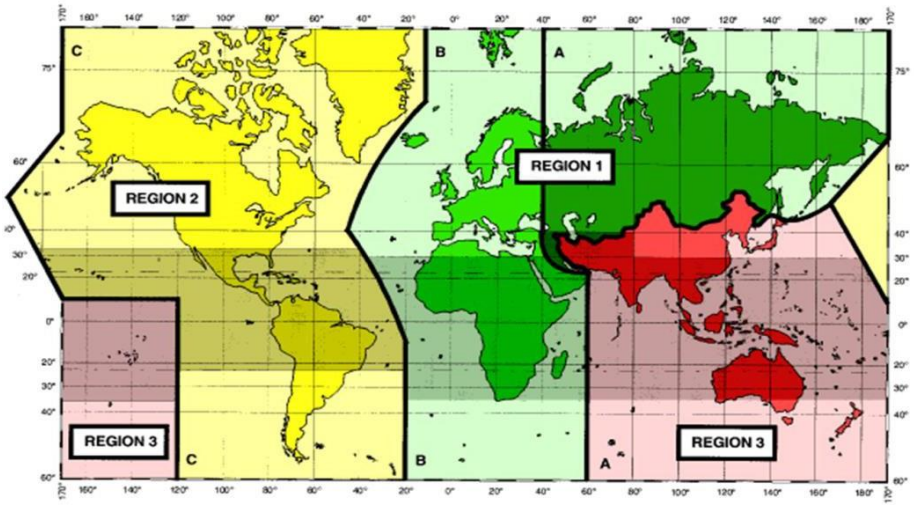

Fig: 5 ITU - R World Regions for Frequency Allocation

Note: *The shaded areas near around equator line in the above map are defined as tropical areas.*

The Independent state of Samoa is signatory to International Telecommunication Union (ITU) convention and situated geographically in 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. Whereas the lines A, B and C are defined as follows:

- **Line A:** *Line A extends from the North Pole along meridian 40° East of Greenwich to parallel 40° North; thence by great circle arc to the intersection of meridian 60° East and the Tropic of Cancer; thence along the meridian 60° East to the South Pole.*

- **Line B:** *Line B extends from the North Pole along meridian 10° West of Greenwich to its intersection with parallel 72° North; thence by great circle arc to the intersection of meridian 50° West and parallel 40° North; thence by great circle arc to the intersection of meridian 20° West and parallel 10° South; thence along meridian 20° West to the South Pole.*
- **Line C:** *Line C extends from the North Pole by great circle arc to the intersection of parallel 65° 30 North with the international boundary in Bering Strait; thence by great circle arc to the intersection of meridian 165° East of Greenwich and parallel 50° North; thence by great circle arc to the intersection of meridian 170° West and parallel 10° North; thence along parallel 10° North to its intersection with meridian 120° West; thence along meridian 120° West to the South Pole.*

5. Objectives

In light of fore-mentioned principle legal documents and the consideration that "Radio frequency spectrum shall be recognized as a strategic national public resource", the core objectives while developing NTFA in connection includes the following:

- *A transparent, non-discriminatory approach to spectrum management*
- *Promote economic and societal benefits for all spectrum users through optimizing the value of scarce radio spectrum resources and ensure its efficient use through the utilization of market-based mechanisms including international tenders.*
- *Ensure public safety communications needs are met*
- *Ensure interoperability of all available communications technologies*
- *Support and promote innovation and competition*
- *Reduce regulatory barriers to radio frequency access*
- *Reserve appropriate spectrum for future innovative technologies*
- *To charge user fees for services that provide identifiable recipients with direct benefits beyond those received by the general public thereby promoting an equitable approach to financing government and regulatory programs.*

6 NTFA Updated

While considering the primary (*Telecommunication ACT 2005*) and secondary (*Spectrum Policy and Guidelines*) National Legal and policy framework currently in-force in Samoa and taking into account the best practices of the objectives while developing and/or updating the NTFA globally, including the outcomes of the WRC-12 and WRC-15, these are details in the form Annexures as follows:

Annex – A **Definition of terms used in NTFA**
The terms and definitions are all in accordance with the Radio Regulations edition 2016.

Annex – B **Frequency allocation table for Samoa**
The table gives detailed service allocation from 8.3 kHz to 3000 GHz

Annex - C **Channelling and band planning Strategies**
Major Band for PMR, Tetra, Cellular Mobile, Aeronautical Services

Annex - D **Bands for Short Range Device**
Provides the details of the spot frequencies and RF bands used for various application of SRDs

Annex – E **Frequencies for distress and safety communications for Global Maritime Distress and Safety System (GMDSS)**

Annex – F **Frequency Allocation chart for Samoa**
The chart serves as a quick reference of service allocation from 8.3 kHz to 3000 GHz. However for detailed information on allocation of any band, reference should made to Annex-B and Annex-C or their latest versions as applicable.

Annex A : Definition

1. Definition

1.1 SERVICES

- ***administration****:* Any governmental department or service responsible for discharging the obligations undertaken in the Constitution of the ITU, in the Convention of the ITU and in the Administrative Regulations (CS 1002).
- ***telecommunication:*** Any transmission, emission or reception of signs, signals, writings, images and sounds or intelligence of any nature by wire, radio, optical or other electromagnetic systems (CS).
- ***radio:*** A general term applied to the use of radio waves.
- ***radio waves or hertzian waves****:* Electromagnetic waves of frequencies arbitrarily lower than 3 000 GHz, propagated in space without artificial guide.
- ***radiocommunication****:* Telecommunication by means of radio waves (CS) (CV).
- ***terrestrial radiocommunication:*** Any radiocommunication other than space radiocommunication or radio astronomy.
- ***space radiocommunication****:* Any radiocommunication involving the use of one or more space stations or the use of one or more reflecting satellites or other objects in space.
- ***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.
- ***radionavigation****:* Radiodetermination used for the purposes of navigation, including obstruction warning.
- ***radiolocation****:* Radiodetermination used for purposes other than those of radionavigation.
- ***radio direction-finding****:* Radiodetermination using the reception of radio waves for the purpose of determining the direction of a station or object.
- ***radio astronomy****:* Astronomy based on the reception of radio waves of cosmic origin.
- ***Coordinated Universal Time (UTC):*** Time scale, based on the second (SI), as defined in Resolution 655 (WRC015)
- ***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.
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1.2 Radio services

- ***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.
- ***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 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.

- ***inter-satellite service:*** A radiocommunication service providing links between artificial satellites.
- ***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.
- ***mobile service:*** A radiocommunication service between mobile and land stations, or between mobile stations (CV).
- ***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.
- ***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 inthis 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.
- ***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.
- ***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.
- ***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 (R) service***: An aeronautical mobile service reserved for communications relating to safety and regularity of flight, primarily along national or international civil air **R**outes.

- ***aeronautical mobile (OR)*** An aeronautical mobile service intended for communications, including those relating to flight coordination, primarily **O**utside national or international civil air **R**outes.
- ***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) service:*** An aeronautical mobile-satellite service reserved for communications relating to safety and regularity of flights, primarily along national or international civil air **R**outes.
- ***aeronautical mobile-satellite (OR) service:*** An aeronautical mobile-satellite service intended for communications, including those relating to flight coordination, primarily **O**utside national or international civil air **R**outes.
- ***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.
- ***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 or 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 used for the purpose of radionavigation. This service may also include feeder links necessary for its operation.
- ***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.
- ***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.
- ***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.
- ***meteorological aids service:*** A radiocommunication service used for meteorological, including hydrological, observations and exploration.
- ***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.

- ***meteorological-satellite service:*** An earth exploration-satellite service for meteorological purposes.
- ***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 purposes as those of the standard frequency and time signal service. This service may also include feeder links necessary for its operation.
- ***space research service:*** A radiocommunication service in which spacecraft or other objects in space are used for scientific or technological research purposes.
- ***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-satellite service:*** A radiocommunication service using space stations on earth satellites for the same purposes as those of the amateur service.
- ***radio astronomy service:*** A service involving the use of radio astronomy.
- ***safety service:*** Any radiocommunication service used permanently or temporarily for the safeguarding of human life and property.
- ***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.

1.3 RADIO STATIONS AND SYSTEMS

- ***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.
- ***terrestrial station:*** A station effecting terrestrial radiocommunication. In these Regulations, unless otherwise stated, any station is a terrestrial station.
- ***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.
- ***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.

- ***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.
- ***fixed station:*** A station in the fixed service.
- ***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.
- ***mobile station:*** A station in the mobile service intended to be used while in motion or during halts at unspecified points.
- ***mobile earth station:*** An earth station in the mobile-satellite service intended to be used while in motion or during halts at unspecified points.
- ***land station:*** A station in the mobile service not intended to be used while in motion.
- ***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.
- ***base station:*** A land station in the land mobile 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.
- ***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 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.
- ***coast station:*** A land station in the maritime mobile service.
- ***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.
- ***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 earth station:*** A mobile earth station in the maritime mobile-satellite service located on board ship.
- ***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 station:*** A coast station in the port operations service.
- ***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.
- ***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.
- ***aircraft station:*** A mobile station in the aeronautical mobile service, other than a survival craft station, located on board an aircraft.
- ***aircraft earth station:*** A mobile earth station in the aeronautical mobile-satellite service located on board an aircraft.

- ***broadcasting station:*** A station in the broadcasting service.
- ***radiodetermination Station:*** A station in the radiodetermination service.
- ***radionavigation mobile station:*** A station in the radionavigation service intended to be used while in motion or during halts at unspecified points.
- ***radionavigation land station***: A station in the radionavigation 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 land station: A station in the radiolocation service not intended to be used while in motion.***
- ***radio direction-finding station:*** A radiodetermination station using radio direction-finding.
- ***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.
- ***emergency position-indicating radiobeacon station:*** A station in the mobile service the emissions of which are intended to facilitate search and rescue operations.
- ***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.
- ***standard frequency and time signal station:*** A station in the standard frequency and time signal service.
- ***amateur station***: A station in the amateur service.
- ***radio astronomy station***: A station in the radio astronomy service.
- ***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.
- ***ship's emergency transmitter:*** A ship's transmitter to be used exclusively on a distress frequency for distress, urgency or safety purposes.
- ***radar:*** A radiodetermination system based on the comparison of reference signals with radio signals reflected, or retransmitted, from the position to be determined.
- ***primary radar:*** A radiodetermination system based on the comparison of reference signals with radio signals reflected from the position to be determined.
- ***secondary radar:*** A radiodetermination system based on the comparison of reference signals with radio signals retransmitted 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.
- ***instrument landing system (ILS):*** A radionavigation system which provides aircraft with horizontal and vertical guidance just before and during landing and, at certain fixed points, indicates the distance to the reference point of landing.
- ***instrument landing system 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.
- ***instrument landing system glide path:*** A system of vertical guidance embodied in the instrument landing system which indicates the vertical deviation of the aircraft from its optimum path of descent.

- ***marker beacon:*** A transmitter in the aeronautical radionavigation service which radiates vertically a distinctive pattern for providing position information to aircraft.
- ***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.
- ***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.
- ***adaptive system:*** A radiocommunication system which varies its radio characteristics according to channel quality.
- ***space system:*** Any group of cooperating earth stations and/or space stations employing space radiocommunication for specific purposes.
- ***satellite system:*** A space system using one or more artificial earth satellites.
- ***satellite network***: A satellite system or a part of a satellite system, consisting of only one satellite and the cooperating earth stations.
- ***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.
- ***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.
- ***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.
- ***meteorological aids land station:*** A station in the meteorological aids service not intended to be used while in motion.
- ***meteorological aids mobile station:*** A station in the meteorological aids service intended to be used while in motion or during halts at unspecified points.

1.4 OPERATIONAL TERMS

- ***public correspondence:*** Any telecommunication which the offices and stations must, by reason of their being at the disposal of the public, accept for transmission (CS).
- ***telegraphy*** A form of telecommunication in which the transmitted information is intended to be recorded on arrival as a graphic document; the transmitted information may sometimes be presented in an alternative form or may be stored for subsequent use (CS 1016).
- ***telegram:*** Written matter intended to be transmitted by telegraphy for delivery to the addressee. This term also includes radiotelegrams unless otherwise specified (CS). In this definition the term telegraphy has the same general meaning as defined in the Convention.
- ***radiotelegram:*** A telegram, originating in or intended for a mobile station or a mobile earth station transmitted on all or part of its route over the radiocommunication channels of the mobile service or of the mobile-satellite service.
- ***radiotelex call:*** A telex call, originating in or intended for a mobile station or a mobile earth station, transmitted on all or part of its route over the radiocommunication channels of the mobile service or the mobile-satellite service.

- ***frequency-shift telegraphy:*** Telegraphy by frequency modulation in which the telegraph signal shifts the frequency of the carrier between predetermined values.
- ***facsimile:*** A form of telegraphy for the transmission of fixed images, with or without half-tones, with a view to their reproduction in a permanent form.
- ***telephony:*** A form of telecommunication primarily intended for the exchange of information in the form of speech (CS 1017).
- ***radiotelephone call:*** A telephone call, originating in or intended for a mobile station or a mobile earth station, transmitted on all or part of its route over the radiocommunication channels of the mobile service or of the mobile-satellite service.
- ***simplex operation:*** Operating method in which transmission is made possible alternately in each direction of a telecommunication channel, for example, by means of manual control.
- duplex operation: Operating method in which transmission is possible simultaneously in both directions of a telecommunication channel2.
- ***semi-duplex operation:*** A method which is simplex operation at one end of the circuit and duplex operation at the other.2
- ***television:*** A form of telecommunication for the transmission of transient images of fixed or moving objects.
- ***individual reception (in the broadcasting-satellite service):*** The reception of emissions from a space station in the broadcasting-satellite service by simple domestic installations and in particular those possessing small antennas.
- ***community reception (in the broadcasting-satellite service):*** The reception of emissions from a space station in the broadcasting-satellite service by receiving equipment, which in some cases may be complex and have antennas larger than those used for individual reception, and intended for use:
    - by a group of the general public at one location; or
    - through a distribution system covering a limited area.
- ***telemetry:*** The use of telecommunication for automatically indicating or recording measurements at a distance from the measuring instrument.
- ***radiotelemetry:*** Telemetry by means of radio waves.
- ***space telemetry:*** The use of telemetry for the transmission from a space station of results of measurements made in a spacecraft, including those relating to the functioning of the spacecraft.
- ***telecommand:*** The use of telecommunication for the transmission of signals to initiate, modify or terminate functions of equipment at a distance.
- ***space telecommand:*** The use of radiocommunication for the transmission of signals to a space station to initiate, modify or terminate functions of equipment on an associated space object, including the space station.
- ***space tracking:*** Determination of the orbit, velocity or instantaneous position of an object in space by means of radiodetermination, excluding primary radar, for the purpose of following the movement of the object.

2.6 CHARACTERISTICS OF EMISSIONS AND RADIO EQUIPMENT

- ***radiation:*** The outward flow of energy from any source in the form of radio waves.
- ***emission:*** Radiation produced, or the production of radiation, by a radio transmitting station.

- For example, the energy radiated by the local oscillator of a radio receiver would not be an emission but a radiation.
- ***class of emission:*** The set of characteristics of an emission, designated by standard symbols, e.g. type of modulation of the main carrier, modulating signal, type of information to be transmitted, and also, if appropriate, any additional signal characteristics.
- ***single-sideband emission:*** An amplitude modulated emission with one sideband only.
- ***full carrier single-sideband emission:*** A single-sideband emission without reduction of the carrier.
- ***reduced carrier single-sideband emission:*** A single-sideband emission in which the degree of carrier suppression enables the carrier to be reconstituted and to be used for demodulation.
- ***suppressed carrier single-sideband emission:*** A single-sideband emission in which the carrier is virtually suppressed and not intended to be used for demodulation.
- ***out-of-band emission:*** Emission on a frequency or frequencies immediately outside the necessary bandwidth which results from the modulation process, but excluding spurious emissions***.***
- ***spurious emission:*** Emission on a frequency or frequencies which are outside the necessary bandwidth and the level of which may be reduced without affecting the corresponding transmission of information. Spurious emissions include harmonic emissions, parasitic emissions, intermodulation products and frequency conversion products, but exclude out-of-band emissions.
- ***unwanted emissions:*** Consist of spurious emissions and out-of-band emissions.
- ***out-of-band domain (of an emission):*** The frequency range, immediately outside the necessary bandwidth but excluding the spurious domain, in which out-of-band emissions generally predominate. Out-of-band emissions, defined based on their source, occur in the out-of-band domain and, to a lesser extent, in the spurious domain. Spurious emissions likewise may occur in the out-of-band domain as well as in the spurious domain. (WRC-03)
- ***spurious domain (of an emission):*** The frequency range beyond the out-of-band domain in which spurious emissions generally predominate. (WRC-03)
- ***assigned frequency band:*** The frequency band within which the emission of a station is authorized; the width of the band equals the necessary bandwidth plus twice the absolute value of the frequency tolerance. Where space stations are concerned, the assigned frequency band includes twice the maximum Doppler shift that may occur in relation to any point of the Earth's surface.
- ***assigned frequency:*** The centre of the frequency band assigned to a station.
- ***characteristic frequency***: A frequency which can be easily identified and measured in a given emission. A carrier frequency may, for example, be designated as the characteristic frequency.
- ***reference frequency:*** A frequency having a fixed and specified position with respect to the assigned frequency. The displacement of this frequency with respect to the assigned frequency has the same absolute value and sign that the displacement of the characteristic frequency has with respect to the centre of the frequency band occupied by the emission.
- ***frequency tolerance:*** The maximum permissible departure by the centre frequency of the frequency band occupied by an emission from the assigned frequency or, by the characteristic frequency of an emission from the reference frequency. The frequency tolerance is expressed in parts in 106 or in hertz.

- ***necessary bandwidth:*** For a given class of emission, the width of the frequency band which is just sufficient to ensure the transmission of information at the rate and with the quality required under specified conditions.
- ***occupied bandwidth:*** The width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage /2 of the total mean power of a given emission.
- Unless otherwise specified in an ITU-R Recommendation for the appropriate class of emission, the value of /2 should be taken as 0.5%.
- ***right-hand (clockwise) polarized wave:*** An elliptically- or circularly-polarized wave, in which the electric field vector, observed in any fixed plane, normal to the direction of propagation, whilst looking in the direction of propagation, rotates with time in a right-hand or clockwise direction.
- ***left-hand (anticlockwise) polarized wave:*** An elliptically- or circularly-polarized wave, in which the electric field vector, observed in any fixed plane, normal to the direction of propagation, whilst looking in the direction of propagation, rotates with time in a left-hand oranticlockwise direction.
- ***power:*** Whenever the power of a radio transmitter, etc. is referred to it shall be expressed in one of the following forms, according to the class of emission, using the arbitrary symbols indicated:
    - peak envelope power (PX or pX);
    - mean power (PY or pY);
    - carrier power (PZ or pZ).
    - For different classes of emission, the relationships between peak envelopepower, mean power and carrier power, under the conditions of normal operation and of no modulation, are contained in ITU-R Recommendations which may be used as a guide. For use in formulae, the symbol p denotes power expressed in watts and the symbol P denotes power expressed in decibels relative to a reference level.
- ***peak envelope power (of a radio transmitter):*** The average power supplied to the antenna transmission line by a transmitter during one radio frequency cycle at the crest of the modulation envelope taken under normal operating conditions.
- ***mean power (of a radio transmitter):*** The average power supplied to the antenna transmission line by a transmitter during an interval of time sufficiently long compared with the lowest frequency encountered in the modulation taken under normal operating conditions.
- ***carrier power (of a radio transmitter):*** The average power supplied to the antenna transmission line by a transmitter during one radio frequency cycle taken under the condition of no modulation.
- ***gain of an antenna:*** The ratio, usually expressed in decibels, of the power required at the input of a loss-free reference antenna to the power supplied to the input of the given antenna to produce, in a given direction, the same field strength or the same power flux-density at the same distance. When not specified otherwise, the gain refers to the direction of maximum radiation. The gain may be considered for a specified polarization. Depending on the choice of the reference antenna a distinction is made between:

- absolute or isotropic gain (Gi), when the reference antenna is an isotropic antenna isolated in space;
- gain relative to a half-wave dipole (Gd), when the reference antenna is a half-wave dipole isolated in space whose equatorial plane contains the given direction;
- gain relative to a short vertical antenna (Gv), when the reference antenna is a linear conductor, much shorter than one quarter of the wavelength, normal to the surface of a perfectly conducting plane which contains the given direction.

- ***equivalent isotropically radiated power (e.i.r.p.):*** The product of the power supplied to the antenna and the antenna gain in a given direction relative to an isotropic antenna (absolute or isotropic gain).
- ***effective radiated power (e.r.p.) (in a given direction):*** The product of the power supplied to the antenna and its gain relative to a half-wave dipole in a given direction.
- ***effective monopole radiated power (e.m.r.p.) (in a given direction):*** The product of the power supplied to the antenna and its gain relative to a short vertical antenna in a given direction.
- ***tropospheric scatter:*** The propagation of radio waves by scattering as a result of irregularities or discontinuities in the physical properties of the troposphere.
- ***ionospheric scatter:*** The propagation of radio waves by scattering as a result of irregularities or discontinuities in the ionization of the ionosphere.

2.7 Frequency sharing

- ***interference:*** The effect of unwanted energy due to one or a combination of emissions, radiations, or inductions upon reception in a radiocommunication system, manifested by any performance degradation, misinterpretation, or loss of information which could be extracted in the absence of such unwanted energy.
- ***permissible interference*** Observed or predicted interference which complies with quantitative interference and sharing criteria contained in these Regulations or in ITU-R Recommendations or in special agreements as provided for in these Regulations.
- ***accepted interference:*** Interference at a higher level than that defined as permissible interference and which has been agreed upon between two or more administrations without prejudice to other administrations.
- ***harmful interference:*** Interference which endangers the functioning of a radionavigation service or of other safety services or seriously degrades, obstructs, or repeatedly interrupts a radiocommunication service operating in accordance with Radio Regulations (CS).
- ***protection ratio (R.F.):*** The minimum value of the wanted-to-unwanted signal ratio, usually expressed in decibels, at the receiver input, determined under specified conditions such that a specified reception quality of the wanted signal is achieved at the receiver output.
- ***coordination area:*** When determining the need for coordination, the area surrounding an earth station sharing the same frequency band with terrestrial stations, or surrounding a transmitting earth station sharing the same bidirectionally allocated frequency band with receiving earth stations, beyond which the level of permissible interference will not be exceeded and coordination is therefore not required. (WRC-2000)
- ***coordination contour:*** The line enclosing the coordination area.
- ***coordination distance:*** When determining the need for coordination, the distance on a given azimuth from an earth station sharing the same frequency band with terrestrial stations, or

from a transmitting earth station sharing the same bidirectionally allocated frequency band with receiving earth stations, beyond which the level of permissible interference will not be exceeded and coordination is therefore not required. (WRC-2000)

- ***equivalent satellite link noise temperature:*** The noise temperature referred to the output of the receiving antenna of the earth station corresponding to the radio frequency noise power which produces the total observed noise at the output of the satellite link excluding noise due to interference coming from satellite links using other satellites and from terrestrial systems.
- ***effective boresight area (of a steerable satellite beam):*** An area on the surface of the Earth within which the boresight of a steerable satellite beam is intended to be pointed. There may be more than one unconnected effective boresight area to which a single steerable satellite beam is intended to be pointed.
- ***effective antenna gain contour (of a steerable satellite beam):*** An envelope of antenna gain contours resulting from moving the boresight of a steerable satellite beam along the limits of the effective boresight area.

2.8 TECHNICAL TERMS RELATING TO SPACE

- ***deep space:*** Space at distances from the Earth equal to, or greater than, 2 × 106 km.
- ***spacecraft:*** A man-made vehicle which is intended to go beyond the major portion of the Earth's atmosphere.
- ***satellite:*** A body which revolves around another body of preponderant mass and which has a motion primarily and permanently determined by the force of attraction of that other body.
- ***active satellite:*** A satellite carrying a station intended to transmit or retransmit radiocommunication signals.
- ***reflecting satellite:*** A satellite intended to reflect radiocommunication signals.
- ***active sensor:*** A measuring instrument in the earth exploration-satellite service or in the space research service by means of which information is obtained by transmission and reception of radio waves.
- ***passive sensor:*** A measuring instrument in the earth exploration-satellite service or in the space research service by means of which information is obtained by reception of radio waves of natural origin.
- ***orbit:*** The path, relative to a specified frame of reference, described by the centre of mass of a satellite or other object in space subjected primarily to natural forces, mainly the force of gravity.
- ***inclination of an orbit (of an earth satellite):*** The angle determined by the plane containing the orbit and the plane of the Earth's equator measured in degrees between 0º and 180º and in counter-clockwise direction from the Earth's equatorial plane at the ascending node of the orbit. (WRC-2000)
- ***period (of a satellite):*** The time elapsing between two consecutive passages of a satellite through a characteristic point on its orbit.
- ***altitude of the apogee or of the perigee:*** The altitude of the apogee or perigee above a specified reference surface serving to represent the surface of the Earth.
- ***geosynchronous satellite:*** An earth satellite whose period of revolution is equal to the period of rotation of the Earth about its axis.

- ***geostationary satellite:*** A geosynchronous satellite whose circular and direct orbit lies in the plane of the Earth's equator and which thus remains fixed relative to the Earth; by extension, a geosynchronous satellite which remains approximately fixed relative to the Earth. (WRC-03)
- ***geostationary-satellite orbit:*** The orbit of a geosynchronous satellite whose circular and direct orbit lies in the plane of the Earth's equator.
- ***steerable satellite beam:*** A satellite antenna beam that can be re-pointed.

Annex B: NTFA for Independent State of Samoa

NATIONAL TABLE OF FREQUENCY ALLOCATIONS FOR INDEPENDENT STATE OF SAMOA

(8.3 kHz to 3000 GHz)

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
Below 8.3 kHz (Not allocated) 5.53 5.54	(Not allocated)		
8.3 - 9 kHz METEOROLOGICAL AIDS 5.54A 5.54B 5.54C	METEOROLOGICAL AIDS		
9 - 11.3 kHz METEOROLOGICAL AIDS 5.54A RADIONAVIGATION	METEOROLOGICAL AIDS RADIONAVIGATION		
11.3 - 14 kHz RADIONAVIGATION	RADIONAVIGATION		
14 - 19.95 kHz FIXED MARITIME MOBILE 5.57 5.55 5.56	FIXED MARITIME MOBILE		
19.95 - 20.05 kHz STANDARD FREQUENCY AND TIME SIGNAL (20 kHz)	STANDARD FREQUENCY AND TIME SIGNAL (20 kHz)		In accordance with ITU RR Article 26

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
20.05 - 70 kHz FIXED MARITIME MOBILE 5.57 5.56 5.58	FIXED MARITIME MOBILE	• Inductive SRD • Maritime and Military applications *(Maritime radiotelegraph broadcasting and tele - printers for marine and submarine communication)* • Ultra Low Power Active Medical Implants	EN 300 330
70 - 72 kHz RADIONAVIGATION 5.60 Fixed Maritime mobile 5.57 5.59	RADIONAVIGATION	• Inductive SRD • Ultra Low Power Active Medical Implants • Long range radio navigation (LORAN) systems for determination of line of position (LOP) in the bands 70 - 86 kHz and 112 - 130 kHz	EN 300 330
72 - 84 kHz FIXED MARITIME MOBILE 5.57 RADIONAVIGATION 5.60	FIXED MARITIME MOBILE RADIONAVIGATION	• Maritime radiotelegraph broadcasting • Long range radio navigation (LORAN) systems for determination of line of position (LOP) in the bands 70 - 86 kHz and 112 - 130 kHz Inductive SRD • Ultra Low Power Active Medical Implants	EN 300 330
84 - 86 kHz RADIONAVIGATION 5.60 Fixed Maritime mobile 5.57 5.59	RADIONAVIGATION Fixed Maritime mobile	• Inductive SRD • Long range radio navigation (LORAN) systems for determination of line of position (LOP) in the bands 70 - 86 kHz and 112 - 130 kHz • Inductive SRD	EN 300 330
86 - 90 kHz FIXED MARITIME MOBILE 5.57 RADIONAVIGATION 5.60	FIXED MARITIME MOBILE RADIONAVIGATION	• Inductive SRD • Maritime radiotelegraph broadcasting • Ultra Low Power Active Medical Implants	EN 300 330

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
90 - 110 kHz RADIONAVIGATION 5.62 Fixed 5.64	RADIONAVIGATION Fixed	• Inductive SRD • Military applications • Ultra Low Power Active Medical Implants	Coordination is required for radionavigation in this band (5.62 of RR) EN 300 330
110 - 112 kHz FIXED MARITIME MOBILE RADIONAVIGATION 5.60 5.64	FIXED MARITIME MOBILE RADIONAVIGATION	• Inductive SRD • LORAN - C en - route hyperbolic aeronautical radionavigation system	EN 300 330
112 - 117.60 kHz RADIONAVIGATION 5.60 Fixed Maritime mobile 5.64 5.65	RADIONAVIGATION Fixed Maritime mobile	• Long range radio navigation (LORAN) systems for determination of line of position (LOP) in the bands 70 - 86 kHz and 112 - 130 kHz	
117.6 - 126 kHz FIXED MARITIME MOBILE RADIONAVIGATION 5.60 5.64	FIXED MARITIME MOBILE RADIONAVIGATION	• Long range radio navigation (LORAN) systems for determination of line of position (LOP) in the bands 70 - 86 kHz and 112 - 130 kHz	
126 - 129 kHz RADIONAVIGATION 5.60 Fixed Maritime mobile 5.64 5.65	RADIONAVIGATION Fixed Maritime mobile	• Long range radio navigation (LORAN) systems for determination of line of position (LOP) in the bands 70 - 86 kHz and 112 - 130 kHz	EN 300 330

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
129 - 130 kHz FIXED MARITIME MOBILE RADIONAVIGATION 5.60 5.64	FIXED MARITIME MOBILE RADIONAVIGATION	• Long range radio navigation (LORAN) systems for determination of line of position (LOP) in the bands 70 - 86 kHz and 112 - 130 kHz	EN 300 330
130 - 135.7 kHz FIXED MARITIME MOBILE RADIONAVIGATION 5.64	FIXED MARITIME MOBILE RADIONAVIGATION		Limitations on fixed and maritime mobile applications (see 5.64 of RR)
135.7 - 137.8 kHz FIXED MARITIME MOBILE RADIONAVIGATION Amateur 5.67A 5.64 5.67 5.67B	FIXED MARITIME MOBILE RADIONAVIGATION Amateur	• Amateur applications • Inductive SRD • Maritime applications	Limitations on fixed and maritime mobile applications (see 5.64 of RR) EN 301 783
137.8 - 160 kHz FIXED MARITIME MOBILE RADIONAVIGATION 5.64	FIXED MARITIME MOBILE RADIONAVIGATION	• Inductive SRD • Maritime applications	Limitations on fixed and maritime mobile applications (see 5.64 of RR) EN 300 330
160 - 190 kHz FIXED Aeronautical radionavigation 5.68 5.69 5.70	FIXED Aeronautical radionavigation	• Aeronautical Radio navigation	

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
190 - 200 kHz AERONAUTICAL RADIONAVIGATION	AERONAUTICAL RADIONAVIGATION	• Aeronautical Radio navigation	EN 300 330
200 - 285 kHz AERONAUTICAL RADIONAVIGATION Aeronautical mobile	AERONAUTICAL RADIONAVIGATION Aeronautical mobile	• L - type non - directional aeronautical radio beacon (NDB) within 255 – 495 kHz Aeronautical Radio Beacons • Ultra Low Power Active Medical Implants	
285 - 325 kHz AERONAUTICAL RADIONAVIGATION MARITIME RADIONAVIGATION (radiobeacons) 5.73	AERONAUTICAL RADIONAVIGATION MARITIME RADIONAVIGATION (radiobeacons)	• L - type non - directional aeronautical radio beacon (NDB) within 255 – 495 kHz Aeronautical Radio Beacons	
325 - 405 kHz AERONAUTICAL RADIONAVIGATION Aeronautical mobile	AERONAUTICAL RADIONAVIGATION	• L - type non - directional aeronautical radio beacon (NDB) within 255 – 495 kHz Aeronautical Radio Beacons	
405 - 415 kHz RADIONAVIGATION 5.76 Aeronautical mobile	RADIONAVIGATION Aeronautical mobile	• Direction finding in maritime radionavigation on 410 kHz (ITU - RR No. 28.12).	
415 - 472 kHz MARITIME MOBILE 5.79 AERONAUTICAL RADIONAVIGATION 5.77, 5.80 5.78 5.82	MARITIME MOBILE AERONAUTICAL RADIONAVIGATION	• NBDP and DSC ITU - RR Articles 51 and 52 • L - type non - directional aeronautical radio beacon (NDB) within 255 – 495 kHz	
472 - 479 kHz MARITIME MOBILE 5.79 Amateur 5.80A Aeronautical radionavigation 5.77 5.80 5.82 5.80B	MARITIME MOBILE Amateur Aeronautical radionavigation	• NBDP and DSC ITU - RR Articles 51 and 52 • L - type non - directional aeronautical radio beacon (NDB) within 255 – 495 kHz	Use of this band by Amateur service is restricted to professional amateurs only (see 5.80A).

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
479 - 495 kHz MARITIME MOBILE 5.79 5.79A Aeronautical radionavigation 5.77 5.80 5.82	MARITIME MOBILE Aeronautical radionavigation	• NBDP and DSC ITU - RR Articles 51 and 52 • L - type non - directional aeronautical radio beacon (NDB) within 255 – 495 kHz	Maritime safety information (MSI - NAVTEX) on 490 kHz (5.79A)
495 - 505 kHz MARITIME MOBILE	MARITIME MOBILE		The GMDSS carrier frequency 500 kHz, using type A2A or H2A emission, is an international distress and calling frequency for Morse radiotelegraphy (ITU - R M.1170 and ITU - RR No.28.12)
505 - 526.5 kHz MARITIME MOBILE 5.79 5.79A 5.84 AERONAUTICAL RADIONAVIGATION Aeronautical mobile Land mobile	MARITIME MOBILE AERONAUTICAL RADIONAVIGATION Aeronautical mobile Land mobile	• MSI - NAVTEX on 518 kHz using NBDP	The frequency 512 kHz is supplementary channel for ships in case 500 kHz is busy (See ITU RR Articles 51 and 52 for maritime mobile)
526.5 - 535 kHz BROADCASTING Mobile 5.88	BROADCASTING Mobile	• Broadcasting	Traditional AM Sound Broadcasting with 9 kHz channel spacing
535 - 1 606.5 kHz BROADCASTING 5.87 5.87A	BROADCASTING	• Broadcasting	Traditional AM Sound Broadcasting with 9 kHz channel spacing

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
1 606.5 - 1800 kHz FIXED MOBILE RADIOLOCATION RADIONAVIGATION 5.91	FIXED MOBILE RADIOLOCATION RADIONAVIGATION	• Narrow Band Direct - Printing telegraphy (NBDP) and Digital Selective Calling (DSC) applications in maritime mobile service by coastal stations • Radio - determination applications	ITU RR Articles 51 and 52
1 800 - 2 000 kHz AMATEUR FIXED MOBILE except aeronautical mobile RADIONAVIGATION Radiolocation 5.97	AMATEUR FIXED MOBILE except aeronautical mobile RADIONAVIGATION Radiolocation	• For DSC. NBDP and SSB Radiotelephony by ship and coast stations in Maritime Mobile service	ITU - RR Articles51 and 52 EN 301 783
2 000 - 2 065 kHz FIXED MOBILE	FIXED MOBILE	• For DSC. NBDP and SSB Radiotelephony by ship and coast stations in Maritime Mobile service	ITU - RR Articles51 and 52
2 065 - 2 107 kHz MARITIME MOBILE 5.105 5.106	MARITIME MOBILE	• For DSC. NBDP and SSB Radiotelephony by ship and coast stations in Maritime Mobile service	Fixed service may be allowed provided the mean output power is less than 50 W ITU - RR Articles51 and 52
2 107 - 2 170 kHz FIXED MOBILE	FIXED MOBILE	• For DSC. NBDP and SSB Radiotelephony by ship and coast stations in Maritime Mobile service	ITU - RR Articles51 and 52
2 170 - 2 173.5 kHz MARITIME MOBILE	MARITIME MOBILE	• Maritime applications • A channel for DSC, NBDP and SSB Radiotelephony,	ITU RR 52.188

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
2 173.5 - 2 190.5 kHz MOBILE (distress and calling) 5.108 5.109 5.110 5.111	MOBILE (distress and calling)	• DSC distress calling at 2187.5 kHz • SAR and distress calling at 2182 kHz • Telex distress traffic 2174.5 kHz	
2 190.5 - 2 194 kHz MARITIME MOBILE	MARITIME MOBILE	• NBDP and SSB radiotelephony	ITU RR Articles 51 and 52
2 194 - 2 300 kHz FIXED MOBILE 5.112	FIXED MOBILE	• Maritime applications • Military applications	ITU RR Articles 51 and 52
2 300 - 2 495 kHz FIXED MOBILE BROADCASTING 5.113	FIXED MOBILE BROADCASTING	• Maritime applications • Military applications	Tropical 120m AM sound Broadcasting with TX carrier power less than 50 kW (ITU RR Article 23)
2 495 - 2 501 kHz STANDARD FREQUENCY AND TIME SIGNAL (2 500 kHz)	STANDARD FREQUENCY AND TIME SIGNAL (2 500 kHz)		In accordance with ITU RR Article 26
2 501 - 2 502 kHz STANDARD FREQUENCY AND TIME SIGNAL Space Research	STANDARD FREQUENCY AND TIME SIGNAL Space Research		In accordance with ITU RR Article 26
2 502 - 2 505 kHz STANDARD FREQUENCY AND TIME SIGNAL	STANDARD FREQUENCY AND TIME SIGNAL		In accordance with ITU RR Article 26
2 505 - 2 850 kHz FIXED MOBILE	FIXED MOBILE	• Military applications • Radio - determination applications • SSB radio telephony on carrier frequency 2635 kHz and 2638 kHz	ITU RR No. 52.11

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
2 850 - 3 025 kHz AERONAUTICAL MOBILE (R) 5.111 5.115	AERONAUTICAL MOBILE (R)	• Aeronautical Mobile (R) applications • SAR on 3023 kHz	ITU RR Appendix 27 allotment Plan
3 025 - 3 155 kHz AERONAUTICAL MOBILE (OR)	AERONAUTICAL MOBILE (OR) **SMO 1**	• Aeronautical Mobile (OR) applications	ITU RR Appendix 26 Allotment Plan
3 155 - 3 200 kHz FIXED MOBILE except aeronautical mobile (R) 5.116 5.117	FIXED MOBILE except aeronautical mobile (R)	• Inductive SRD • Maritime applications • Military applications	NBDP telegraphy by ship stations in Maritime Mobile service (ITU RR Article 52) EN 300 330
3 200 - 3 230 kHz FIXED MOBILE except aeronautical mobile (R) BROADCASTING 5.113 5.116	FIXED MOBILE except aeronautical mobile (R) BROADCASTING	• Inductive SRD • Military applications • DSC. NBDP and SSB Radiotelephony by ship and coast stations in Maritime Mobile service	EN 300 330 ITU - RR Articles 51 and 52 Tropical 90m AM sound Broadcasting with TX carrier power less than 50 kW (ITU RR Article 23)

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
3 230 - 3 400 kHz FIXED MOBILE except aeronautical mobile BROADCASTING 5.113 5.116 5.118	FIXED MOBILE except aeronautical mobile BROADCASTING	• Inductive SRD • Military applications • DSC. NBDP and SSB Radiotelephony by ship and coast stations in Maritime Mobile service	EN 300 330 ITU - RR Articles 51 and 52 Tropical 90m AM sound Broadcasting with TX carrier power less than 50 kW (ITU RR Article 23)
3 400 - 3 500 kHz AERONAUTICAL MOBILE (R)	AERONAUTICAL MOBILE (R)		ITU RR Appendix 27 Allotment Plan
3 500 - 3 900 kHz AMATEUR FIXED MOBILE	AMATEUR FIXED MOBILE	• Amateur applications • Military applications • DSC. NBDP and SSB Radiotelephony by ship and coast stations in Maritime Mobile service	EN 301 783 ITU - RR Articles 51 and 52
3 900 - 3 950 kHz AERONAUTICAL MOBILE BROADCASTING	AERONAUTICAL MOBILE BROADCASTING	• Future Sound Broadcasting and aeronautical mobile systems	
3 950 - 4 000 kHz FIXED BROADCASTING 5.126	FIXED BROADCASTING	• 75m AM sound Broadcasting	Conventional Fixed service has higher priority in this band
4 000 - 4 063 kHz FIXED MARITIME MOBILE 5.127 5.126	FIXED MARITIME MOBILE	• Maritime applications	Appendix 17 channeling plan TX power of fixed stations shall not exceed 50 W in this band

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
4 063 - 4 438 kHz MARITIME MOBILE 5.79A 5.109 5.110 5.130 5.131 5.132 5.128	MARITIME MOBILE	• DSC calling 4208, 4208.5, 4209, 4219.5, 4220, 4220.5 kHz • DSC distress traffic 4207.5 kHz • Maritime Safety Information (MSI) 4210 kHz • Meteorological and navigational warnings 4209.5 kHz • Telephony distress traffic and calling by • rescue centers4125 kHz • Telex distress traffic 4177.5 kHz	ITU RR Article 31 ITU RR Appendix 17 ITU RR Appendix 13
4 438 - 4 488 kHz FIXED MOBILE except aeronautical mobile Radiolocation 5.132A	FIXED MOBILE except aeronautical mobile Radiolocation	• Duplex operation of coastal station with ships transmitting in 4438 - 4650 kHz	Radiolocation service is limited to oceanographic radars (ITU RR 5.132A) Sub - Section C - 1, App. 17, ITU - R RR)
4 488 - 4 650 kHz FIXED MOBILE except aeronautical mobile	FIXED MOBILE except aeronautical mobile		Duplex operation of coastal station with ships transmitting in 4438 - 4650 kHz (Sub - Section C - 1, App. 17, ITU - R RR)
4 650 - 4 700 kHz AERONAUTICAL MOBILE (R)	AERONAUTICAL MOBILE (R)		ITU RR Appendix 27 Allotment Plan
4 700 - 4 750 kHz AERONAUTICAL MOBILE (OR)	AERONAUTICAL MOBILE (OR) **SMO 1**		Appendix 26 Allotment Plan
4 750 - 4 850 kHz FIXED LAND MOBILE BROADCASTING 5.113	FIXED LAND MOBILE BROADCASTING	• Tropical 60m AM sound Broadcasting with carrier power less than 50 kW	Conventional Fixed service has higher priority in this band

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
4 850 - 4 995 kHz FIXED LAND MOBILE BROADCASTING 5.113	FIXED LAND MOBILE BROADCASTING	• Tropical 60m AM sound Broadcasting with carrier power less than 50 kW	Conventional Fixed service has higher priority in this band
4 995 - 5 003 kHz STANDARD FREQUENCY AND TIME SIGNAL (5 000 kHz)	STANDARD FREQUENCY AND TIME SIGNAL (5 000 kHz)		
5 003 - 5 005 kHz STANDARD FREQUENCY AND TIME SIGNAL Space research	STANDARD FREQUENCY AND TIME SIGNAL Space research		
5 005 - 5 060 kHz FIXED BROADCASTING 5.113	FIXED BROADCASTING	• Tropical 60m AM sound Broadcasting with carrier power less than 50 kW	Conventional Fixed service has higher priority in this band
5 060 - 5 250 kHz FIXED Mobile except aeronautical mobile 5.133	FIXED Mobile except aeronautical mobile	• Conventional fixed stations and PMR • Military applications	
5 250 - 5 275 kHz FIXED MOBILE except aeronautical mobile Radiolocation 5.132A	FIXED MOBILE except aeronautical mobile Radiolocation	• Conventional fixed stations and PMR • Military applications	Radiolocation service is limited to oceanographic radars
5 275 - 5 351.5 kHz FIXED MOBILE except aeronautical mobile	FIXED MOBILE except aeronautical mobile	• Conventional fixed stations and PMR • Military applications	

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
5 351.5 - 5 366.5 kHz FIXED MOBILE except aeronautical mobile 5.133B	FIXED MOBILE except aeronautical mobile	• Conventional fixed stations and PMR • Military applications	Stations in the amateur service using the frequency band 5 351.5-5 366.5 kHz shall not exceed a maximum radiated power of 15 W (e.i.r.p.).
5 366.5 - 5 450 kHz FIXED MOBILE except aeronautical mobile	FIXED MOBILE except aeronautical mobile	• Conventional fixed stations and PMR • Military applications	
5 450 - 5 480 kHz FIXED AERONAUTICAL MOBILE (OR) LAND MOBILE	FIXED AERONAUTICAL MOBILE (OR) LAND MOBILE		Conventional Fixed and land mobile services has higher priority in this band
5 480 - 5 680 kHz AERONAUTICAL MOBILE (R) 5.111 5.115	AERONAUTICAL MOBILE (R)		Appendix 27 Allotment Plan Search and Rescue on 5680 kHz (5.111 and 5.115)
5 680 - 5 730 kHz AERONAUTICAL MOBILE (OR) 5.111 5.115	AERONAUTICAL MOBILE (OR) **SMO 1**		Appendix 26 Allotment Plan Search and Rescue on 5680 kHz (5.111 and 5.115)
5 730 - 5 900 kHz FIXED Mobile except aeronautical mobile	FIXED Mobile except aeronautical mobile		Conventional Fixed and land mobile services has higher priority in this band
5 900 - 5 950 kHz BROADCASTING 5.134 5.136	BROADCASTING	• 49 m Short Wave AM sound broadcasting	Sound broadcasting subject to procedure of ITU RR Article 12

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
5 950 - 6 200 kHz BROADCASTING	BROADCASTING	• 49 m Short Wave AM sound broadcasting	Article 12 planning procedure
6 200 - 6 525 kHz MARITIME MOBILE 5.109 5.110 5.130 5.132 5.137	MARITIME MOBILE	• DSC calling 6312.5, 6313, 6313.5, 6331, 6331.5, 6332kHz • DSC distress traffic 6312 kHz • Maritime applications • Maritime Safety Information (MSI) 6314 kHz • Telephony distress traffic and calling by • rescue centers 6215 kHz • Telex distress traffic 6268 kHz	ITU RR Appendix 17 channeling plan Article 31 of ITU RR
6 525 - 6 685 kHz AERONAUTICAL MOBILE (R)	AERONAUTICAL MOBILE (R)		Appendix 27 Allotment Plan
6 685 - 6 765 kHz AERONAUTICAL MOBILE (OR)	AERONAUTICAL MOBILE (OR) **SMO 1**		Appendix 26 Allotment Plan
6 765 - 7 000 kHz FIXED MOBILE except aeronautical mobile (R) 5.138 5.138A 5.139	FIXED MOBILE except aeronautical mobile (R)	• Inductive SRD • ISM applications • Military applications • Non Specific SRD applications • Conventional fixed stations and PMR	ISM application in the band 6 765 - 6 795 kHz (5.138) EN 300 330
7 000 - 7 100 kHz AMATEUR AMATEUR - SATELLITE 5.140 5.141 5.141A	AMATEUR AMATEUR - SATELLITE		EN 301 783
7 100 - 7 200 kHz **AMATEUR** 5.141A 5.141B 5.141C 5.142	**AMATEUR** FIXED MOBILE		Allocation to Fixed and Mobile services is in accordance with the ITU RR 5.141B EN 301 783

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
7 200 - 7 300 kHz BROADCASTING	BROADCASTING	• 41m AM sound Broadcasting	
7 300 - 7 400 kHz BROADCASTING 5.134 5.143 5.143A 5.143B 5.143C 5.143D	BROADCASTING	• 41m AM sound Broad casting	Broadcasting.in 7 300 - 7 350 kHz is subject to procedure of ITU RR Article 12
7 400 - 7 450 kHz BROADCASTING 5.143A 5.143C	BROADCASTING FIXED	• 41m AM sound Broadcasting	
7 450 - 8 100 kHz FIXED MOBILE except aeronautical mobile (R) 5.143E 5.144	FIXED MOBILE except aeronautical mobile (R)	• Inductive SRD • Military applications • Conventional fixed stations and PMR	EN 300 330
8 100 - 8 195 kHz FIXED MARITIME MOBILE	FIXED MARITIME MOBILE	• Inductive SRD • Maritime applications	EN 300 330 Appendix 17 channeling plan
8 195 - 8 815 kHz MARITIME MOBILE 5.109 5.110 5.132 5.145 5.111	MARITIME MOBILE	• DSC calling 8415, 8415.5, 8416, 8436.5, 8437, 8437.5 kHz • DSC distress traffic 8364 kHz and 8414.5 kHz • Inductive SRD • Maritime applications • Maritime Safety Information (MSI) 8416.5 kHz • Telephony distress traffic and calling by • rescue centers 8291 kHz • Telex distress traffic 8376.5 kHz	EN 300 330 ITU RR Appendix 17 channeling plan ITU RR article 31 and 52
8 815 - 8 965 kHz AERONAUTICAL MOBILE (R)	AERONAUTICAL MOBILE (R)		Appendix 27 Allotment Plan

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
8 965 - 9 040 kHz AERONAUTICAL MOBILE (OR)	AERONAUTICAL MOBILE (OR) **SMO 1**		Appendix 26 Allotment Plan
9 040 - 9 305 kHz FIXED	FIXED	• Conventional Fixed stations	
9 305 - 9 355 kHz FIXED Radiolocation 5.145A	FIXED	• Conventional Fixed stations	Radiolocation service is limited to oceanographic radars (5.145A)
9 040 - 9 400 kHz FIXED	FIXED	• Conventional Fixed stations	
9 400 - 9 500 kHz BROADCASTING 5.134 5.146	BROADCASTING	• 31m AM sound Broadcasting	WARC92 band for broadcasting; subject to the procedure of ITU RR Article 12
9 500 - 9 900 kHz BROADCASTING 5.147	BROADCASTING	• 31m AM sound Broadcasting	May also be used by Fixed stations Article 12 planning procedure
9 900 - 9 995 kHz FIXED	FIXED	• Conventional Fixed stations	
9 995 - 10 003 kHz STANDARD FREQUENCY AND TIME SIGNAL (10 000 kHz) 5.111	STANDARD FREQUENCY AND TIME SIGNAL (10 000 kHz)		In accordance with ITU RR Article 26
10 003 - 10 005 kHz STANDARD FREQUENCY AND TIME SIGNAL Space research 5.111	STANDARD FREQUENCY AND TIME SIGNAL Space research		In accordance with ITU RR Article 26

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
10 005 - 10 100 kHz AERONAUTICAL MOBILE (R) 5.111	AERONAUTICAL MOBILE (R) 5.111		Appendix 27 Allotment Plan Inlcuding HF Data Links
10 100 - 10 150 kHz FIXED Amateur	FIXED Amateur	• Conventional Fixed stations	EN 301 783
10 150 - 11 175 kHz FIXED Mobile except aeronautical mobile (R)	FIXED Mobile except aeronautical mobile (R)	• Inductive SRD • Military applications • Conventional Fixed stations and PMR	
11 175 - 11 275 kHz AERONAUTICAL MOBILE (OR)	AERONAUTICAL MOBILE (OR) **SMO 1**		Appendix 26 Allotment Plan
11 275 - 11 400 kHz AERONAUTICAL MOBILE (R)	AERONAUTICAL MOBILE (R)		Appendix 27 Allotment Plan
11 400 - 11 600 kHz FIXED	FIXED	• Conventional Fixed stations	
11 600 - 11 650 kHz BROADCASTING 5.134 5.146	BROADCASTING	• 25m AM sound Broadcasting	WARC92 bands for broadcasting; sound Broadcasting subject to the procedure of ITU RR Article 12
11 650 - 12 050 kHz BROADCASTING 5.147	BROADCASTING	• 25m AM sound Broadcasting	May be used by Fixed stations (RR 5.147) Article 12 planning procedure

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
12 050 - 12 100 kHz BROADCASTING 5.134 5.146	BROADCASTING	• 25m AM sound Broadcasting	WARC92 bands for broadcasting; sound Broadcasting subject to the procedure of ITU RR Article 12
12 100 - 12 230 kHz FIXED	FIXED	• Conventional Fixed stations	
12 230 - 13 200 kHz MARITIME MOBILE 5.109 5.110 5.132 5.145		• DSC calling 12577.5, 12578, 12578.5, 12657, 12657.5,12658 kHz • DSC distress traffic 12577 kHz • Maritime applications	Appendix 17 channeling plan
	MARITIME MOBILE	• Maritime Safety Information (MSI) 12579 kHz • Telephony distress traffic and calling by • rescue centers12290 kHz • Telex distress traffic 12520 kHz	ITU RR App.15, Articles 31and 52.
13 200 - 13 260 kHz AERONAUTICAL MOBILE (OR)	AERONAUTICAL MOBILE (OR) **SMO 1**		Appendix 26 Allotment Plan
13 260 - 13 360 kHz AERONAUTICAL MOBILE (R)	AERONAUTICAL MOBILE (R)		Appendix 27 Allotment Plan
13 360 - 13 410 kHz FIXED RADIO ASTRONOMY 5.149	FIXED RADIO ASTRONOMY	• Conventional Fixed stations • Radioastronomy applications	
13 410 - 13 450 kHz FIXED Mobile except aeronautical mobile (R)	FIXED Mobile except aeronautical mobile (R)	• Conventional Fixed stations and PMR	

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
13 450 - 13 550 kHz FIXED Mobile except aeronautical mobile (R) 5.132A Radiolocation	FIXED Mobile except aeronautical mobile (R) Radiolocation	• Conventional Fixed stations and PMR	Radiolocation service is limited to oceanographic radars (5.132A)
13 550 - 13 570 kHz FIXED Mobile except aeronautical mobile (R) 5.150	FIXED Mobile except aeronautical mobile (R)	• Inductive SRD • ISM applications • Conventional Fixed stations and PMR • Non Specific SRD applications	EN 300 330
13 570 - 13 600 kHz BROADCASTING 5.134 5.151	BROADCASTING	• 22m AM sound Broadcasting	ITU RR Article 12 planning procedure
13 600 - 13 800 kHz BROADCASTING	BROADCASTING	• 22m AM sound Broadcasting	ITU RR Article 12 planning procedure
13 800 - 13 870 kHz BROADCASTING 5.134 5.151	BROADCASTING	• 22m AM sound Broadcasting	ITU RR Article 12 planning procedure
13 870 - 14 000 kHz FIXED Mobile except aeronautical mobile (R)	FIXED Mobile except aeronautical mobile (R)	• Conventional Fixed stations and PMR	Radiolocation service is limited to oceanographic radars
14 000 - 14 250 kHz AMATEUR AMATEUR - SATELLITE	AMATEUR AMATEUR - SATELLITE		EN 301 783
14 250 - 14 350 kHz AMATEUR 5.152	AMATEUR		EN 301 783

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
14 350 - 14 990 kHz FIXED Mobile except aeronautical mobile (R)	FIXED Mobile except aeronautical mobile (R)	• Conventional Fixed stations and PMR	
14 990 - 15 005 kHz STANDARD FREQUENCY AND TIME SIGNAL (15 000 kHz) 5.111	STANDARD FREQUENCY AND TIME SIGNAL (15 000 kHz)		In accordance with ITU RR Article 26
15 005 - 15 010 kHz STANDARD FREQUENCY AND TIME SIGNAL Space research	STANDARD FREQUENCY AND TIME SIGNAL Space research		In accordance with ITU RR Article 26
15 010 - 15 100 kHz AERONAUTICAL MOBILE (OR)	AERONAUTICAL MOBILE (OR) **SMO 1**		Appendix 26 Allotment Plan
15 100 - 15 600 kHz BROADCASTING	BROADCASTING	• 19m AM sound Broadcasting	
15 600 - 15 800 kHz BROADCASTING 5.134 5.146	BROADCASTING	• 19m AM sound Broadcasting	Article 12 planning procedure
15 800 - 16 100 kHz FIXED 5.153	FIXED	• Conventional Fixed stations	
16 100 - 16 200 kHz FIXED Radiolocation 5.145A	FIXED Radiolocation	• Conventional Fixed stations	
16 200 - 16 360 kHz FIXED	FIXED	• Conventional Fixed stations	

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
16 360 - 17 410 kHz MARITIME MOBILE 5.109 5.110 5.132 5.145	MARITIME MOBILE	• DSC calling 16805, 16805.5, 16806,16903, 16903.5, 16904 kHz • DSC distress traffic 16804.5 kHz • Maritime applications • Maritime Safety Information (MSI) 16806.5 kHz • Telephony distress traffic and calling by • rescue centers 16420 kHz • Telex distress traffic 16695 kHz	Appendix 17 channeling plan Appendix 15 Articles 31and 52
17 410 - 17 480 kHz FIXED	FIXED	• Conventional Fixed stations	
17 480 - 17 550 kHz BROADCASTING 5.134 5.146	BROADCASTING	• 16m AM sound Broadcasting	Sound Broadcasting subject to the procedure of ITU RR Article 12
17 550 - 17 900 kHz BROADCASTING	BROADCASTING	• 16m AM sound Broadcasting	
17 900 - 17 970 kHz AERONAUTICAL MOBILE (R)	AERONAUTICAL MOBILE (R)	• Aeronautical Mobile (R) applications	Appendix 27 Allotment Plan
17 970 - 18 030 kHz AERONAUTICAL MOBILE (OR)	AERONAUTICAL MOBILE (OR) **SMO 1**	• Aeronautical Mobile (OR) applications	Appendix 26 Allotment Plan
18 030 - 18 052 kHz FIXED	FIXED	• Conventional Fixed stations	
18 052 - 18 068 kHz FIXED Space research	FIXED Space research	• Conventional Fixed stations	

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
18 068 - 18 168 kHz AMATEUR AMATEUR - SATELLITE 5.154	AMATEUR AMATEUR - SATELLITE		EN 301 783
18 168 - 18 780 kHz FIXED Mobile except aeronautical mobile	FIXED Mobile except aeronautical mobile	• DSC calling 18898.5, 18899, 18899.5 kHz	
18 780 - 18 900 kHz MARITIME MOBILE	MARITIME MOBILE	• Maritime applications	Appendix 17 channeling plan
18 900 - 19 020 kHz BROADCASTING 5.134 5.146	BROADCASTING		May be used by Fixed stations
19 020 - 19 680 kHz FIXED	FIXED	• Conventional Fixed stations	
19 680 - 19 800 kHz MARITIME MOBILE 5.132	MARITIME MOBILE	• DSC calling 19703.5, 19704, 19704.5 kHz • Maritime applications Maritime Safety Information (MSI) 19680.5 kHz	Appendix 17 channeling plan
19 800 - 19 990 kHz FIXED	FIXED	• Conventional Fixed stations	
19 990 - 19 995 kHz STANDARD FREQUENCY AND TIME SIGNAL Space research 5.111	STANDARD FREQUENCY AND TIME SIGNAL Space research	• Search and rescue (SAR) operations on 19993 • 3 kHz kHz	In accordance with ITU RR Article 26. (ITU RR Article31
19 995 - 20 010 kHz STANDARD FREQUENCY AND TIME SIGNAL (20 000 kHz) 5.111	STANDARD FREQUENCY AND TIME SIGNAL (20 000 kHz)	• Search and rescue (SAR) operations on 19993 • 3 kHz kHz	In accordance with ITU RR Article 26. (ITU RR Article31

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
20 010 - 21 000 kHz FIXED Mobile	FIXED Mobile	• Conventional Fixed stations and PMR	
21 000 - 21 450 kHz AMATEUR AMATEUR - SATELLITE	AMATEUR AMATEUR - SATELLITE		EN 301 783
21 450 - 21 850 kHz BROADCASTING	BROADCASTING	• 13m AM sound Broadcasting	
21 850 - 21 870 kHz FIXED 5.155A 5.155	FIXED	• Conventional Fixed stations	
21 870 - 21 924 kHz FIXED 5.155B	FIXED	• Conventional Fixed stations	
21 924 - 22 000 kHz AERONAUTICAL MOBILE (R)	AERONAUTICAL MOBILE (R)	• Aeronautical Mobile (R) applications	Appendix 27 Allotment Plan
22 000 - 22 855kHz MARITIME MOBILE 5.132 5.156	MARITIME MOBILE	• DSC calling 22374.5, 22375, 22375.5, 22444, 22444.5, 22445 kHz • Maritime applications Maritime Safety Information (MSI) 22376 kHz	Appendix 17 channeling plan
22 855 - 23 000 kHz FIXED 5.156	FIXED	• Conventional Fixed stations	
23 000 - 23 200 kHz FIXED Mobile except aeronautical mobile (R) 5.156	FIXED Mobile except aeronautical mobile (R)		

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
23 200 - 23 350 kHz FIXED 5.156A AERONAUTICAL MOBILE (OR)	FIXED AERONAUTICAL MOBILE (OR)		The use of the band 23 200 - 23 350 kHz by the fixed service is limited to provision of services related to aircraft flight safety.
23 350 - 24 000 kHz FIXED MOBILE except aeronautical mobile 5.157	FIXED MOBILE except aeronautical mobile	• Conventional Fixed stations and PMR	Maritime mobile service is limited to inter - ship radiotelegraphy
24 000 - 24 890 kHz FIXED LAND MOBILE	FIXED LAND MOBILE	• Conventional Fixed stations and PMR	
24 890 - 24 990 kHz AMATEUR AMATEUR - SATELLITE	AMATEUR AMATEUR - SATELLITE	• Amateur applications	EN 301 783
24 990 - 25 005 kHz STANDARD FREQUENCY AND TIME SIGNAL (25 000 kHz)	STANDARD FREQUENCY AND TIME SIGNAL (25 000 kHz)		In accordance with ITU RR Article 26.
25 005 - 25 010 kHz STANDARD FREQUENCY AND TIME SIGNAL Space research	STANDARD FREQUENCY AND TIME SIGNAL Space research	• Space Research (Scientific and medical)	In accordance with ITU RR Article 26.
25 010 - 25 070 kHz FIXED MOBILE except aeronautical mobile	FIXED MOBILE except aeronautical mobile	• Conventional Fixed stations and PMR	
25 070 - 25 210 kHz MARITIME MOBILE	MARITIME MOBILE	• DSC calling 25208.5, 25209, 25209.5 kHz • Maritime applications	Appendix 17 channeling plan

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
25 210 - 25 550 kHz FIXED MOBILE except aeronautical mobile	FIXED MOBILE except aeronautical mobile	• Conventional Fixed stations and PMR	
25 550 - 25 670 kHz RADIO ASTRONOMY 5.149	RADIO ASTRONOMY		
25 670 - 26 100 kHz BROADCASTING	BROADCASTING	• 11m AM sound Broadcasting	Article 12 Planning procedure
26 100 - 26 175 MARITIME MOBILE 5.132	MARITIME MOBILE	• DSC calling 26121, 26121.5, 16122 kHz • Maritime applications Maritime Safety Information (MSI) 26100.5 kHz	Appendix 17 channeling plan
26 175 - 26 200 kHz FIXED MOBILE except aeronautical mobile	FIXED MOBILE except aeronautical mobile	• Conventional Fixed stations and PMR	
26 200 - 26 350 kHz FIXED MOBILE except aeronautical mobile Radiolocation 5.132A	FIXED MOBILE except aeronautical mobile radiolocation	• Conventional Fixed stations and PMR	Radiolocation service is limited to oceanographic radars

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
26 350 - 27 500 kHz FIXED MOBILE except aeronautical mobile 5.150			ETS 300 135 26.960 - 27.410 MHz EN 300 433 EN 300 330 EN 300 220
	FIXED	• CB • SRD	HF CBRS in the band 26.965 –
	MOBILE except aeronautical mobile	• ISM applications • Conventional Fixed stations and PMR • Railway applications	27.405 MHz in accordance with document No. TR603 LPDs & Radio Tx Toys in accordance with TR619 ISM in the 26957 - 27283 kHz
27.5 - 28 MHz METEOROLOGICAL AIDS FIXED MOBILE	METEOROLOGICAL AIDS FIXED MOBILE	• Conventional Fixed stations and PMR	
28 - 29.7 MHz AMATEUR AMATEUR - SATELLITE	AMATEUR AMATEUR - SATELLITE		EN 301 783
29.7 - 30.005 MHz FIXED MOBILE	FIXED MOBILE	• Radio microphones • Narrow band audio systems including tour guide systems on a tuning range basis • Conventional Fixed stations and PMR	EN 300 422

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
30.005 - 30.01 MHz SPACE OPERATION (satellite identification) FIXED MOBILE SPACE RESEARCH	SPACE OPERATION (satellite identification) FIXED MOBILE SPACE RESEARCH	• Radio microphones • Narrow band audio systems including tour guide systems on a tuning range basis • Conventional Fixed stations and PMR	EN 300 422
30.01 - 37.5 MHz FIXED MOBILE	FIXED MOBILE	• Model control • Conventional Fixed stations and PMR • Radio microphones • Narrow band audio systems including tour guide systems on a tuning range	EN 300 220 EN 300 086 EN 300 113 EN 300 219 EN 300 296 EN 300 341 EN 300 390 EN 300 471 EN 300 422 30 MHz Cordless Telephone in accordance with the TR421 Radio Control Models in accordance with TR619

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
37.5 - 38.25 MHz FIXED MOBILE Radio astronomy 5.149	FIXED MOBILE Radio astronomy	• Conventional Fixed stations and PMR • Radio astronomy applications Continuum measurements • Radio microphones • Narrow band audio systems including tour guide systems on a tuning range basis	EN 300 086 EN 300 113 EN 300 219 EN 300 296 EN 300 341 EN 300 390 EN 300 471 EN 300 422
38.25 - 39.5 MHz FIXED MOBILE	FIXED MOBILE	• Conventional Fixed stations and PMR • Radio microphones • Narrow band audio systems	EN 300 220 EN 300 086 EN 300 113 EN 300 219 EN 300 296 EN 300 341 EN 300 390 EN 300 471 EN 300 422 30 MHz Cordless Telephone in accordance with the TR421

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
39.5 - 39.986 MHz FIXED MOBILE RADIOLOCATION 5.132A	FIXED MOBILE RADIOLOCATION	• Conventional Fixed stations and PMR • Radio microphones • Narrow band audio systems	EN 300 220 EN 300 086 EN 300 113 EN 300 219 EN 300 296 EN 300 341 EN 300 390 EN 300 471 EN 300 422 30 MHz Cordless Telephone in accordance with the TR421
39.986 - 40 MHz FIXED MOBILE RADIOLOCATION 5.132A	FIXED MOBILE RADIOLOCATION	• Conventional Fixed stations and PMR • Radio microphones • Narrow band audio systems	Radiolocation service is limited to oceanographic radars
40.0 - 40.02 MHz FIXED MOBILE Space research	FIXED MOBILE Space research	• Conventional Fixed stations and PMR	

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
40.02 - 40.98 MHz FIXED MOBILE 5.150		• SRD	EN 300 086 EN 300 113 EN 300 219
	FIXED MOBILE	• Model Control • ISM band Applications • Conventional Fixed stations and PMR • Radio microphones • Narrow band audio systems	EN 300 296 EN 300 341 EN 300 390 EN 300 471 EN 300 422 EN 300 220
40.98 - 41.015 MHz FIXED MOBILE Space research 5.160 5.161	FIXED MOBILE Space research	• Conventional Fixed stations and PMR • Radio microphones • Narrow band audio systems	EN 300 086 EN 300 113 EN 300 219 EN 300 296 EN 300 341 EN 300 390 EN 300 471 EN 300 422

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
41.015 - 42 MHz FIXED MOBILE 5.160 5.161 5.161A			EN 300 086 EN 300 113 EN 300 219
	FIXED MOBILE	• Conventional Fixed stations and PMR • Radio microphones • Narrow band audio systems	EN 300 296 EN 300 341 EN 300 390 EN 300 471 EN 300 422
42 - 42.5 MHz FIXED MOBILE 5.161			EN 300 086 EN 300 113 EN 300 219
	FIXED MOBILE	• Conventional Fixed stations and PMR • Radio microphones • Narrow band audio systems	EN 300 296 EN 300 341 EN 300 390 EN 300 471 EN 300 422

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
42.5 - 44 MHz FIXED MOBILE 5.160 5.161 5.161A			EN 300 086 EN 300 113 EN 300 219
	FIXED MOBILE	• Conventional Fixed stations and PMR • Radio microphones • Narrow band audio systems	EN 300 296 EN 300 341 EN 300 390 EN 300 471 EN 300 422
44 - 47MHz FIXED MOBILE 5.162 5.162A			EN 300 086 EN 300 113 EN 300 219 EN 300 296 EN 300 341 EN 300 390 EN 300 471 EN 300 422 46 MHz Cordless Telephone in accordance with the TR421
	FIXED MOBILE	• Conventional Fixed stations and PMR • Radio microphones • Narrow band audio systems • Wind Profiler Radars	
47 - 50 MHz FIXED MOBILE BROADCASTING 5.162A	FIXED MOBILE BROADCASTING	• Conventional Fixed stations and PMR	46 MHz Cordless Telephone in accordance with the TR421

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
50 - 54 MHz AMATEUR 5.162A 5.166 5.167 5.168 5.170	AMATEUR		
54 - 68 MHz FIXED MOBILE BROADCASTING 5.162A	FIXED MOBILE BROADCASTING	• Conventional Fixed stations and PMR	
68 - 74.8 MHz FIXED MOBILE 5.149 5.176 5.179	FIXED MOBILE	• TLMRS(Single Frequency Systems) in accordance with the "VHF Mid Band Plan in the band 68 - 88 MHz"	EN 300 086 EN 300 113 EN 300 219 EN 300 296 EN 300 341 EN 300 390 EN 300 471
74.8 - 75.2 MHz AERONAUTICAL RADIONAVIGATION 5.180 5.181	AERONAUTICAL RADIONAVIGATION	• ILS/marker beacons on 75 MHz ± 0.005%. using horizontal polarization with vertical radiation pattern	ICAO Annex 10, volume1, chapter 3, sections 3.1.7 and 3.6
75.2 - 75.4 MHz FIXED MOBILE 5.179	FIXED MOBILE	• PMR (Single Frequency)	In accordance with the "VHF Mid Band Plan in the band 68 - 88 MHz"
75.4 - 87 MHz FIXED MOBILE 5.182 5.183 5.188	FIXED MOBILE	• Single Frequency Systems (Conventional)in accordance with the "VHF Mid Band Plan in the band 68 - 88 MHz"	

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
87 - 100 MHz FIXED MOBILE BROADCASTING	FIXED MOBILE BROADCASTING	• Fixed and Mobile systems in accordance with the "VHF Mid Band Plan in the band 68 - 88 MHz"	VHF FM Broadcasting in accordance with the plan No. 1212.1
100 - 108 MHz BROADCASTING 5.192 5.194	BROADCASTING	• FM sound Broadcasting	VHF FM Broadcasting in accordance with the plan No. 1212.1
108 - 117.975 MHz AERONAUTICAL RADIONAVIGATION 5.197 5.197A	AERONAUTICAL RADIONAVIGATION	• ILS/Localiser (Within 108 - 112 MHz) • Short range VOR (TVOR) and en - route VOR	ITU RR Resolution 413
117.975 - 137 MHz AERONAUTICAL MOBILE (R) 5.111 5.200 5.201 5.202	AERONAUTICAL MOBILE (R)	• Aeronautical mobile communications for safety and regularity of flights (117.975 – 121.45 MHz) • EPIRB (121.45 – 121.55 MHz) • Aeronautical mobile communications for safety and regularity of flights, airline business and airport mobile communications (121.55 – 136 MHz)	

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
137 - 137.025 MHz SPACE OPERATION (space - to - Earth) METEOROLOGICAL - SATELLITE (space - to - Earth) MOBILE - SATELLITE (space - to - Earth) 5.208A 5.209 SPACE RESEARCH (space - to - Earth) Fixed Mobile except aeronautical mobile (R) 5.204 5.205 5.206 5.207 5.208	SPACE OPERATION (space - to - Earth) METEOROLOGICAL - SATELLITE (space - to - Earth) MOBILE - SATELLITE (space - to - Earth) SPACE RESEARCH (space - to - Earth) Fixed Mobile except aeronautical mobile (R)	• Low earth orbiting satellites • Meteorological Satellite • Mobile applications (Restricted to aeronautical Mobile (OR), including air support)	EN 301 721
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 5.209 Mobile except aeronautical mobile (R) 5.204 5.205 5.206 5.207 5.208	SPACE OPERATION (space - to - Earth) METEOROLOGICAL - SATELLITE (space - to - Earth) SPACE RESEARCH (space - to - Earth) Fixed Mobile - satellite (space - to - Earth) Mobile except aeronautical mobile (R)	• Low earth orbiting satellites • Meteorological Satellite • Mobile applications (Restricted to aeronautical Mobile (OR), including air support)	EN 301 721

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
137.175 - 137.825 MHz SPACE OPERATION (space - to - Earth) METEOROLOGICAL - SATELLITE (space - to - Earth) MOBILE - SATELLITE (space - to - Earth) 5.208A 5.209 SPACE RESEARCH (space - to - Earth) Fixed Mobile except aeronautical mobile (R) 5.204 5.205 5.206 5.207 5.208	SPACE OPERATION (space - to - Earth) METEOROLOGICAL - SATELLITE (space - to - Earth) MOBILE - SATELLITE (space - to - Earth) SPACE RESEARCH (space - to - Earth) Fixed Mobile except aeronautical mobile (R)	• Low earth orbiting satellites • Meteorological Satellite • Mobile applications (Restricted to aeronautical Mobile (OR), including air support)	EN 301 721
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 5.209 Mobile except aeronautical mobile (R) 5.204 5.205 5.206 5.207 5.208	SPACE OPERATION (space - to - Earth) METEOROLOGICAL - SATELLITE (space - to - Earth) SPACE RESEARCH (space - to - Earth) Fixed Mobile - satellite (space - to - Earth) 5.208A 5.209 Mobile except aeronautical mobile (R)	• Low earth orbiting satellites • Meteorological Satellite • Mobile applications (Restricted to aeronautical Mobile (OR), including air support)	EN 301 721
138 - 143.6 MHz FIXED MOBILE Space research (space - to - Earth) 5.207 5.213	FIXED MOBILE Space research (space - to - Earth)		Conventional Fixed service has higher priority in this band

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
143.6 - 143.65 MHz FIXED MOBILE SPACE RESEARCH (space - to - Earth) 5.207 5.213	FIXED MOBILE SPACE RESEARCH (space - to - Earth)		Conventional Fixed service has higher priority in this band
143.65 - 144 MHz FIXED MOBILE Space research (space - to - Earth) 5.207 5.213	FIXED MOBILE Space research (space - to - Earth)		Conventional Fixed service has higher priority in this band
144 - 146MHz AMATEUR AMATEUR - SATELLITE 5.216	AMATEUR AMATEUR - SATELLITE		2 meters Amateur band
146 - 148 MHz AMATEUR FIXED MOBILE 5.217	AMATEUR FIXED MOBILE	• PMR (Both Single frequency and Duplex operations)	Conventional Fixed and land mobile services has higher priority over amateur service in this band
148 - 149.9 MHz FIXED MOBILE MOBILE - SATELLITE (Earth - to - space) 5.209 5.218 5.219 5.221	FIXED MOBILE MOBILE – SATELLITE (Earth - to - space)	• LEO Satellite • PMR (Duplex operations)	Land mobile service in accordance with Band plan "148 - 174 MHz"

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
149.9 - 150.05 MHz MOBILE - SATELLITE (Earth - to - space) 5.209 5.220	MOBILE - SATELLITE (Earth - to - space)	• LEO Satellite	EPIRB and low rate date through satellite The use of the frequency bands 149.9-150.05 MHz and 399.9-400.05 MHz by the mobile-satellite service is subject to coordination under No. 9.11A of RR
150.05 - 154 MHz FIXED MOBILE 5.225	FIXED MOBILE	• PMR (Both Single frequency and Duplex operations) • Radio Astronomy	Land mobile service in accordance with Band plan "148 - 174 MHz"
154 - 156.4875 MHz FIXED MOBILE 5.225A 5.226	FIXED MOBILE	• PMR (Duplex Operations)	Land mobile service in accordance with Band plan "148 - 174 MHz"
156.4875 - 156.5625 MHz MARITIME MOBILE (distress and calling via DSC) 5.111 5.225A 5.226 5.227	MARITIME MOBILE (distress and calling via DSC)	• SAR and safety DSC in 156.525 MHz	ITU RR Article 31 and App.18

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
156.5625 - 156.7625 MHz FIXED MOBILE 5.225 5.226	FIXED MOBILE		Land mobile service in accordance with Band plan "148 - 174 MHz" Safety of navigation communication for ship to ship on 156.650 MHz (ITU RR No. 33.52)
156.7625 - 156.7875 MHz MARITIME MOBILE Mobile satellite(Earth –to - space) 5.225A 5.226 5.228	MARITIME MOBILE Mobile satellite(Earth –to - space)		Maritime mobile service in accordance with ITU RR Article 31 and App.18
156.7875 - 156.8125 MHz MARITIME MOBILE (distress and calling) 5.111 5.226	MARITIME MOBILE (distress and calling)	• International distress, safety and calling frequency (156.8MHz single Frequency)	ITU RR Article31 and Appendix15
156.8125 - 156.8375 MHz MARITIME MOBILE Mobile satellite(Earth –to - space) 5.111 5.226 5.228	MARITIME MOBILE Mobile satellite(Earth –to - space)		Maritime mobile service in accordance with ITU RR Article 31 and App.18
156.8375 - 161.9375 MHz FIXED MOBILE 5.226	FIXED MOBILE	• PMR • Coastal Stations	Maritime mobile service in accordance with ITU RR Articles 31and 32, and App.18 Land mobile service in accordance with Band plan "148 - 174 MHz"

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
161.9375 - 161.9625 MHz FIXED MOBILE Maritime mobile-satellite (Earth-to-space) 5.228AA 5.226	FIXED MOBILE Maritime mobile-satellite (Earth-to-space)	• PMR • Coastal Stations	Maritime mobile service in accordance with ITU RR Articles31and 32, and App.18 Use of this band for Maritime mobile-satellite (Earth-to-space) is limited to systems that operate in accordance with Appendix 18 of RR Land mobile service in accordance with Band plan "148 - 174 MHz"
161.9625 - 161.9875 MHz MARITIME MOBILE Aeronautical mobile (OR) 5.228E Mobile - satellite (Earth - to - space) 5.228F 5.226	MARITIME MOBILE Aeronautical mobile (OR) Mobile - satellite (Earth - to - space)		The use of the automatic identification (AID)system by AM(OR)S is limited to aircraft stations for the purpose of SAR, also MSS (↑) is limited to the reception of AID
161.9875 - 162.0125 MHz FIXED MOBILE Maritime mobile-satellite (Earth-to-space) 5.228AA 5.226	FIXED MOBILE Maritime mobile-satellite (Earth-to-space)	• PMR • Coastal Stations	Land mobile service in accordance with Band plan "148 - 174 MHz" Use of this band for Maritime mobile-satellite (Earth-to-space) is limited to systems that operate in accordance with Appendix 18 of RR

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
162.0125 - 162.0375 MHz MARITIME MOBILE Aeronautical mobile (OR) 5.228E Mobile - satellite (Earth - to - space) 5.228F 5.226	MARITIME MOBILE Aeronautical mobile (OR) Mobile - satellite (Earth - to - space)		The use of the automatic identification (AID)system by AM(OR)S is limited to aircraft stations for the purpose of SAR, also MSS (↑) is limited to the reception of AID
162.0375 - 174 MHz FIXED MOBILE 5.226 5.230 5.231	FIXED MOBILE	• PMR • Coastal Stations • Aids for Handicapped (Within 173.965 - 174.015 MHz)	Land mobile service in accordance with Band plan "148 - 174 MHz"
174 - 223 MHz FIXED MOBILE BROADCASTING 5.233 5.238 5.240 5.245	FIXED MOBILE BROADCASTING	• Aids for Handicapped (Within 173.965 - 174.015 MHz) • Radio microphones (on Tuning Basis) • Broadcasting • DAB	VHF TV Band III (based on 7 MHz channel spacing)
223 - 230 MHz BROADCASTING FIXED MOBILE AERONAUTICAL RADIONAVIGATION Radiolocation 5.250	BROADCASTING FIXED MOBILE AERONAUTICAL RADIONAVIGATION Radiolocation	• Broadcasting • DAB	VHF TV channel No. 8 (in the VHF TV Band III)

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
230 - 235 MHz FIXED MOBILE AERONAUTICAL RADIONAVIGATION 5.250	FIXED MOBILE AERONAUTICAL RADIONAVIGATION SERVICE	• Security purposes	
235 - 267MHz FIXED MOBILE 5.111 5.252 5.254 5.256 5.256A	FIXED MOBILE	• Security • EPIRB (242.95 – 243.055 MHz)	RR App. 13 AERO - SAR radiotelephony in the 243 MHz for communication with maritime and aeronautical stations.
267 - 272MHz FIXED MOBILE Space operation (space - to - Earth) 5.254 5.257	FIXED MOBILE Space operation (space - to - Earth)	• Security Air Traffic control, Land and Mobile services	
272 - 273MHz SPACE OPERATION (space - to - Earth) FIXED MOBILE 5.254	SPACE OPERATION (space - to - Earth) FIXED MOBILE	• Security Air Traffic control, Land and Mobile services	
273 - 312MHz FIXED MOBILE 5.254	FIXED MOBILE	• Security Air Traffic control, Land and Mobile services	

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
312 - 315MHz FIXED MOBILE Mobile – satellite (Earth - to - space) 5.254 5.255	FIXED MOBILE Mobile - satellite (Earth - to - space)	• Security Air Traffic control, Land and Mobile services	
315 - 322MHz FIXED MOBILE 5.254	FIXED MOBILE	• Security Air Traffic control, Land and Mobile services	
322 - 328.6 MHz FIXED MOBILE RADIO ASTRONOMY 5.149	FIXED MOBILE RADIO ASTRONOMY	• Security Land and Mobile services	
328.6 - 335.4 MHz AERONAUTICAL RADIONAVIGATION 5.258 5.259	AERONAUTICAL RADIONAVIGATION	• ILS/Glide path	Limited to instrument landing (ILS) system in glide path (ICAO, Annex 10, Vol.1, Chapter 3)
335.4 - 387 MHz FIXED MOBILE 5.254	FIXED MOBILE	• Security Air Traffic control, Land and Mobile services • Emergency services	
387 - 390 MHz FIXED MOBILE Mobile - satellite (space - to - Earth) 5.208A 5.254 5.255	FIXED MOBILE Mobile - satellite (space - to - Earth)	• Digital Land Mobile PMR/PAMR	

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
390 - 399.9 MHz FIXED MOBILE 5.254	FIXED MOBILE	• Security (Air Traffic control) • Emergency Services • Digital Land Mobile PMR/PAMR	
399.9 - 400.05 MHz MOBILE - SATELLITE (Earth - to - space) 5.209 5.220	MOBILE - SATELLITE (Earth - to - space)		The use of the frequency bands 149.9-150.05 MHz and 399.9-400.05 MHz by the mobile-satellite service is subject to coordination under No. 9.11A of RR
400.05 - 400.15MHz STANDARD FREQUENCY AND TIME SIGNAL - SATELLITE (400.1 **MHz**) 5.261 5.262	STANDARD FREQUENCY AND TIME SIGNAL - SATELLITE (400.1 **MHz**)		
400.15 - 401 MHz METEOROLOGICAL AIDS METEOROLOGICAL - SATELLITE (space - to - Earth) MOBILE - SATELLITE (space - to - Earth) 5.208A 5.209 SPACE RESEARCH (space - to - Earth) 5.263 Space operation (space - to - Earth) 5.262 5.264	METEOROLOGICAL AIDS METEOROLOGICAL - SATELLITE (space - to - Earth) MOBILE - SATELLITE (space - to - Earth) SPACE RESEARCH (space - to - Earth) Space operation (space - to - Earth)	• LEO Satellites	EN 301 721 Radiosondee NAVID, readout from balloon - borne radiosonde and readout from descending dropsonde

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
401 - 402 MHz METEOROLOGICAL AIDS SPACE OPERATION (space - to - Earth) EARTH EXPLORATION - SATELLITE (Earth - to - space) METEOROLOGICAL - SATELLITE (Earth - to - space) Fixed Mobile except aeronautical mobile	METEOROLOGICAL AIDS SPACE OPERATION (space - to - Earth) EARTH EXPLORATION - SATELLITE (Earth - to - space) METEOROLOGICAL - SATELLITE (Earth - to - space) Fixed Mobile except aeronautical mobile	• Meteorological radio sondes • Meteorological satellites, data • collection platform	Radiosondee NAVID, readout from balloon - borne radiosonde and readout from descending dropsonde
402 - 403 MHz METEOROLOGICAL AIDS EARTH EXPLORATION - SATELLITE (Earth - to - space) METEOROLOGICAL - SATELLITE (Earth - to - space) Fixed Mobile except aeronautical mobile	METEOROLOGICAL AIDS EARTH EXPLORATION - SATELLITE (Earth - to - space) METEOROLOGICAL - SATELLITE (Earth - to - space) Fixed Mobile except aeronautical mobile	• Medical implants within 402 - 405 MHz • Meteorological radio sondes • Meteorological satellites, data • collection platform	EN 300 220
403 - 406 MHz METEOROLOGICAL AIDS Fixed Mobile except aeronautical mobile 5.265	METEOROLOGICAL AIDS Fixed Mobile except aeronautical mobile	• Medical implants within 402 - 405 MHz • Meteorological radio sondes	EN 300 220 Radiosondee NAVID, readout from balloon - borne radiosonde and readout from descending dropsonde Resolution 205 (Rev.WRC-15) ***[****Protection of the systems operating in the mobile-satellite service in the frequency band 406-406.1 MHz*] applies

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
406 - 406.1 MHz MOBILE - SATELLITE (Earth - to - space) 5.265 5.266 5.267	MOBILE - SATELLITE (Earth - to - space)	• EPIRB	EN 300 066 COSPAS – SARSAT global satellite - based search and rescue system (ITU - R M.1478) EPIRB's service (ITU RR Article 31and, App.s13 and 15) Resolution 205 (Rev.WRC-15) ***[****Protection of the systems operating in the mobile-satellite service in the frequency band 406-406.1 MHz*] applies
406.1 - 410 MHz FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY 5.149 5.265	FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY	• Analogue and digital land mobile PMR/PAMR (Single frequency applications)	EN 300 086 EN 300 113 EN 300 219 EN 300 296 EN 300 341 EN 300 390 EN 300 471 Resolution 205 (Rev.WRC-15) ***[****Protection of the systems operating in the mobile-satellite service in the frequency band 406-406.1 MHz*] applies
410 - 420 MHz FIXED MOBILE except aeronautical mobile SPACE RESEARCH (space - to - space) 5.268	FIXED MOBILE except aeronautical mobile SPACE RESEARCH (space - to - space)	• Anagolue and digital land mobile PMR/PAMR (Duplex applications)	

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
420 - 430 MHz FIXED MOBILE except aeronautical mobile Radiolocation 5.269 5.270 5.271	FIXED MOBILE except aeronautical mobile Radiolocation	• Anagolue and digital land mobile PMR/PAMR (Duplex applications)	
430 - 432 MHz RADIOLOCATION Amateur 5.271 5.275 5.276 5.277 5.278 5.279	RADIOLOCATION Amateur		EN 301 783 Use of thisband by Amateur service is restricted to professional amateurs only.
432 - 438 MHz RADIOLOCATION Amateur Earth exploration - satellite (active) 5.279A 5.271 5.276 5.277 5.278 5.279 5.281 5.282	RADIOLOCATION Amateur Earth exploration - satellite (active)	• Amateur Applications • ISM • Non Specific SRD	EN 301 783 EN 300 220
438 - 440 MHz RADIOLOCATION Amateur 5.271 5.276 5.277 5.278 5.279	RADIOLOCATION Amateur		EN 301 783
440 - 450 MHz FIXED MOBILE except aeronautical mobile Radiolocation 5.269 5.270 5.271 5.284 5.285 5.286	FIXED MOBILE except aeronautical mobile Radiolocation	• Analogue and digital land mobile • PMR/PAMR • Digital Land Mobile DMO • Onsite paging	EN 300 224 EN 300 296

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
450 - 455 MHz FIXED MOBILE 5.286AA 5.209 5.271 5.286 5.286A 5.286B 5.286C 5.286D 5.286E	FIXED MOBILE	• Analogue and digital land mobile • PMR/PAMR • Digital Land Mobile DMO • Onsite paging	EN 300 224 EN 300 296
455 - 456 FIXED MOBILE 5.286AA 5.209 5.271 5.286A 5.286B 5.286C 5.286E	FIXED MOBILE	• Analogue and digital land mobile • PMR/PAMR • Onsite paging • Cellular Networks	EN 300 224
456 - 459 MHz FIXED MOBILE 5.286AA 5.271 5.287 5.288	FIXED MOBILE	• Analogue and digital land mobile • PMR/PAMR • Onsite paging • Cellular Networks • Maritime on board Communications within 457.525 - 457.575 MHz	EN 300 224 EN 300 720
459 - 460 MHz FIXED MOBILE 5.286AA 5.209 5.271 5.286A 5.286B 5.286C 5.286E	FIXED MOBILE	• Analogue and digital land mobile • PMR/PAMR • Onsite paging • Cellular Networks	EN 300 224
460 - 470 MHz FIXED MOBILE 5.286AA Meteorological - satellite (space - to - Earth) 5.287 5.288 5.289 5.290	FIXED MOBILE Meteorological - satellite (space - to - Earth)	• Analogue and digital land mobile • PMR/PAMR • Onsite paging • Cellular Networks • Maritime on board Communications within 467.525 - 467.575 MHz	EN 300 224 EN 300 720

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
470 - 585 MHz FIXED BROADCASTING MOBILE 5.296A 5.291 5.298	FIXED BROADCASTING MOBILE	• Broadcasting • Radio Microphones (On tuning range basis)	UHF CBRS in the band 476.400 – 477.425MHz in accordance with document No. TR603 UHF Television channels 28 to 34 in the band IV (526 - 606 MHz) using 8 MHz channel spacing
585 - 610 MHz FIXED BROADCASTING MOBILE 5.296A RADIONAVIGATION 5.149 5.305 5.306 5.307	FIXED BROADCASTING MOBILE RADIONAVIGATION	• Broadcasting • Radio Microphones (On tuning range basis) • Future LTE deployment	UHF Television channels 35 to 37 in the band IV (526 - 606 MHz) using 8 MHz channel spacing
610 - 890 MHz FIXED MOBILE 5.313A 5.317A 5.296A BROADCASTING 5.149 5.305 5.306 5.307 5.311A 5.320	FIXED MOBILE BROADCASTING	• Security systems (Tactical Relay Radio 870 - 876MHz paired with 915 - 921MHz) • Narrow band analogue Voice devises (864.8 - 865 MHz) • Radio microphones (863 - 865 MHz) • Social Alarms (869.2 - 869.25 MHz) • SRD in 862 - 870 MHz • Wireless Audio (863 - 865 MHz) • Cordless Telephones (Phasing out) • Digital land mobile PMR/PAMR (870 - 876MHz paired with 915 - 921MHz) • Railway Systems (876 - 880MHz paired with 921 - 925 MHz) • EGSM (880 - 890MHz paired with 925 - 935MHz) • APT700 (703 – 745 paired with 758 – 803MHz)	EN 301 797 EN 300 220 EN 300 422 EN 301 357 EN 300 220 EN 301 357 EN 303 035 EN 301 502 EN 301 511

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
890 - 942 MHz FIXED MOBILE 5.317A BROADCASTING 5.322 Radiolocation 5.327	FIXED MOBILE BROADCASTING Radiolocation	• GSM • EGSM (880 - 890MHz paired with 925 - 935MHz) • Digital land mobile PMR/PAMR (870 - 876MHz paired with 915 - 921MHz) • Railway Systems (876 - 880MHz paired with 921 - 925 MHz) • Security systems (Tactical Relay Radio 870 - 876MHz paired with 915 - 921MHz) • ISM applications in 915 – 925 MHz	EN 301 502 EN 301 511
942 - 960 MHz FIXED MOBILE 5.317A BROADCASTING 5.323	FIXED MOBILE BROADCASTING	• GSM	EN 301 502 EN 301 511
960 - 1 164 MHz AERONAUTICAL RADIONAVIGATION 5.328 AERONAUTICAL MOBILE (R) 5.327A 5.328AA	AERONAUTICAL RADIONAVIGATION AERONAUTICAL MOBILE (R)	• Flight Safety, Navigation and Information Distribution systems (DME,TACAN,SSR,MIDS)	DME (960 – 1215 MHz) and SSR in the paired bands 1025 - 1035 MHz/ 1085 – 1095 MHz Airborne collision avoidance system (ACAS) supplementing SSR on the frequencies 1030 and 1090 MHz

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
1 164 - 1 215 MHz AERONAUTICAL RADIONAVIGATION 5.328 RADIONAVIGATION - SATELLITE (space - to - Earth) (space - to - space) 5.328B 5.328A	AERONAUTICAL RADIONAVIGATION RADIONAVIGATION - SATELLITE (space - to - Earth) (space - to - space)	• Flight Safety, Navigation and Information Distribution systems (DME,TACAN,SSR,MIDS) • Satellite navigation	DME (960 – 1215 MHz), SSR GPS L5 link (ITU - R Rec. M.1088) GALILO E5a and E5b radionavigation satellite systems
1 215 - 1 240 MHz EARTH EXPLORATION - SATELLITE (active) RADIOLOCATION RADIONAVIGATION - SATELLITE (space - to - Earth) (space - to - space) 5.328B 5.329 5.329A SPACE RESEARCH (active) 5.330 5.331 5.332	EARTH EXPLORATION - SATELLITE (active) RADIOLOCATION RADIONAVIGATION - SATELLITE (space - to - Earth) (space - to - space) SPACE RESEARCH (active)	• Security systems • Radar and Navigation systems and • Active Sensors • Satellite Navigation	Primary radar stations on the ground in the band 1215 – 1400 MHz GPS L2 - signalon 1227.6 MHz (ITU - R Rec. M.1088)
1 240 - 1 300 MHz EARTH EXPLORATION - SATELLITE (active) RADIOLOCATION RADIONAVIGATION - SATELLITE (space - to - Earth) (space - to - space) 5.328B 5.329 5.329A SPACE RESEARCH (active) Amateur 5.282 5.330 5.331 5.332 5.335 5.335A	EARTH EXPLORATION - SATELLITE (active) RADIOLOCATION RADIONAVIGATION - SATELLITE (space - to - Earth) (space - to - space) SPACE RESEARCH (active) Amateur	• Amateur applications • Security systems • Radar and Navigation systems and • Active Sensors • Satellite Navigation	EN 301 783 Primary radar stations on the ground in the band 1215 – 1400 MHz GLONASS and GALILO radionavigation satellite systems.

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
1 300 - 1 350 MHz AERONAUTICAL RADIONAVIGATION 5.337 RADIOLOCATION RADIONAVIGATION - SATELLITE (Earth - to - space) 5.149 5.337A	AERONAUTICAL RADIONAVIGATION RADIOLOCATION RADIONAVIGATION - SATELLITE (Earth - to - space)	• Security systems • Radar and Navigation systems and • Satellite Navigation • Radio Astronomy Applications	Primary radar stations on the ground in the band 1215 – 1400 MHz Ground - based radars and to associated airborne transponders (5.337)
1 350 - 1 400 MHz RADIOLOCATION 5.149 5.334 5.339	RADIOLOCATION		Primary radar stations on the ground in the band 1215 – 1400 MHz GPS L3 link on 1379
1 400 - 1 427 MHz EARTH EXPLORATION - SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340 5.341	EARTH EXPLORATION - SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive)	• Passive applications	All emissions are prohibited in this band
1 427 - 1 429 MHz SPACE OPERATION (Earth - to - space) FIXED MOBILE except aeronautical mobile 5.341A 5.341B 5.341C 5.341 5.338A	SPACE OPERATION (Earth - to - space) FIXED MOBILE except aeronautical mobile	• Low capacity fixed links • Security systems	For Low capacity microwave point to point in ITU - R Rec.s F1242 and F.701 applies EN 301 751
1 429 - 1 452 MHz FIXED MOBILE 5.343 5.341B 5.341C 5.341 5.338A	FIXED MOBILE	• Low capacity fixed links • Security systems	ITU - R Rec.s F1242 and F.701 applies for Fixed Links EN 301 751

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
1 452 - 1 492 MHz FIXED MOBILE 5.343 5.341B 5.346A BROADCASTING 5.345 BROADCASTING - SATELLITE 5.208B 5.345 5.341 5.344	FIXED MOBILE except aeronautical mobile BROADCASTING BROADCASTING - SATELLITE	• Low capcity fixed links • DAB	ITU - R Rec.s F1242 and F.701 applies for Fixed Links
1 492 - 1 518 MHz FIXED MOBILE 5.341C 5.341	FIXED MOBILE except aeronautical mobile	• Low capacity fixed links • Security systems	ITU - R Rec.s F1242 and F.701 applies for Fixed Links EN 301 751
1 518 - 1 525 MHz FIXED MOBILE MOBILE - SATELLITE (space - to - Earth) 5.348 5.348A 5.348B 5.341 5.342	FIXED MOBILE MOBILE - SATELLITE (space - to - Earth)	• fixed links • Security systems	ITU - R Rec. F.701 EN 301 751

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
1 525 - 1 610 MHz AERONAUTICAL RADIONAVIGATION RADIONAVIGATION-SATELLITE (space-to-Earth) (space-to-space) 5.208B 5.328B 5.329A 5.341	AERONAUTICAL RADIONAVIGATION RADIONAVIGATION-SATELLITE (space-to-Earth) (space-to-space)	• Mobile satellite applications • Some legacy fixed links but not in common use	INMARSAT B, C, D, M, M4, mini M terminals EN 301 426 EN 301 444 EN 301 681 EN 301 473 EN 301 751
1 610 - 1 610.6 MHz MOBILE - SATELLITE (Earth - to - space) 5.351A AERONAUTICALRADIONAVIGATION Radiodetermination Satellite (Earth to space) 5.341 5.355 5.359 5.364 5.366 5.367 5.368 5.369 5.372	MOBILE - SATELLITE (Earth - to - space) AERONAUTICALRADIONAVIGATION Radiodetermination Satellite (Earth to space)	• Mobile satellite applications	Airborne electronic aids to air navigation and any directly associated ground - based or satellite - borne facilities. Satellite personal communication systems (S - PCS) EN 301 441 EN 301 473
1 610.6 - 1 613.8 MHz MOBILE - SATELLITE (Earth - to - space) 5.351A RADIO ASTRONOMY AERONAUTICAL RADIONAVIGATION Radiodetermination - Satellite (Earth to space) 5.149 5.341 5.355 5.359 5.364 5.366 5.367 5.368 5.369 5.372	MOBILE - SATELLITE (Earth - to - space) RADIO ASTRONOMY AERONAUTICAL RADIONAVIGATION Radiodetermination - Satellite (Earth to space)	• Mobile satellite applications • Radio astronomy applications	Airborne electronic aids to air navigation and any directly associated ground - based or satellite - borne facilities. Satellite personal communication systems (S - PCS) EN 301 441 EN 301 473

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
1 613.8 - 1 626.5 MHz MOBILE - SATELLITE (Earth - to - pace) 5.351A AERONAUTICAL RADIONAVIGATION RADIODETERMINATION - SATELLITE (Earth - to - space) 5.369 Mobile - satellite (space - to - Earth) 5.208B 5.3415.3645.3655.3665.3675.3685.372	MOBILE - SATELLITE (Earth - to - pace) AERONAUTICAL RADIONAVIGATION RADIODETERMINATION - SATELLITE (Earth - to - space) Mobile - satellite (space - to - Earth)	• Airborne electronic aids to air navigation and any directly associated ground-based or satellite-borne facilities. • Satellite personal communication systems (S-PCS)	
1 626.5 - 1 660 MHz MOBILE - SATELLITE (Earth - to - space) 5.351A 5.341 5.351 5.353A 5.354 5.357A 5.375 5.376	MOBILE - SATELLITE (Earth - to - space)	• Terminals of space radiocom systems providing either data communications or both voice and data communications. • INMARSAT B, C, D, M, M4, mini M terminals	GMDSS distress, urgency and safety communications (in addition to routine non-safety communications) in the band 1626.5 – 1645.5 MHz (ITU RR App. 15) Distress and safety operations and feeder links to relay EPIRB and narrow-band space-to-earth links from satellite to mobile station in maritime mobile-satellite service(GMDSS) in the band 1645.5 – 1646.5 MHz (ITU RR Article 31 and App.15)
1 660 - 1 660.5 MHz MOBILE - SATELLITE (Earth - to - space) 5.351A RADIO ASTRONOMY 5.1495.341 5.351 5.354 5.376	MOBILE - SATELLITE (Earth - to - space) RADIO ASTRONOMY	• INMARSAT B, C, D, M, M4, mini M terminals	End-user stations (terminals) of space radiocommunication systems providing either data communications or both voice and data communications.

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
1 660.5 - 1 668 MHz RADIO ASTRONOMY SPACE RESEARCH (passive) Fixed Mobile except aeronautical mobile 5.149 5.341 5.379A	RADIO ASTRONOMY SPACE RESEARCH (passive) Fixed Mobile except aeronautical mobile		-
1 668 - 1 668.4 MHz MOBILE - SATELLITE (Earth - to - space) 5.351A5.379B5.379C RADIO ASTRONOMY SPACE RESEARCH (passive) Fixed Mobile except aeronautical mobile 5.149 5.341 5.379	MOBILE - SATELLITE (Earth - to - space) RADIO ASTRONOMY SPACE RESEARCH (passive) Fixed Mobile except aeronautical mobile		
1 668.4 - 1 670 MHz METEOROLOGICAL AIDS FIXED MOBILE except aeronautical mobile MOBILE - SATELLITE (Earth - to - space) 5.379B5.379C RADIO ASTRONOMY 5.149 5.341 5.379D	METEOROLOGICAL AIDS FIXED MOBILE except aeronautical mobile MOBILE - SATELLITE (Earth - to - space) RADIO ASTRONOMY		Direct data readout from balloon-borne radiosonde in the band 1668.4 – 1700 MHz Radiosonde radio direction finding (RDF) (ITU-R Rec. SA.1262)

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
1 670 - 1 675 MHz METEOROLOGICAL AIDS FIXED METEOROLOGICAL - SATELLITE (space - to - Earth) MOBILE 5.380 MOBILE - SATELLITE (Earth - to - space) 5.379B 5.341 5.379D 5.380A	METEOROLOGICAL AIDS FIXED METEOROLOGICAL - SATELLITE (space - to - Earth) MOBILE MOBILE - SATELLITE (Earth - to - space)	• Worldwide aeronautical public correspondence	Direct data readout from balloon-borne radiosonde in the band 1668.4 – 1700 MHz Radiosonde radio direction finding (RDF) (ITU-R Rec. SA.1262)
1 675 - 1 690 MHz METEOROLOGICAL AIDS FIXED METEOROLOGICAL - SATELLITE (space - to - Earth) MOBILE except aeronautical mobile 5.341	METEOROLOGICAL AIDS FIXED METEOROLOGICAL - SATELLITE (space - to - Earth) MOBILE except aeronautical mobile	• Fixed earth stations for reception of raw image data, data collection data and spacecraft telemetry from GSO meteorological satellites	Direct data readout from balloon-borne radiosonde in the band 1668.4 – 1700 MHz Radiosonde radio direction finding (RDF) (ITU-R Rec. SA.1262) (ITU-R Rec. SA.1158)
1 690 - 1 700 MHz METEOROLOGICAL AIDS METEOROLOGICAL - SATELLITE (space - to - Earth) 5.289 5.341	METEOROLOGICAL AIDS METEOROLOGICAL - SATELLITE (space - to - Earth)	• Direct data readout from balloon-borne radiosonde in the band 1668.4 – 1700 MHz •	User stations for direct readout services from GSO MetSat in thee band 1690–1698 MHz and from Non-GSO MetSat in the band 1698 – 1710 MHz (ITU-R SA.1158)
1 700 - 1 710 MHz FIXED METEOROLOGICAL - SATELLITE (space - to - Earth) MOBILE except aeronautical mobile 5.289 5.341	FIXED METEOROLOGICAL - SATELLITE (space - to - Earth) MOBILE except aeronautical mobile		User stations for direct readout services and prerecorded image data from Non-GSO MetSat in the band 1698 – 1710 MHz (ITU-R Rec. SA.1158) Fixed service in the bands 1.8 GHz and 1.9 GHz bands (ITU-R Rec.s F.701, F.382 and F.283)

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
1 710 - 1 785 MHz MOBILE 5.384A 5.385 5.341 5.149	MOBILE	• GSM system in the band 1710-1785 MHz/1805-1880 MHz • Designated for IMT	
1 785 - 1 805 MHz FIXED MOBILE 5.384A	FIXED MOBILE		Use of this band by IMT systems has higher priority
1 805 - 1 930 MHz MOBILE 5.384A 5.388A 5.388	MOBILE	• GSM system in the band 1710-1785 MHz/1805-1880 MHz • Designated for IMT	
1 930 - 1 970 MHz MOBILE 5.388A 5.388	MOBILE	• Designated for IMT	Fixed service are available outside IMT band
1 970 - 1 980 MHz MOBILE 5.388A 5.388	MOBILE	• Designated for IMT	
1 980 - 2 010 MHz FIXED MOBILE MOBILE - SATELLITE (Earth - to - space) 5.351A 5.388 5.389A	FIXED MOBILE MOBILE - SATELLITE (Earth - to - space)		Satellite component of IMT-2000 subject to coordination under No. 9.11A
2 010 - 2 025 MHz MOBILE 5.388A 5.388	MOBILE 5	• Designated for IMT	

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
2 025 - 2 110 MHz SPACE OPERATION (Earth - to - space) (space - to - space) EARTH EXPLORATION - SATELLITE (Earth - to - space) (space - to - space) FIXED MOBILE 5.391 SPACE RESEARCH(Earth - to - space) (space - to - space) 5.392	SPACE OPERATION (Earth - to - space) (space - to - space) EARTH EXPLORATION - SATELLITE (Earth - to - space) (space - to - space) FIXED MOBILE SPACE RESEARCH(Earth - to - space) (space - to - space)	• High density mobile systems are not permitted. • Low capacity microwave links in the 1.8 GHz, 1.9 GHz bands	ITU-R Rec.sF.701, F.382, F.283 and F.1098
2 110 - 2 120 MHz MOBILE 5.388A 5.388	MOBILE	• Designated for IMT	
2 120 - 2 160 MHz MOBILE 5.388A 5.388	MOBILE	• Designated for IMT	
2 160 - 2 170 MHz MOBILE 5.388A 5.388	MOBILE	• Designated for IMT	
2 170 - 2 200 MHz FIXED MOBILE MOBILE - SATELLITE (space - to - Earth)5.351A 5.3885.389A	FIXED MOBILE MOBILE - SATELLITE (space - to - Earth)	• Low capacity microwave links	Satellite component of IMT-2000 subject to coordination under No. 9.11A Low capacity microwave links in the 2.1 GHz, 2.2 GHz bands in accordance with ITU-R Rec.s F.701, F.382, F.283 and F.1098

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
2 200 - 2 290 MHz SPACE OPERATION (space - to - Earth) (space - to - space) EARTH EXPLORATION - SATELLITE (space - to - Earth) (space - to - space) FIXED MOBILE 5.391 SPACE RESEARCH (space - to - Earth) (space - to - space) 5.392	SPACE OPERATION (space - to - Earth) (space - to - space) EARTH EXPLORATION - SATELLITE (space - to - Earth) (space - to - space) FIXED MOBILE SPACE RESEARCH (space - to - Earth) (space - to - space)	• Low capacity microwave links	Low capacity microwave links in the 2.1 GHz, 2.2 GHz bands in accordance with ITU-R Rec.s F.701, F.382, F.283 and F.1098 High density mobile systems are not permitted.
2 290 - 2 300 MHz FIXED MOBILE except aeronautical mobile SPACE RESEARCH (deep space) (space - to - Earth)	FIXED MOBILE except aeronautical mobile SPACE RESEARCH (deep space) (space - to - Earth)	• Low capacity microwave links	Low capacity microwave links in the 2.1 GHz, 2.2 GHz bands in accordance with ITU-R Rec.s F.701, F.382, F.283, F.1098 and F.1243
2 300 - 2 450 MHz FIXED MOBILE RADIOLOCATION Amateur 5.150 5.282 5.396	FIXED MOBILE RADIOLOCATION Amateur	• The band 2300-2400 MHz designated for IMT advanced	2.4 GHz (2400 – 2483.5 MHz) ISM band. LPD devices are permited to use this band subject to comply with given standards.
2 450 - 2 483.5 MHz FIXED MOBILE RADIOLOCATION 5.150	FIXED MOBILE RADIOLOCATION		2.4 GHz (2400 – 2483.5 MHz) ISM band. LPD devices are permitted to use this band subject to comply with given standards.

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
2 483.5 - 2 500 MHz FIXED MOBILE MOBILE - SATELLITE (space - to - Earth)5.351A RADIOLOCATION RADIODETERMINATION - SATELLITE (space - to - Earth) 5.398 5.150 5.401 5.402	FIXED MOBILE MOBILE - SATELLITE (space - to - Earth) RADIOLOCATION RADIODETERMINATION - SATELLITE (space - to - Earth)	• Low capacity microwave links • SAP/SAB and ENG/OB (temporary application)	Low capacity microwave links in the 2.4 GHz, 2.48 GHz bands in accordance with ITU-R Rec.s ITU-R F.701, F.1243 and F.746 ISM band, up to 2.5 GHz
2 500 - 2 520 MHz FIXED MOBILE except aeronautical mobile 5.384A 5.414 5.415	FIXED MOBILE except aeronautical mobile	• LTE systems	
2 520 - 2 535 MHz FIXED 5.410 FIXED-SATELLITE (space-to-earth) 5.415 MOBILE except aeronautical mobile 5.384A BROADCASTING-SATELLITE 5.413 5.416 5.403 5.415A 5.414A	FIXED MOBILE except aeronautical mobile FIXED-SATELLITE (space-to-earth) BROADCASTING-SATELLITE	• LTE systems • SAP/SAB and ENG/OB in the band 2520 – 2670 MHz (temporary application)	
2 535 - 2 655 MHz FIXED 5.410 MOBILE except aeronautical mobile 5.384A BROADCASTING-SATELLITE 5.413 5.416 5.339 5.416 5.418A 5.418B 5.418 5.418C	FIXED MOBILE except aeronautical mobile BROADCASTING-SATELLITE	• LTE systems • SAP/SAB and ENG/OB in the band 2520 – 2670 MHz (temporary application)	

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
2 655 - 2 670 MHz FIXED MOBILE except aeronautical mobile 5.384A 5.149 5.4155.416 5.420	FIXED MOBILE except aeronautical mobile	• LTE systems • SAP/SAB and ENG/OB in the band 2520 – 2670 MHz (temporary application)	
2 670 - 2 690 MHz FIXED MOBILE except aeronautical mobile 5.384A 5.149 5.415 5.419 5.420	FIXED MOBILE except aeronautical mobile	• LTE systems	
2 690 - 2 700 MHz EARTH EXPLORATION - SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340	EARTH EXPLORATION - SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive)		All emissions are prohibited in this band
2 700 - 2 900 MHz AERONAUTICAL RADIONAVIGATION 5.337 Radiolocation 5.423	AERONAUTICAL RADIONAVIGATION Radiolocation	• Ground-based 10 cm (S-band) long-range surveillance primary radar and associated airborne transponders	Ground-based 10 cm (S-band) long-range surveillance primary radar and associated airborne transponders in accordance to ICAO Annex 10, Vol.1, chapter 3
2 900 - 3 100 MHz RADIOLOCATION 5.424A RADIONAVIGATION 5.426 5.425 5.427	RADIOLOCATION RADIONAVIGATION	• Ground-based 10 cm (S-band) long-range surveillance primary radar and associated airborne transponders • Maritime SIT and RACON S-band radars	Ground-based 10 cm (S-band) long-range surveillance primary radar and associated airborne transponders in accordance to ICAO Annex 10, Vol.1, chapter 3

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
3 100 - 3 300 MHz RADIOLOCATION Earth exploration - satellite (active) Space research (active) 5.149	RADIOLOCATION Earth exploration - satellite (active) Space research (active)	• High power shipboard and airborne radars for searching, tracking and surveillance in the band 3100 – 3600 MHz	Ground-based 10 cm (S-band) long-range surveillance primary radar and associated airborne transponders in accordance to ICAO Annex 10, Vol.1, chapter 3
3 300 - 3 400 MHz RADIOLOCATION Amateur 5.149 5.429 5.429E 5.429F	RADIOLOCATION Amateur	• High power shipboard and airborne radars for searching, tracking and surveillance in the band 3100 – 3600 MHz	
3 400 - 3 500 MHz FIXED FIXED-SATELITE (space-to-Earth) Amateur Mobile 5.432 5.432B Radiolocation 5.433 5.282 5.432A	FIXED Amateur Mobile Radiolocation FIXED-SATELITE (space-to-Earth)	• The band 3400-3600 MHz designated for high-density fixed and mobile systems in accordance with the "Public Cellular Band Plan"	
3 500 - 3 600 MHz FIXED FIXED-SATELITE (space-to-Earth) MOBILE except aeronautical mobile Radiolocation 5.433	FIXED MOBILE except aeronautical mobile Radiolocation FIXED-SATELITE (space-to-Earth)	• 3400-3600 MHz for high-density fixed and mobile systems	

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
3 600 - 3 700 MHz FIXED FIXED - SATELLITE (space - to - Earth) MOBILE except aeronautical mobile Radiolocation 5.435	FIXED FIXED - SATELLITE (space - to - Earth) MOBILE except aeronautical mobile Radiolocation	• Microwave links	Microwave links in the 4 GHz band in accordance with ITU-R Rec.s F.635 and F.382. point-to-multipoint access network (MDS) (Annex 4 in ITU-R Rec. F.755) Frequency block arrangement in accordance with ITU-R Rec. F.1488
3 700 - 4 200 MHz FIXED FIXED - SATELLITE (space - to - Earth) MOBILE except aeronautical mobile	FIXED FIXED - SATELLITE (space - to - Earth) MOBILE except aeronautical mobile	• Microwave links	Microwave links in the 4 GHz band in accordance with ITU-R Rec.s F.635 and F.382. point-to-multipoint access network (MDS) (Annex 4 in ITU-R Rec. F.755) Frequency block arrangement in accordance with ITU-R Rec. F.1488
4 200 - 4 400 MHz AERONAUTICAL MOBILE (R) 5.436 AERONAUTICAL RADIONAVIGATION 5.438 5.437 5.439 5.440	AERONAUTICAL RADIONAVIGATION	• Altimeters	Reserved exclusively for radio altimeters installed on board aircraft and for the associated transponders on the ground (5.438)
4 400 - 4 500 MHz FIXED MOBILE	FIXED MOBILE	• Microwave links	Microwave links in the 4.7 GHz band in accordance with ITU-R Rec.sF.746 and F.1099.SAP/SAB and ENG/OB in the band 4400 – 5000 MHz (temporary application)
4 500 - 4 800 MHz FIXED FIXED - SATELLITE (space - to - Earth) 5.441 MOBILE 5.440A	FIXED FIXED - SATELLITE (space - to - Earth) MOBILE **SMO 4**	• Microwave links	Microwave links in the 4.7 GHz band in accordance with ITU-R Rec.s F.746 and F.1099. SAP/SAB and ENG/OB in the band 4400 – 5000 MHz (temporary application)

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
4 800 - 4 990 MHz FIXED MOBILE 5.440A 5.441A 5.441B 5.442 Radio astronomy 5.149 5.339 5.443	FIXED MOBILE Radio astronomy	• Microwave links	Microwave links in the 4.7 GHz band in accordance with ITU-R Rec.s F.746 and F.1099. SAP/SAB and ENG/OB in the band 4400 – 5000 MHz (temporary application)
4 990 - 5 000 MHz FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY Space research (passive) 5.149	FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY Space research (passive)	• Microwave links	Microwave links in the 4.7 GHz band in accordance with ITU-R Rec.s F.746 and F.1099.
5 000 - 5 010 MHz AERONAUTICAL MOBILE SATELLITE (R) 5.443AA AERONAUTICAL RADIONAVIGATION RADIONAVIGATION - SATELLITE (Earth - to - space)	AERONAUTICAL MOBILE SATELLITE (R) AERONAUTICAL RADIONAVIGATION RADIONAVIGATION - SATELLITE (Earth - to - space)	• Internationally standardized aeronautical mobile satellite systems	
5 010 - 5 030 MHz AERONAUTICAL MOBILE SATELLITE (R) 5.443AA AERONAUTICAL RADIONAVIGATION RADIONAVIGATION - SATELLITE (space - to - Earth) (space - space) 5.328B 5.443B	AERONAUTICAL MOBILE SATELLITE (R) AERONAUTICAL RADIONAVIGATION RADIONAVIGATION - SATELLITE (space - to - Earth) (space - space)	• Internationally standardized aeronautical mobile satellite systems	
5 030 - 5 091 MHz FIXED SATELLITE (Earth-to-space) 5.444A AERONAUTICAL MOBILE (R) 5.444B AERONAUTICAL MOBILE SATELLITE (R) 5.443AA AERONAUTICAL RADIONAVIGATION 5.444	FIXED-SATELLITE (Earth-to-space) AERONAUTICAL MOBILE (R) AERONAUTICAL MOBILE SATELLITE (R) AERONAUTICAL RADIONAVIGATION	• Internationally standardized aeronautical mobile satellite systems • DME system	MLS for precision approach and landing has prority over other uses of this band (5.444)

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
5 091 - 5 150 MHz AERONAUTICAL MOBILE 5.444B AERONAUTICAL MOBILE SATELLITE (R) 5.443AA AERONAUTICAL RADIONAVIGATION 5.444 5.444A	AERONAUTICAL MOBILE AERONAUTICAL MOBILE SATELLITE (R) AERONAUTICAL RADIONAVIGATION	• Microwave links	Microwave landing system (MLS) for precision approach and landing (see ITU-R Rec. M.1582 and Res. 114)
5 150 - 5 250 MHz AERONAUTICAL RADIONAVIGATION FIXED - SATELLITE (Earth - to - space) 5.447A MOBILE except aeronautical mobile 5.446A 5.446B 5.447B 5.447C	AERONAUTICAL RADIONAVIGATION FIXED - SATELLITE (Earth - to - space) MOBILE except aeronautical mobile	• HIPERLAN indoor applications	HiperLAN (under LPD category) in the band 5150 – 5250 MHz with a maximum mean e.i.r.p.of 200 mW(see ITU-R Res.229)
5 250 - 5 255 MHz EARTH EXPLORATION - SATELLITE (active) RADIOLOCATION SPACE RESEARCH 5.447D FIXED 5.447E MOBILE except aeronautical mobile 5.446A 5.447F 5.448A	EARTH EXPLORATION - SATELLITE (active) RADIOLOCATION SPACE RESEARCH FIXED MOBILE except aeronautical mobile	• HIPERLAN indoor applications • Fixed Wireless Access	FWA systems in fixed service and stations in mobile service shall not claim protection from the other services in the band 5 250-5 350 MHz (see 5.447E and 5.447F for details) HIPERLAN in the band 5250 – 5350 MHz with a max. mean e.i.r.p.of 200 mW for indoor and 1 W for outdoor applications (ITU-R Res.229)

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
5 255 - 5 350 MHz EARTH EXPLORATION - SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active) FIXED 5.447E MOBILE except aeronautical mobile 5.446A 5.447F 5.448A	EARTH EXPLORATION - SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active) FIXED MOBILE except aeronautical mobile	• HIPERLAN indoor applications • Fixed Wireless Access	HIPERLAN in the band 5250 – 5350 MHz with a max. mean e.i.r.p.of 200 mW for indoor and 1 W for outdoor applications (ITU-R Res.229) FWA systems in fixed service and stations in mobile service shall not claim protection from the other serices in the band 5 250-5 350 MHz (see 5.447E and 5.447F for details)
5 350 - 5 460 MHz EARTH EXPLORATION - SATELLITE (active) 5.448B SPACE RESEARCH (active) 5.448C AERONAUTICAL RADIONAVIGATION 5.449 RADIOLOCATION 5.448D	EARTH EXPLORATION - SATELLITE (active) SPACE RESEARCH (active) AERONAUTICAL RADIONAVIGATION RADIOLOCATION	• Aeronautical navigation service	Aeronautical navigation service limited to airborne radars and associated airborne beacons in the band 5350 – 5470 MHz
5 460 - 5 470 MHz RADIONAVIGATION 5.449 EARTH EXPLORATION - SATELLITE (active) SPACE RESEARCH (active) RADIOLOCATION 5.448D 5.448B	RADIONAVIGATION EARTH EXPLORATION - SATELLITE (active) SPACE RESEARCH (active) RADIOLOCATION	• Aeronautical navigation service	Aeronautical navigation service limited to airborne radars and associated airborne beacons in the band 5350 – 5470 MHz

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
5 470 - 5 570 MHz MARITIME RADIONAVIGATION MOBILE except aeronautical mobile 5.446A 5.450A EARTH EXPLORATION - SATELLITE (active) SPACE RESEARCH (active) RADIOLOCATION 5.450B 5.448B	MARITIME RADIONAVIGATION MOBILE except aeronautical mobile EARTH EXPLORATION - SATELLITE (active) SPACE RESEARCH (active) RADIOLOCATION	• Mobile	For the conditions of sharing between WAS, including RLANs, and the EESS (active) in this band see ITU-R Rec. M.1653 In the band 5470-5725 MHz, mobile service shall be restricted to a maximum TX power of 250 mW with a maximum mean e.i.r.p. of 1W and a maximummean e.i.r.p. density of 50 mW/MHz in any 1 MHz band (ITU RR Res. 229)
5 570 - 5 650 MHz MARITIME RADIONAVIGATION MOBILE except aeronautical mobile 5.446A 5.450A RADIOLOCATION 5.450B 5.452	MARITIME RADIONAVIGATION MOBILE except aeronautical mobile RADIOLOCATION		In the band 5470-5725 MHz, mobile service shall be restricted to a maximum TX power of 250 mW with a maximum mean e.i.r.p. of 1W and a maximum mean e.i.r.p. density of 50 mW/MHz in any 1 MHz band (ITU RR Res. 229) Gruand-based meterologicl radar in the band 5600-5650 MHz for weather services (5.452)
5 650 - 5 725 MHz RADIOLOCATION MOBILE except aeronautical mobile5.446A 5.450A Amateur Space research (deep space) 5.282	RADIOLOCATION MOBILE except aeronautical mobile Amateur Space research (deep space)		In the band 5470-5725 MHz, mobile service shall be restricted to a maximum TX power of 250 mW with a maximum mean e.i.r.p. of 1W and a maximum mean e.i.r.p. density of 50 mW/MHz in any 1 MHz band (ITU RR Res. 229)

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
5 725 - 5 830 MHz RADIOLOCATION Amateur 5.150 5.453 5.455	RADIOLOCATION Amateur	• ISM band	5.8 GHz ISM band (5725-5 875 MHz)
5 830 - 5 850 MHz RADIOLOCATION Amateur Amateur - satellite (space - to - Earth) 5.150 5.453 5.455	RADIOLOCATION Amateur Amateur - satellite (space - to - Earth)	• ISM band	
5 850 - 5 925 MHz FIXED FIXED - SATELLITE (Earth - to - space) MOBILE Radiolocation 5.150	FIXED FIXED - SATELLITE (Earth - to - space) MOBILE Radiolocation	• Microwave links	Microwave links in the 6 GHz band in accordance with ITU-R Rec. F.3835.8 GHz ISM band (up to 5875 MHz)
5 925 - 6 700 MHz FIXED 5.457 FIXED - SATELLITE (Earth - to - space) 5.457A MOBILE 5.149 5.440 5.458	FIXED FIXED - SATELLITE (Earth - to - space) MOBILE **SMO 6**	• Microwave links • VSAT	Microwave links in the 6 GHz and 6.5 GHz bands in accordance with ITU-R Rec.sF.383 and F.384 (see noting a), ITU R Res. 902) See ITU-R Res. 902 for licensing Earth stations on board vessels (ESV) in the band 5925–6425MHz
6 700 - 7 075 MHz FIXED FIXED - SATELLITE (Earth - to - space) (space - to - Earth) 5.441 MOBILE 5.458 5.458A 5.458B	FIXED FIXED - SATELLITE (Earth - to - space) (space - to - Earth) MOBILE **SMO 4**	• Microwave links	Microwave links in the 6.5 GHz and 7 GHz bands in accordance with ITU-R Rec.s F.384 and F.385.

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
7 075 - 7 145 MHz FIXED MOBILE 5.458	FIXED MOBILE **SMO 7**	• Microwave links	Microwave links in the 6.5 GHz and 7 GHz bands in accordance with ITU-R Rec.s F.384 and F.385
7 145 - 7 190 MHz FIXED MOBILE SPACE RESEARCH (deep space) (Earth - to - space) 5.458 5.459	FIXED MOBILE SPACE RESEARCH (deep space) (Earth - to - space) **SMO 7**	• Microwave links	Microwave links in the 7.4 GHz band in accordance with ITU-R Rec. F.385
7 190 - 7 235 MHz EARTH EXPLORATION-SATELLITE (Earth-to-space) 5.460A 5.460B FIXED MOBILE SPACE RESEARCH (Earth - to - space) 5.460 5.458 5.459	FIXED EARTH EXPLORATION-SATELLITE (Earth-to-space) MOBILE SPACE RESEARCH (Earth - to - space) **SMO 7**	• Microwave links	Microwave links in the 7.4 GHz band in accordance with ITU-R Rec. F.385
7 235 - 7 250 MHz EARTH EXPLORATION-SATELLITE (Earth-to-space) 5.460A FIXED MOBILE 5.458	FIXED MOBILE **SMO 7**	• Microwave links	Microwave links in the 7.4 GHz band in accordance with ITU-R Rec. F.385.

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
7 250 - 7 300 MHz FIXED FIXED - SATELLITE (space - to - Earth) MOBILE 5.461	FIXED FIXED - SATELLITE (space - to - Earth) MOBILE **SMO 7**	• Microwave links	Microwave links in the 7.2 GHz and 7.4 GHz band in accordance with Rec. ITU-R F.385
7 300 - 7 375 MHz FIXED FIXED - SATELLITE (space - to - Earth) MOBILE except aeronautical mobile 5.461	FIXED FIXED - SATELLITE (space - to - Earth) MOBILE except aeronautical mobile **SMO 7**	• Microwave links	Microwave links in the 7.2 GHz and 7.4 GHz band in accordance with Rec. ITU-R F.385
7 375 - 7 450 MHz FIXED FIXED - SATELLITE (space - to - Earth) MOBILE except aeronautical mobile MARITIME MOBILE-SATELLTE 5.461AA 5.461AB	FIXED FIXED - SATELLITE (space - to - Earth) MOBILE except aeronautical mobile MARITIME MOBILE-SATELLTE **SMO 7**	• Microwave links	Microwave links in the 7.2 GHz and 7.4 GHz band in accordance with Rec. ITU-R F.385
7 450 - 7 550 MHz FIXED FIXED - SATELLITE (space - to - Earth) METEOROLOGICAL - SATELLITE (space - to - Earth) MOBILE except aeronautical mobile MARITIME MOBILE-SATELLTE 5.461AA 5.461AB 5.461A	FIXED FIXED - SATELLITE (space - to - Earth) METEOROLOGICAL - SATELLITE (space - to - Earth) MOBILE except aeronautical mobile MARITIME MOBILE-SATELLTE **SMO 7**	• Microwave links	Microwave links in the 7.2 GHz and 7.4 GHz band in accordance with Rec. ITU-R F.385
7 550 - 7 750 MHz FIXED FIXED - SATELLITE (space - to - Earth) MOBILE except aeronautical mobile MARITIME MOBILE-SATELLTE 5.461AA 5.461AB	FIXED FIXED - SATELLITE (space - to - Earth) MOBILE except aeronautical mobile MARITIME MOBILE-SATELLTE **SMO 7, SMO 8**	• Microwave links	Microwave links in the 7 GHz and 8 GHz band in accordance with ITU-R Rec.s F.385 and F.386.

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
7 750 - 7 850 MHz FIXED METEOROLOGICAL - SATELLITE (space - to - Earth) 5.461B MOBILE except aeronautical mobile	FIXED METEOROLOGICAL - SATELLITE (space - to - Earth) MOBILE except aeronautical mobile **SMO 7, SMO 8**	• Microwave links	Microwave links in the 7 GHz and 8 GHz band in accordance with ITU-R Rec.s F.385 and F.386.
7 850 - 7 900 MHz FIXED MOBILE except aeronautical mobile	FIXED MOBILE except aeronautical mobile **SMO 7, SMO 8**	• Microwave links	Microwave links in the 7 GHz and 8 GHz band in accordance with ITU-R Rec.s F.385 and F.386.
7 900 - 8 025 MHz FIXED FIXED - SATELLITE (Earth - to - space) MOBILE 5.461	FIXED FIXED - SATELLITE (Earth - to - space) MOBILE **SMO 8**	• Microwave links	Microwave links in the 8 GHz and 8.15 GHz bands in accordance with ITU-R Rec. F.386
8 025 - 8 175 MHz EARTH EXPLORATION - SATELLITE (space - to - Earth) FIXED FIXED - SATELLITE (Earth - to - space) MOBILE 5.463 5.462A	EARTH EXPLORATION - SATELLITE (space - to - Earth) FIXED FIXED - SATELLITE (Earth - to - space) MOBILE **SMO 8**	• Microwave links	Aircraft stations shall not start any course of transmission in the band 8025 – 8400 MHz in the aeronautical mobile service (5.463)

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
8 175 - 8 215 MHz EARTH EXPLORATION - SATELLITE (space - to - Earth) FIXED FIXED - SATELLITE (Earth - to - space) METEOROLOGICAL - SATELLITE (Earth - to - space) MOBILE 5.463 5.462A	EARTH EXPLORATION - SATELLITE (space - to - Earth) FIXED FIXED - SATELLITE (Earth - to - space) METEOROLOGICAL - SATELLITE (Earth - to - space) MOBILE **SMO 8**	• Microwave links	Microwave links in the 8 GHz, 8.15 GHz and 8.3 GHz bands in accordance with ITU-R Rec. F.386. Aircraft stations shall not start any course of transmission in the band 8025 – 8400 MHz in the aeronautical mobile service (5.463)
8 215 - 8 400 MHz EARTH EXPLORATION - SATELLITE (space - to - Earth) FIXED FIXED - SATELLITE (Earth - to - space) MOBILE 5.463 5.462A	EARTH EXPLORATION - SATELLITE (space - to - Earth) FIXED FIXED - SATELLITE (Earth - to - space) MOBILE **SMO 8**	• Microwave links	Microwave links in the 8 GHz, 8.15 GHz and 8.3 GHz bands in accordance with ITU-R Rec. F.386. Aircraft stations shall not start any course of transmission in the band 8025 – 8400 MHz in the aeronautical mobile service (5.463)
8 400 - 8 500 MHz FIXED MOBILE except aeronautical mobile SPACE RESEARCH (space - to - Earth) 5.465	FIXED MOBILE except aeronautical mobile SPACE RESEARCH (space - to - Earth) **SMO 8**	• Microwave links	Microwave links in the 8 GHz, 8.3 GHz and 8.4 GHz bands in accordance with ITU-R Rec. F.386
8 500 - 8 550 MHz RADIOLOCATION	RADIOLOCATION	• Radiolocation service	Maritime and aeronautical ground based radars to measure speed and distance in the band 8500 – 10000 MHz

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
8 550 - 8 650 MHz EARTH EXPLORATION - SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active) 5.469A	EARTH EXPLORATION - SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active)	• Radars	Maritime and aeronautical ground based radars to measure speed and distance in the band 8500 – 10000 MHz
8 650 - 8 750 MHz RADIOLOCATION	RADIOLOCATION		Maritime and aeronautical ground based radars to measure speed and distance in the band 8500 – 10000 MHz
8 750 - 8 850 MHz RADIOLOCATION AERONAUTICAL RADIONAVIGATION 5.470	RADIOLOCATION AERONAUTICAL RADIONAVIGATION	• Maritime radars	Maritime and aeronautical ground based radars to measure speed and distance in the band 8500 – 10000 MHz Airborne Doppler navigation aid in aeronautical navigation service
8 850 - 9 000 MHz RADIOLOCATION MARITIME RADIONAVIGATION 5.472	RADIOLOCATION MARITIME RADIONAVIGATION	• Maritime shore-based surveillance radars	Aeronautical ground based radars to measure speed and distance in the band 8500 – 10000 MHz
9 000 - 9 200 MHz AERONAUTICAL RADIONAVIGATION 5.337 Radiolocation 5.473A	AERONAUTICAL RADIONAVIGATION Radiolocation	• Maritime radars to measure speed and distance in the band 8500 – 10000 MHz	Ground-based radar and associated airborne transponders in aeronautical radio navigation service in accordance with ICAO Annex 10, Vol.1, chapter 3 and depending to the requirements different assigned bandwidths are achievable.

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
9 200 - 9 300 MHz EARTH EXPLORATION-SATELLITE (active) 5.474A 5.474B 5.474C RADIOLOCATION MARITIME RADIONAVIGATION 5.472 5.473 5.474 5.474D	RADIOLOCATION EARTH EXPLORATION-SATELLITE (active) MARITIME RADIONAVIGATION	• Search and rescue transponders (SART) in the band 9 200-9 500 MHz (see ITU RR Article 31) •	Maritime shore-based surveillance radars in the band 9200-9255 MHz
9 300 - 9 500 MHz RADIONAVIGATION 5.476 Radiolocation 5.427 5.474 5.475 5.475A 5.475B 5.476A	RADIONAVIGATION Radiolocation	• Search and rescue transponders (SART) in the band 9 200-9 500 MHz (see ITU RR Article 31) • Future remote earth exploration	Aeronautical radionavigation service is limited to airborne weather radars and ground-based radars in the band 9 300-9 500 MHz Ground-based radar beacons (see 5.475)
9 500 - 9 800 MHz EARTH EXPLORATION - SATELLITE (active) RADIOLOCATION RADIONAVIGATION SPACE RESEARCH (active) 5.476A	EARTH EXPLORATION - SATELLITE (active) RADIOLOCATION RADIONAVIGATION SPACE RESEARCH (active)		Maritime and aeronautical ground based radars to measure speed and distance in the band 8500 – 10000 MHz
9 800 - 9 900 MHz RADIOLOCATION Earth exploration - satellite (active) Space research (active) Fixed 5.478A 5.478B	RADIOLOCATION Earth exploration - satellite (active) Space research (active) Fixed		Maritime and aeronautical ground based radars to measure speed and distance in the band 8500 – 10000 MHz

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
9 900 - 10 000 MHz EARTH EXPLORATION-SATELLITE (active) 5.474A 5.474B 5.474C RADIOLOCATION Fixed 5.474D 5.477 5.478 5.479	RADIOLOCATION Fixed EARTH EXPLORATION-SATELLITE (active)	• Weather Radar in the band 9975 – 10025 MHz on a secondary services (see 5.479) • Future remote earth exploration	
10 - 10.40 GHz EARTH EXPLORATION-SATELLITE (active) 5.474A 5.474B 5.474C FIXED MOBILE RADIOLOCATION Amateur 5.479 5.474D	EARTH EXPLORATION-SATELLITE (active) FIXED MOBILE RADIOLOCATION Amateur **SMO 9**	Future remote earth exploration	Microwave links in the 10 GHz, 10.4 GHz and 10.5 GHz bands in accordance with ITU-R Rec.sF.747, F.1568 and F.746.Weather Radar in the band 9975 – 10025 MHz on a secondary services (see 5.479)
10.40 - 10.45 GHz FIXED MOBILE RADIOLOCATION Amateur	FIXED MOBILE RADIOLOCATION Amateur **SMO 9**	Future remote earth exploration	Microwave links in the 10 GHz, 10.4 GHz and 10.5 GHz bands in accordance with ITU-R Rec.sF.747, F.1568 and F.746.Weather Radar in the band 9975 – 10025 MHz on a secondary services (see 5.479)
10.45 - 10.5 GHz RADIOLOCATION Amateur Amateur - satellite	RADIOLOCATION Amateur Amateur – satellite **SMO 9**		Amateur service is restricted to professional amateurs only.
10.5 - 10.55 GHz FIXED MOBILE RADIOLOCATION	FIXED MOBILE RADIOLOCATION **SMO 9**	• Fixed links	Microwave links in the 10 GHz, 10.4 GHz and 10.5 GHz bands in accordance with ITU-R Rec.sF.747, F.1568 and F.746.

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
10.55 - 10.6 GHz FIXED MOBILE except aeronautical mobile Radiolocation	FIXED MOBILE except aeronautical mobile Radiolocation **SMO 9**	• Fixed links	Microwave links in the 10 GHz, 10.4 GHz and 10.5 GHz bands in accordance with ITU-R Rec.s F.747, F.1568 and F.746.FDMA point-to-multipoint systems in accordance to ITU-R F.755, Annex 4
10.6 - 10.68 GHz EARTH EXPLORATION - SATELLITE (passive) FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY SPACE RESEARCH (passive) Radiolocation 5.149 5.482 5.482A	EARTH EXPLORATION - SATELLITE (passive) FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY SPACE RESEARCH (passive) Radiolocation **SMO 9**	• Fixed links	Microwave links in the 10 GHz, 10.4 GHz and 10.5 GHz bands in accordance with ITU-R Rec.s F.747, F.1568 and F.746.FDMA point-to-multipoint systems in accordance to ITU-R F.755, Annex 4
10.68 - 10.7 GHz EARTH EXPLORATION - SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340	EARTH EXPLORATION - SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive)		All emissions are prohibited in this band
10.7 – 10.95 GHz FIXED FIXED - SATELLITE (space - to - Earth) 5.441 MOBILE except aeronautical mobile	FIXED FIXED - SATELLITE (space - to - Earth) MOBILE except aeronautical mobile **SMO 5**	• Receive-only earth stations, Satellite news gathering (SNG) equipments and Satellite interactive terminals (SIT)	Microwave links in the 11 GHz band in accordance with ITU-R Rec. F.387 For use of non-planned bands by non-GSO FSS see 5.484A

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
10.95 - 11.2 GHz FIXED FIXED - SATELLITE (space - to - Earth) 5.484B 5.484A MOBILE except aeronautical mobile	FIXED FIXED - SATELLITE (space - to - Earth) MOBILE except aeronautical mobile **SMO 5**	• Receive-only earth stations, Satellite news gathering (SNG) equipments and Satellite interactive terminals (SIT)	Microwave links in the 11 GHz band in accordance with ITU-R Rec. F.387 For use of non-planned bands by non-GSO FSS see 5.484A
11.20 - 11.45 GHz FIXED FIXED - SATELLITE (space - to - Earth) 5.441 MOBILE except aeronautical mobile	FIXED FIXED - SATELLITE (space - to - Earth) MOBILE except aeronautical mobile **SMO 5**	• Receive-only earth stations, Satellite news gathering (SNG) equipments and Satellite interactive terminals (SIT)	Microwave links in the 11 GHz band in accordance with ITU-R Rec. F.387 For use of non-planned bands by non-GSO FSS see 5.484A
11.45 - 11.70 GHz FIXED FIXED - SATELLITE (space - to - Earth) 5.484A 5.484B MOBILE except aeronautical mobile	FIXED FIXED - SATELLITE (space - to - Earth) MOBILE except aeronautical mobile **SMO 5**	• Receive-only earth stations, Satellite news gathering (SNG) equipments and Satellite interactive terminals (SIT)	Microwave links in the 11 GHz band in accordance with ITU-R Rec. F.387 For use of non-planned bands by non-GSO FSS see 5.484A
11.7 - 12.2 GHz FIXED MOBILE except aeronautical mobile BROADCASTING BROADCASTING - SATELLITE 5.492 5.487 5.487A	FIXED MOBILE except aeronautical mobile BROADCASTING BROADCASTING - SATELLITE **SMO 2, SMO 3**	• Home-receivers of broadcasting-satellite networks	Microwave links in the 12.1 GHz band in accordance with ITU-R Rec. F.746
12.2 - 12.5 GHz FIXED FIXED - SATELLITE(space - to - Earth) 5.484B MOBILE except aeronautical mobile BROADCASTING 5.484A 5.487	FIXED FIXED - SATELLITE(space - to - Earth) MOBILE except aeronautical mobile BROADCASTING	• Fixed links	Microwave links in the 12.1 GHz band in accordance with ITU-R Rec. F.746

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
12.5 - 12.75 GHz FIXED FIXED - SATELLITE(space - to - Earth) 5.484B MOBILE except aeronautical mobile BROADCASTING - SATELLITE 5.493	FIXED FIXED - SATELLITE(space - to - Earth) MOBILE except aeronautical mobile BROADCASTING - SATELLITE	• SAP/SAB and ENG/OB (temporary application)	
12.75 - 13.25 GHz FIXED FIXED - SATELLITE (Earth - to - space) 5.441 MOBILE Space research (deep space) (space - to - Earth)	FIXED FIXED - SATELLITE (Earth - to - space) MOBILE Space research (deep space) (space - to - Earth) **SMO 5, SMO 10**	• Fixed links	Microwave links in the 13 GHz band in accordance with ITU-R rec. F.497
13.25 - 13.4 GHz EARTH EXPLORATION - SATELLITE (active) AERONAUTICAL RADIONAVIGATION 5.497 SPACE RESEARCH (active) 5.498A 5.499	EARTH EXPLORATION - SATELLITE (active) AERONAUTICAL RADIONAVIGATION SPACE RESEARCH (active)		Aeronautical radionavigation service is limited to Doppler navigation aids in the band 13.25 13.4 GHz (5.497)
13.4 - 13.65 GHz EARTH EXPLORATION - SATELLITE (active) RADIOLOCATION SPACE RESEARCH 5.499C 5.499D Standard frequency and time signal - satellite (Earth - to - space) 5.499 5.500 5.501 5.501B	EARTH EXPLORATION - SATELLITE (active) RADIOLOCATION SPACE RESEARCH Standard frequency and time signal - satellite (Earth - to - space)	• Security applications	Shipboard and airborne military radars for tracking targets and commanding and controlling in the band 13.25 – 14 GHz

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
13.65 - 13.75 GHz EARTH EXPLORATION - SATELLITE (active) RADIOLOCATION SPACE RESEARCH 5.501A Standard frequency and time signal - satellite (Earth - to - space) 5.499 5.500 5.501 5.501B	EARTH EXPLORATION - SATELLITE (active) RADIOLOCATION SPACE RESEARCH Standard frequency and time signal - satellite (Earth - to - space)	• Security applications	Shipboard and airborne military radars for tracking targets and commanding and controlling in the band 13.25 – 14 GHz
13.75 - 14 GHz FIXED - SATELLITE (Earth - to - space) 5.484A RADIOLOCATION Earth exploration - satellite Standard frequency and time signal - satellite (Earth - to - space) Space research 5.502 5.503 5.499 5.500 5.501	FIXED - SATELLITE (Earth - to - space) RADIOLOCATION Earth exploration - satellite Standard frequency and time signal - satellite (Earth - to - space) Space research	• Security applications	Shipboard and airborne military radars for tracking targets and commanding and controlling in the band 13.25 – 14 GHzIn this band GSO and non-GSO FSS earth stations and radiolocation or radionavigation shall comply with technical requirements given in ITU RR No.5.502
14 - 14.25 GHz FIXED – SATELLITE (Earth- to-space) 5.457A 5.457B 5.484A 5.484B 5.506 5.506B RADIONAVIGATION 5.504 Mobile–satellite (Earth-to-space) 5.504B 5.504C 5.506A Space research 5.504A 5.505	FIXED – SATELLITE (Earth - to - space) RADIONAVIGATION Mobile - satellite (Earth - to - space) Space research	• Feeder link of broadcasting satellite service in fixed satellite service	For ship earth station see ITU RR Res.902 For aircraft earth stations in the aeronautical mobile service see Annex 1, part B of ITU Rec. M.1643. Satellite news gathering (SNG) equipments

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
14.25 - 14.3 GHz FIXED – SATELLITE (Earth- to-space) 5.457A 5.457B 5.484A 5.484B 5.506 5.506B RADIONAVIGATION 5.504 Mobile–satellite (Earth-to-space) 5.504B 5.504C 5.506A Space research 5.504A 5.505 5.508	FIXED - SATELLITE (Earth - to - space) RADIONAVIGATION Mobile - satellite (Earth - to - space) Space research		Microwave radio relay links in the 14.3 GHz band in accordance with ITU-R Rec. F.746. For ship earth station see ITU RR Res.902 Feeder link of broadcasting satellite service in fixed satellite service Satellite news gathering (SNG) equipments
14.3 - 14.4 GHz FIXED FIXED - SATELLITE (Earth - to - space) 5.457A 5.484A 5.484B 5.506 5.506B MOBILE except aeronautical mobile Mobile - satellite (Earth - to - space) 5.504B 5.506A 5.509A Radionavigation - satellite 5.504A	FIXED FIXED - SATELLITE (Earth - to - space) MOBILE except aeronautical mobile Mobile - satellite (Earth - to - space) Radionavigation - satellite	• Fixed Links	Microwave radio relay links in the 14.3 GHz band in accordance with ITU-R Rec. F.746. For ship earth station see ITU RR Res.902
14.4 - 14.47 GHz FIXED FIXED – SATELLITE (Earth- to-space) 5.457A 5.457B 5.484A 5.484B 5.506 5.506B Mobile–satellite (Earth-to-space) 5.504B 5.509A 5.506A Space research (space-to-Earth) 5.504A	FIXED FIXED - SATELLITE (Earth - to - space) MOBILE except aeronautical mobile Mobile - satellite (Earth - to - space) Space research (space - to - Earth)	• Fixed Links	Microwave radio relay links in the 14.3 GHz band in accordance with ITU-R Rec. F.746. For ship earth station see ITU RR Res.902

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
14.47 - 14.5 GHz FIXED FIXED - SATELLITE (Earth - to - space) 5.457A 5.484A 5.506 5.506B MOBILE except aeronautical mobile Mobile - satellite (Earth - to - space) 5.506A Radio astronomy 5.149 5.504A	FIXED FIXED - SATELLITE (Earth - to - space) MOBILE except aeronautical mobile Mobile - satellite (Earth - to - space) Radio astronomy 5.149 5.504A	• Fixed Links	Microwave radio relay links in the 14.3 GHz band in accordance with ITU-R Rec. F.746. For ship earth station see ITU RR Res.902
14.5 - 14.75 GHz FIXED FIXED - SATELLITE (Earth - to - space) 5.509B 5.509C 5.509D 5.509E 5.509F 5.510 MOBILE Space research 5.509G	FIXED FIXED - SATELLITE (Earth - to - space) MOBILE Space research **SMO 3**	• Fixed Links • BSS feeder links	Microwave links in the 15 GHz band in accordance to ITU-R Rec. F.636 Appendix 30A of RR
14.75 - 14.80 GHz FIXED FIXED - SATELLITE (Earth - to - space) 5.509B 5.509C 5.509D 5.509E 5.509F 5.510 MOBILE Space research 5.509G	FIXED FIXED - SATELLITE (Earth - to - space) MOBILE Space research **SMO 3**	• Fixed Links • BSS feeder links	Microwave links in the 15 GHz band in accordance to ITU-R Rec. F.636 Appendix 30A of RR
14.8 - 15.35 GHz FIXED MOBILE Space research 5.339	FIXED MOBILE Space research	• Fixed Links	Microwave links in the 15 GHz band in accordance to ITU-R Rec. F.636

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
15.35 - 15.4 GHz EARTH EXPLORATION - SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340 5.511	EARTH EXPLORATION - SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive)		All emissions prohibited in this band (except for countries listed in No.5.511)
15.4 - 15.43 GHz RADIOLOCATION 5.511E 5.511F AERONAUTICAL RADIONAVIGATION	RADIOLOCATION AERONAUTICAL RADIONAVIGATION		Aeronautical radionavigation stations average radiated power is limited to 42 dBWe.i.r.p. (ITU-R Rec. S.1340)
15.43 - 15.63 GHz FIXED - SATELLITE (Earth - to - space) 5.511A RADIOLOCATION 5.511E 5.511F AERONAUTICAL RADIONAVIGATION 5.511C	FIXED - SATELLITE (Earth - to - space) RADIOLOCATION AERONAUTICAL RADIONAVIGATION	• Primary radar particularly airport surface detection equipment (ASDE)	Aeronautical radionavigation stations average radiated power is limited to 42 dBWe.i.r.p. (ITU-R Rec. S.1340)
15.63 - 15.7 GHz RADIOLOCATION 5.511E 5.511F AERONAUTICAL RADIONAVIGATION	RADIOLOCATION AERONAUTICAL RADIONAVIGATION	• Primary radar particularly airport surface detection equipment (ASDE)	Aeronautical radionavigation stations average radiated power is limited to 42 dBWe.i.r.p. (ITU-R Rec. S.1340)
15.7 - 16.6 GHz RADIOLOCATION 5.512 5.513	RADIOLOCATION	• Primary radar particularly airport surface detection equipment (ASDE)	
16.6 - 17.1 GHz RADIOLOCATION Space research (deep space) (Earth - to - space) 5.512 5.513	RADIOLOCATION Space research (deep space) (Earth - to - space)	• Airport surface detection equipment (ASDE)	

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
17.1 - 17.2 GHz RADIOLOCATION 5.512 5.513	RADIOLOCATION	• Airport surface detection equipment (ASDE)	
17.2 - 17.3 GHz EARTH EXPLORATION - SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active) 5.512 5.513 5.513A	EARTH EXPLORATION - SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active)	• Experimental testing and calibration of radiolocations and navigation systems	
17.3 - 17.7 GHz FIXED - SATELLITE (Earth - to - space) 5.516 Radiolocation 5.514	FIXED - SATELLITE (Earth - to - space) Radiolocation **SMO 3**	• Experimental testing and calibration of radiolocations and navigation systems.	Use of GSO FSS in the band 17.3 – 18.1 GHz is limited to feeder links of broadcasting-satellite service (for using non-GSO FSS in band 17.3–18.1 GHz see 5.516)
17.7 - 18.1 GHz FIXED FIXED - SATELLITE(space - to - Earth) 5.484A (Earth - to - space) 5.516 MOBILE	FIXED FIXED - SATELLITE(space - to - Earth) (Earth - to - space) MOBILE **SMO 3, SMO 11**	• Fixed Links	Use of GSO FSS in the band 17.3 – 18.1 GHz is limited to feeder links of broadcasting-satellite service (for using non-GSO FSS in band 17.3– 18.1 GHz see 5.516) Microwave links in the 18 GHz band in accordance with ITU-R Rec. F.595

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
18.1 - 18.4 GHz FIXED FIXED - SATELLITE (space - to - Earth) 5.484A (Earth - to - space) 5.520 MOBILE 5.519 5.521	FIXED FIXED - SATELLITE (space - to - Earth) (Earth - to - space) MOBILE **SMO 11**	• Fixed Links	Microwave links in the 18 GHz band in accordance with ITU-R Rec. F.595 Use of FSS is limited to feeder links of GSO systems in the broadcasting-satellite service
18.4 - 18.6 GHz FIXED FIXED - SATELLITE (space - to - Earth) 5.484A MOBILE	FIXED FIXED - SATELLITE (space - to - Earth) MOBILE **SMO 11**	• Fixed Links	Microwave links in the 18 GHz band in accordance with ITU-R Rec. F.595
18.6 - 18.8 GHz EARTH EXPLORATION - SATELLITE (passive) FIXED FIXED - SATELLITE (space - to - Earth) 5.522B MOBILE except aeronautical mobile Space research (passive) 5.522A	EARTH EXPLORATION - SATELLITE (passive) FIXED FIXED - SATELLITE (space - to - Earth) MOBILE except aeronautical mobile Space research (passive) **SMO 11**	• Fixed Links	Microwave links in the 18 GHz band in accordance with ITU-R Rec. F.595 Emission of fixed service and FSS service shall be in accordance with ITU RR article 21 (5.522A). Use of FSS in limited to GSO systems with an orbit of apogee greater than 20 000 km (5.522B)
18.8 - 19.3 GHz FIXED FIXED - SATELLITE (space - to - Earth) 5.523A MOBILE	FIXED FIXED - SATELLITE (space - to - Earth) MOBILE **SMO 11**	• Fixed Links	Microwave links in the 18 GHz band in accordance with ITU-R Rec. F.595 GSO and non-GSO FSS are subject to 9.11A (see 5.523A)

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
19.3 - 19.7 GHz FIXED FIXED - SATELLITE (space - to - Earth) (Earth - to - space) 5.523B 5.523C 5.523D 5.523E MOBILE	FIXED FIXED - SATELLITE (space - to - Earth) (Earth - to - space MOBILE **SMO 11**	• Fixed Links	Microwave links in the 18 GHz band in accordance with ITU-R Rec. F.595 FSS is limited to feeder links for non-GSO systems in MSS (5.523B)
19.7 - 20.1 GHz FIXED - SATELLITE(space - to - Earth) 5.484A 5.484B 5.516B 5.527A Mobile - satellite (space - to - Earth) 5.524	FIXED - SATELLITE(space - to - Earth) Mobile - satellite (space - to - Earth)	• Fixed Links	High-density applications in the fixed-satellite service in the band 19.7-20.2 GHz New non-GSO systems are subject to application of RR No.9.12 respect to existing non-GSO systems.
20.1 - 20.2 GHz FIXED - SATELLITE (space - to - Earth) 5.484A 5.484B 5.516B 5.527A MOBILE - SATELLITE (space - to - Earth) 5.524 5.525 5.526 5.527 5.528	FIXED - SATELLITE (space - to - Earth) MOBILE - SATELLITE (space - to - Earth)	• Fixed Links	High-density applications in the fixed-satellite service in the band 19.7-20.2 GHz New non-GSO systems are subject to application of RR No.9.12 respect to existing non-GSO systems. Spot-beam MSS in this band
20.2 - 21.2 GHz FIXED - SATELLITE (space - to - Earth) MOBILE - SATELLITE (space - to - Earth) Standard frequency and time signal - satellite (space - to - Earth) 5.524	FIXED - SATELLITE (space - to - Earth) MOBILE - SATELLITE (space - to - Earth) Standard frequency and time signal - satellite (space - to - Earth)	• Fixed Links	

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
21.2 - 21.4 GHz EARTH EXPLORATION - SATELLITE (passive) FIXED MOBILE SPACE RESEARCH (passive)	EARTH EXPLORATION - SATELLITE (passive) FIXED MOBILE SPACE RESEARCH (passive) **SMO 12**	• Fixed Links • Temporary service ancillary to broadcasting and program making (SAB/SAP)	Microwave links in the 23 GHz band in accordance with ITU-R Rec. F.637
21.4 - 22 GHz FIXED MOBILE BROADCASTING - SATELLITE 5.208B 5.530A 5.530B 5.530D 5.531	FIXED MOBILE BROADCASTING - SATELLITE **SMO 12**	• Fixed Links • HDTV systems of the broadcasting-satellite service in the band 21.4 – 22 GHz	Microwave links in the 23 GHz band in accordance with ITU-R Rec. F.637 (see 5.530B and ITU R Res. 755 also)
22 - 22.21 GHz FIXED MOBILE except aeronautical mobile 5.149	FIXED MOBILE except aeronautical mobile **SMO 12**	• Fixed Links	Microwave links in the 23 GHz band in accordance with ITU-R Rec. F.637
22.21 - 22.5 GHz EARTH EXPLORATION - SATELLITE (passive) FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY SPACE RESEARCH (passive) 5.149 5.532	EARTH EXPLORATION - SATELLITE (passive) FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY SPACE RESEARCH (passive) **SMO 12**	• Fixed Links	Microwave links in the 23 GHz band in accordance with ITU-R Rec. F.637
22.5 - 22.55 GHz FIXED MOBILE	FIXED MOBILE **SMO 12**	• Fixed Links	Microwave links in the 23 GHz band in accordance with ITU-R Rec. F.637

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
22.55 - 23.15 GHz FIXED INTER - SATELLITE 5.338A MOBILE SPACE RESEARCH (Earth - to - space) 5.532A 5.149	FIXED INTER - SATELLITE MOBILE SPACE RESEARCH (Earth - to - space) **SMO 12**	• Fixed Links	Microwave links in the 23 GHz band in accordance with ITU-R Rec. F.637
23.15 - 23.55 GHz FIXED INTER - SATELLITE 5.338A MOBILE	FIXED INTER - SATELLITE MOBILE **SMO 12**	• Fixed Links	Microwave links in the 23 GHz band in accordance with ITU-R Rec. F.637
23.55 - 23.6 GHz FIXED MOBILE	FIXED MOBILE **SMO 12**	• Fixed Links	Microwave links in the 23 GHz band in accordance with ITU-R Rec. F.637 Point-to-multipoint systems in TDMA technology (ITU-R F.755)
23.6 - 24 GHz EARTH EXPLORATION - SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340	EARTH EXPLORATION - SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive)		All emissions are prohibited in this band
24 - 24.05 GHz AMATEUR AMATEUR - SATELLITE 5.150	AMATEUR AMATEUR - SATELLITE		-

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
24.05 - 24.25 GHz RADIOLOCATION Amateur Earth exploration - satellite (active) 5.150	RADIOLOCATION Amateur Earth exploration - satellite (active)	• Different types of short range radars (less than 200 m) for distance and speed measurement such as police radar-gun	
24.25 - 24.45 GHz RADIONAVIGATION FIXED MOBILE	RADIONAVIGATION FIXED MOBILE	• Fixed Links	Microwave links in the 25 GHz band in accordance with ITU-R Rec. F.748
24.45 - 24.65 GHz FIXED INTER - SATELLITE MOBILE RADIONAVIGATION 5.533	FIXED INTER - SATELLITE MOBILE RADIONAVIGATION **SMO 13**	• Fixed Links	Microwave links in the 25 GHz and 25.5 GHz bands in accordance with ITU-R Rec. F.748 FDMA and TDMA high-density point-to-multipoint systems in accordance with ITU-R Rec. F.755, Annexes 3 and 4
24.65 - 24.75 GHz FIXED FIXED - SATELLITE (Earth - to - space) 5.532B INTER - SATELLITE MOBILE 5.533	FIXED FIXED - SATELLITE (Earth - to - space) INTER - SATELLITE MOBILE **SMO 13**	• Fixed Links	Microwave links in the 25 GHz and 25.5 GHz bands in accordance with ITU-R Rec. F.748 FDMA and TDMA high-density point-to-multipoint systems in accordance with ITU-R Rec. F.755, Annexes 3 and 4

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
24.75 - 25.25 GHz FIXED FIXED - SATELLITE (Earth - to - space) 5.535 MOBILE	FIXED FIXED - SATELLITE (Earth - to - space) MOBILE **SMO 13**	• Fixed Links	Microwave links in the 25 GHz and 25.5 GHz bands in accordance with ITU-R Rec. F.748 FDMA and TDMA high-density point-to-multipoint systems in accordance with ITU-R Rec. F.755, Annexes 3 and 4
25.25 - 25.5 GHz FIXED INTER - SATELLITE 5.536 MOBILE Standard frequency and time signal - satellite (Earth - to - space)	FIXED INTER - SATELLITE MOBILE Standard frequency and time signal - satellite (Earth - to - space) **SMO 13**	• Fixed Links	Microwave links in the 25.5 GHz, 26 GHz, and 26.1 GHz and 27.1 GHz bands in accordance with ITU-R Rec. F.748 FDMA and TDMA high-density point-to-multipoint systems in accordance with ITU-R F.755, Annexes 3 and 4
25.5 - 27 GHz EARTH EXPLORATION - SATELLITE (space - to Earth) FIXED INTER - SATELLITE 5.536 MOBILE SPACE RESEARCH (space - to - Earth) Standard frequency and time signal - satellite (Earth - to - space) 5.536A	EARTH EXPLORATION - SATELLITE (space - to Earth) FIXED INTER - SATELLITE MOBILE SPACE RESEARCH (space - to - Earth) Standard frequency and time signal - satellite (Earth - to - space) **SMO 13**	• Fixed Links	Microwave links in the 25.5 GHz, 26 GHz, and 26.1 GHz and 27.1 GHz bands in accordance with ITU-R Rec. F.748 FDMA and TDMA high-density point-to-multipoint systems in accordance with ITU-R F.755, Annexes 3 and 4

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
27 - 27.5 GHz FIXED FIXED - SATELLITE (Earth - to - space) INTER - SATELLITE 5.536 5.537 MOBILE	FIXED FIXED - SATELLITE (Earth - to - space) INTER - SATELLITE MOBILE **SMO 14**	• Fixed Links	Microwave links in the 25.5, 26, 26.1 and 27.1 GHz bands in accordance with ITU-R Rec. F.748 FDMA and TDMA high-density point-to-multipoint systems in accordance with ITU-R F.755, Annexes 3 and 4
27.5 - 28.5 GHz FIXED FIXED - SATELLITE (Earth - to - space) 5.484A 5.516B 5.539 MOBILE 5.538 5.540	FIXED FIXED - SATELLITE (Earth - to - space) MOBILE **SMO 14**	• Fixed Links	Microwave links in the 28 GHz and 28.5 GHz bands in accordance with ITU-R Rec. F.748 FDMA and TDMA high-density point-to-multipoint systems in accordance with ITU-R Rec. F.755, Annexes 3 and 4
28.5 - 29.1 GHz FIXED FIXED - SATELLITE (Earth - to - space) 5.484A 5.516B 5.523A 5.539 MOBILE Earth exploration - satellite (Earth - to - space) 5.541 5.540	FIXED FIXED - SATELLITE (Earth - to - space) MOBILE Earth exploration - satellite (Earth - to - space) **SMO 14**	• Fixed Links	Microwave links in the 28 GHz 28.5 GHz bands in accordance with ITU-R Rec. F.748 GSO and non-GSO FSS are subject to 9.11A (see 5.523A) FDMA and TDMA high-density point-to-multipoint systems in accordance with ITU-R Rec. F.755, Annexes 3 and 4

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
29.1 - 29.5 GHz FIXED FIXED - SATELLITE (Earth - to - space) 5.516B 5.523C 5.523E 5.535A 5.539 5.541A MOBILE Earth exploration - satellite (Earth - to - space) 5.541 5.540	FIXED FIXED - SATELLITE (Earth - to - space) MOBILE Earth exploration - satellite (Earth - to - space) **SMO 14**	• Fixed Links	Microwave links in the 28 GHz 28.5 GHz bands in accordance with ITU-R Rec. F.748 FDMA and TDMA high-density point-to-multipoint systems in accordance with ITU-R Rec. F.755, Annexes 3 and 4
29.5 - 29.9 GHz FIXED - SATELLITE (Earth - to - space) 5.484A 5.484B 5.516B 5.527A 5.539 Earth exploration - satellite (Earth - to - space) 5.541 Mobile - satellite (Earth - to - space) 5.540 5.542	FIXED - SATELLITE (Earth - to - space) Earth exploration - satellite (Earth - to - space) Mobile - satellite (Earth - to - space)	• Worldwide high-density applications in the fixed-satellite service (HDFSS) via satellite receives in the band 29.46–30 GHz (Earth-to-space) (ITU RR Res. 143)	Use of the band 29.5-30 GHz by non-GSO FSS is subject to application of ITU RR No.9.12 respect to existing non-GSO FSS system (see 5.484A).
29.9 - 30 GHz FIXED - SATELLITE (Earth - to - space) 5.484A 5.484B 5.516B 5.527A 5.539 MOBILE - SATELLITE (Earth - to - space) Earth exploration - satellite (Earth - to - space) 5.541 5.543 5.525 5.526 5.527 5.538 5.540 5.542	FIXED - SATELLITE (Earth - to - space) MOBILE - SATELLITE (Earth - to - space) Earth exploration - satellite (Earth - to - space)	• Worldwide high-density applications in the fixed-satellite service (HDFSS) via satellite receives in the band 29.46–30 GHz (Earth-to-space) (ITU RR Res. 143)	Use of the band 29.5-30 GHz by non-GSO FSS is subject to application of ITU RR No.9.12 respect to existing non-GSO FSS system (see 5.484A).

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
30 - 31 GHz FIXED - SATELLITE (Earth - to - space) 5.338A MOBILE - SATELLITE(Earth - to - space) Standard frequency and time signal - satellite (space - to - Earth) 5.542	FIXED - SATELLITE (Earth - to - space) MOBILE - SATELLITE(Earth - to - space) Standard frequency and time signal - satellite (space - to - Earth) **SMO 15**		For the unwanted emission of fixed-satellite service See ITU RR Res. 750
31 - 31.3 GHz FIXED 5.338A MOBILE Standard frequency and time signal - satellite (space - to - Earth) Space research 5.544 5.149	FIXED MOBILE Standard frequency and time signal - satellite (space - to - Earth) Space research **SMO 15**	• Fixed Links	For the unwanted emission of fixed service (excluding HAPS) see ITU RR Res. 750 Point-to-point and point-to-multipoint operation in the band 31 – 31.3 GHz
31.3 - 31.5 GHz EARTH EXPLORATION - SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340	EARTH EXPLORATION - SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive)		All emissions are prohibited in this band
31.5 - 31.8 GHz EARTH EXPLORATION - SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) Fixed Mobile except aeronautical mobile 5.149	EARTH EXPLORATION - SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) Fixed Mobile except aeronautical mobile		

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
31.8 - 32 GHz FIXED 5.547A RADIONAVIGATION SPACE RESEARCH (deep space) (space - to - Earth) 5.547 5.548	FIXED RADIONAVIGATION SPACE RESEARCH (deep space) (space - to - Earth)	• Fixed Links	FDD or TDD point-to-point (extendable to point-to-multipoint) in the band 37.6 GHz according with ITU-R Rec. F.1520 For block arrangement see the guidelines in ITU-R Rec. F.1519 For protection of airborne radars from the interference of HDFS see ITU-R Rec. F.1571
32 - 32.3 GHz FIXED 5.547A RADIONAVIGATION SPACE RESEARCH (deep space) (space - to - Earth) 5.547 5.548	FIXED RADIONAVIGATION SPACE RESEARCH (deep space) (space - to - Earth)	• Fixed Links	FDD or TDD point-to-point (extendable to point-to-multipoint) in the band 37.6 GHz according with ITU-R Rec. F.1520 For block arrangement see the guidelines in ITU-R Rec. F.1519 For protection of airborne radars from the interference of HDFS see ITU-R Rec. F.1571
32.3 - 33 GHz FIXED 5.547A INTER - SATELLITE RADIONAVIGATION 5.5475.548	FIXED INTER - SATELLITE RADIONAVIGATION	• Fixed Links	FDD or TDD point-to-point (extendable to point-to-multipoint) in 37.6 GHz band in accordance with ITU-R Rec.F.1520 For block arrangement see the guidelines in ITU-R Rec. F.1519 For protection of airborne radars from the interference of HDFS see ITU-R Rec. F.1571

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
33 - 33.4 GHz FIXED 5.547A RADIONAVIGATION 5.547 5.547[E]	FIXED RADIONAVIGATION	• Fixed Links	FDD or TDD point-to-point (extendable to point-to-multipoint) in 37.6 GHz band in accordance with ITU-R Rec.F.1520 For block arrangement see the guidelines in ITU-R Rec. F.1519 For protection of airborne radars from the interference of HDFS see ITU-R Rec. F.1571
33.4 - 34.2 GHz RADIOLOCATION	RADIOLOCATION	• Short range radars	
34.2 - 34.7 GHz RADIOLOCATION SPACE RESEARCH (deep space) (Earth - to - space) 5.549	RADIOLOCATION SPACE RESEARCH (deep space) (Earth - to - space)	• Short range radars	
34.7 - 35.2 GHz RADIOLOCATION Space research 5.550 5.549	RADIOLOCATION Space research	• Short range radars	
35.2 - 35.5 GHz METEOROLOGICAL AIDS RADIOLOCATION 5.549	METEOROLOGICAL AIDS RADIOLOCATION	• Short range radars • Weather observatory satellites	

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
35.5 - 36 GHz METEOROLOGICAL AIDS EARTH EXPLORATION - SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active) 5.549A	METEOROLOGICAL AIDS EARTH EXPLORATION - SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active)	• Short range radars • Weather observatory satellites	
36 - 37 GHz EARTH EXPLORATION - SATELLITE (passive) FIXED MOBILE SPACE RESEARCH (passive) 5.149 5.550A	EARTH EXPLORATION - SATELLITE (passive) FIXED MOBILE SPACE RESEARCH (passive)	• Fixed Links	Microwave systems in the bands 36.5 GHz and 38 GHz in accordance with ITU-R F.794 and ITU-RR Res. 752. (transmitter power at the antenna port less than -10dBW for point to point) For use of this band by different serices see ITU-RR Res. 752
37 - 37.5 GHz FIXED MOBILE except aeronautical mobile SPACE RESEARCH (space - to - Earth) 5.547	FIXED MOBILE except aeronautical mobile SPACE RESEARCH (space - to - Earth) **SMO 16**	• Fixed Links	Microwave systems in 36.5 and 38 GHz bands in accordance with the ITU-R Rec. F.794 Worldwide high-density applications in the fixed service (HDFS) (ITU RR Res. 75) in the band 37 – 40 GHz
37.5 - 38 GHz FIXED FIXED - SATELLITE (space - to - Earth) MOBILE except aeronautical mobile SPACE RESEARCH (space - to - Earth) Earth exploration - satellite (space - to - Earth) 5.547	FIXED FIXED - SATELLITE (space - to - Earth) MOBILE except aeronautical mobile SPACE RESEARCH (space - to - Earth) Earth exploration - satellite (space - to - Earth) **SMO 16**	• Fixed Links	Microwave systems, supporting HDFS (see ITU RR Res. 75), in the bands 38 GHz, 38.25 GHz and 38.28 GHz in accordance with the ITU-R Rec. F.794 VSAT terminals providing video, voice, internet, broadcasting service via 36 MHz – width channels (ITU-R Rec. S.1557)

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
38 - 39.5 GHz FIXED FIXED - SATELLITE (space - to - Earth) MOBILE Earth exploration - satellite (space - to - Earth) 5.547	FIXED FIXED - SATELLITE (space - to - Earth) MOBILE Earth exploration - satellite (space - to - Earth) **SMO 16**	• Fixed Links	Microwave systems, supporting HDFS (see ITU RR Res. 75), in the bands 38, 38.25, 38.28, 38.77 and 39.3 GHz in accordance with the ITU-R Rec. F.794 VSAT terminals providing video, voice, internet, broadcasting service via 36 MHz – width channels (ITU-R Rec. S.1557)
39.5 - 40 GHz FIXED FIXED - SATELLITE (space - to - Earth) 5.516B MOBILE MOBILE - SATELLITE (space - to - Earth) Earth exploration - satellite (space - to - Earth) 5.547	FIXED FIXED - SATELLITE (space - to - Earth) MOBILE MOBILE - SATELLITE (space - to - Earth) Earth exploration - satellite (space - to - Earth)	• Fixed Links	Microwave systems, supporting HDFS (see ITU RR Res. 75), in the bands 38, 39.3 and 40.5 GHz in accordance with ITU-R Rec. F.794 For this band see also ITU RR Res. 143, ITU-R Rec.s S.524 and Rec. S.1594 VSAT terminals providing video, voice, internet, broadcasting service via 36 MHz – width channels (ITU-R Rec. S.1557)

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
40 - 40.5 GHz EARTH EXPLORATION - SATELLITE (Earth - to - space) FIXED FIXED - SATELLITE (space - to - Earth) 5.516B MOBILE MOBILE - SATELLITE (space - to - Earth) SPACE RESEARCH (Earth - to - space) Earth exploration - satellite (space - to - Earth)	EARTH EXPLORATION - SATELLITE (Earth - to - space) FIXED FIXED - SATELLITE (space - to - Earth) MOBILE MOBILE - SATELLITE (space - to - Earth) SPACE RESEARCH (Earth - to - space) Earth exploration - satellite (space - to - Earth)	• Fixed Links	Microwave systems, supporting HDFS, in the bands 38 GHz and 40 GHz in accordance with the ITU-R Rec. F.794 High-density applications in FSS. VSAT terminals providing video, voice, internet, broadcasting service via 36 MHz – width channels (ITU-R Rec. S.1557) For this band see also ITU RR Res. 143, ITU-R Rec.s S.524 and S.1594
40.5 - 41 GHz FIXED FIXED - SATELLITE (space - to - Earth) BROADCASTING BROADCASTING - SATELLITE Mobile 5.547	FIXED FIXED - SATELLITE (space - to - Earth) BROADCASTING BROADCASTING - SATELLITE Mobile	• Fixed Links	Worldwide high-density applications in the fixed service (HDFS) (ITU RR Res.s 75) in the band 40.5 – 43.5 GHz VSAT terminals providing video, voice, internet, broadcasting service via 36 MHz – width channels (ITU-R Rec. S.1557)
41 - 42.5 GHz FIXED FIXED - SATELLITE (space - to - Earth) BROADCASTING BROADCASTING - SATELLITE Mobile 5.547 5.551H 5.551I	FIXED FIXED - SATELLITE (space - to - Earth) BROADCASTING BROADCASTING - SATELLITE Mobile	• Fixed Links	Worldwide high-density applications in the fixed service (HDFS) (ITU RR Res.s 75) in the band 40.5 – 43.5 GHz VSAT terminals providing video, voice, internet, broadcasting service via 36 MHz – width channels (ITU-R Rec. S.1557)

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
42.5 - 43.5 GHz FIXED FIXED - SATELLITE (Earth - to - space) 5.552 MOBILE except aeronautical mobile RADIO ASTRONOMY 5.149 5.547	FIXED FIXED - SATELLITE (Earth - to - space) MOBILE except aeronautical mobile RADIO ASTRONOMY	• Fixed Links	Worldwide high-density applications in the fixed service (HDFS) (ITU RR Res.s 75) in the band 40.5 – 43.5 GHz
43.5 - 47 GHz MOBILE 5.553 MOBILE - SATELLITE RADIONAVIGATION RADIONAVIGATION - SATELLITE 5.554	MOBILE MOBILE - SATELLITE RADIONAVIGATION RADIONAVIGATION - SATELLITE		Spectral line observation in the band 45.33 – 45.44 GHz (ITU-R Rec. RA.314)
47 - 47.2 GHz AMATEUR AMATEUR - SATELLITE	AMATEUR AMATEUR - SATELLITE	• 6 mm amateur band	
47.2 - 47.5 GHz FIXED FIXED - SATELLITE (Earth - to - space) 5.552 MOBILE 5.552A	FIXED FIXED - SATELLITE (Earth - to - space) MOBILE		For HAPS fixed system in the band 47.2-47.5 GHz and 47.9-48.2 GHz, an example of technical specification has been given in Table 28, ITU-R Rec. F.758
47.5 - 47.9 GHz FIXED FIXED - SATELLITE (Earth - to - space) 5.552 MOBILE	FIXED FIXED - SATELLITE (Earth - to - space) MOBILE	• Fixed Links	Microwave systems in the band 47.2 – 50.2 GHz. Technical specification has been given in Table 28, ITU-R Rec. F.758

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
47.9 - 48.2 GHz FIXED FIXED - SATELLITE (Earth - to - space) 5.552 MOBILE 5.552A	FIXED FIXED - SATELLITE (Earth - to - space) MOBILE		For HAPS fixed system in the band 47.2-47.5 GHz and 47.9-48.2 GHz, an example of technical specification has been given in Table 27, ITU-R Rec. F.758
48.2 - 50.2 GHz FIXED 5.338A FIXED - SATELLITE (Earth - to - space) 5.552 MOBILE 5.149 5.340 5.555	FIXED FIXED - SATELLITE (Earth - to - space) MOBILE	• Fixed Links	Low and medium capacity short range digital microwave systems in the band 47.2 – 50.2 GHz, an example of technical specification has been given in Table 27, ITU-R Rec. F.758
50.2 - 50.4 GHz EARTH EXPLORATION - SATELLITE (passive) SPACE RESEARCH (passive) 5.338A 5.340	EARTH EXPLORATION - SATELLITE (passive) SPACE RESEARCH (passive)		All emissions are prohibited in this band
50.4 - 51.4 GHz FIXED FIXED - SATELLITE (Earth - to - space) 5.338A MOBILE Mobile - satellite (Earth - to - space)	FIXED FIXED - SATELLITE (Earth - to - space) MOBILE Mobile - satellite (Earth - to - space)		Weather prediction for disaster management under ITU RR No. 5.338A

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
51.4 - 52.6 GHz FIXED 5.338A MOBILE			FDD short range FWSs for high density fixed service in accordance with ITU-R Rec. F.1496
5.547 5.556	FIXED MOBILE	• Fixed Links	Low and medium capacity short range digital microwave systems in the band 51.4 – 52.6 GHz, an example of technical specification has been given in Tables 28 and 35, ITU-R Rec. F.758
52.6 - 54.25 GHz EARTH EXPLORATION - SATELLITE (passive) SPACE RESEARCH (passive) 5.340 5.556	EARTH EXPLORATION - SATELLITE (passive) SPACE RESEARCH (passive)		All emissions are prohibited in this band
54.25 - 55.78 GHz EARTH EXPLORATION - SATELLITE (passive) INTER - SATELLITE 5.556A SPACE RESEARCH (passive)	EARTH EXPLORATION - SATELLITE (passive) INTER - SATELLITE SPACE RESEARCH (passive)		Inter-satellite service is limited to satellites in the GSO orbit in the bands 54.25-56.9 GHz

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
55.78 - 56.9 GHz EARTH EXPLORATION - SATELLITE (passive) FIXED 5.557A INTER - SATELLITE 5.556A MOBILE 5.558 SPACE RESEARCH (passive) 5.547 5.557	EARTH EXPLORATION - SATELLITE (passive) FIXED INTER - SATELLITE MOBILE SPACE RESEARCH (passive)	• Fixed Links	TDD or FDD FWSs in supporting HDFS in accordance with ITU-R Rec. F. 1497, Annex 1 Low and medium capacity short range digital microwave systems in 55.78 –57 GHz band, an example of technical specification is available in Tables 27 & 29, ITU-R Rec. F.758 Inter-satellite service is limited to satellites in the GSO orbit in the bands 54.25-56.9 GHz
56.9 - 57 GHz EARTH EXPLORATION - SATELLITE (passive) FIXED INTER - SATELLITE 5.558A MOBILE 5.558 SPACE RESEARCH (passive) 5.547 5.557	EARTH EXPLORATION - SATELLITE (passive) FIXED INTER - SATELLITE MOBILE SPACE RESEARCH (passive)		TDD or FDD FWSs in supporting HDFS in accordance with ITU-R Rec. F. 1497, Annex 1 Low and medium capacity short range digital microwave systems in the band 55.78 – 57 GHz, an example of technical specification has been given in Tables 27 and 29, ITU-R Rec. F.758

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
57 - 58.2 GHz EARTH EXPLORATION - SATELLITE (passive) FIXED INTER - SATELLITE 5.556A MOBILE 5.558 SPACE RESEARCH (passive) 5.547 5.557	EARTH EXPLORATION - SATELLITE (passive) FIXED INTER - SATELLITE MOBILE SPACE RESEARCH (passive)		TDD or FDD FWSs in supporting HDFS in accordance with ITU-R Rec. F.1497, Annex 2. An example of technical specification is available in Table 29, ITU-R Rec. F.758 Inter-satellite service is limited to satellites in the GSO orbit in the bands 57-58.2 GHz
58.2 - 59 GHz EARTH EXPLORATION - SATELLITE (passive) FIXED MOBILE SPACE RESEARCH (passive) 5.547 5.556	EARTH EXPLORATION - SATELLITE (passive) FIXED MOBILE SPACE RESEARCH (passive)		TDD or FDD FWSs in supporting HDFS in accordance with ITU-R Rec. F. 1497, Annex 2. An example of technical specification has been given in Table 29, ITU-R Rec. F.758
59 - 59.3 GHz EARTH EXPLORATION - SATELLITE (passive) FIXED INTER - SATELLITE 5.556A MOBILE 5.558 RADIOLOCATION 5.559 SPACE RESEARCH (passive)	EARTH EXPLORATION - SATELLITE (passive) FIXED INTER - SATELLITE MOBILE RADIOLOCATION SPACE RESEARCH (passive)	• Airborne radar in the band 59 – 64 GHz in radiolocation service (5.559)	
59.3 - 64 GHz FIXED INTER - SATELLITE MOBILE 5.558 RADIOLOCATION 5.559 5.138	FIXED INTER - SATELLITE MOBILE RADIOLOCATION	• Short range high capacity digital links for fixed and mobile application • Short range vehicle radar equipment, standardized by ASTAP, with power delivered to the antenna less than 10 mW and 1 GHz bandwidth (ITU-R Rec. M.1452)	

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
64 - 65 GHz FIXED INTER - SATELLITE MOBILE except aeronautical mobile 5.547 5.556	FIXED INTER - SATELLITE MOBILE except aeronautical mobile		Worldwide high-density applications in the fixed service (HDFS) (ITU RR Res. 75) in the band 64 – 66 GHz. An example of technical specification has been given in Table 33, ITU-R Rec. F.758
65 - 66 GHz EARTH EXPLORATION - SATELLITE FIXED INTER - SATELLITE MOBILE except aeronautical mobile SPACE RESEARCH 5.547	EARTH EXPLORATION - SATELLITE FIXED INTER - SATELLITE MOBILE except aeronautical mobile SPACE RESEARCH		Worldwide high-density applications in the fixed service (HDFS) (ITU RR Res. 75) in the band 64 – 66 GHz. An example of technical specification has been given in Table 33, ITU-R Rec. F.758
66 - 71 GHz INTER - SATELLITE MOBILE 5.553 5.558 MOBILE - SATELLITE RADIONAVIGATION RADIONAVIGATION - SATELLITE 5.554	INTER - SATELLITE MOBILE MOBILE - SATELLITE RADIONAVIGATION RADIONAVIGATION - SATELLITE		-
71 - 74 GHz FIXED FIXED - SATELLITE (space - to - Earth) MOBILE MOBILE - SATELLITE (space - to - Earth)	FIXED FIXED - SATELLITE (space - to - Earth) MOBILE MOBILE - SATELLITE (space - to - Earth)	• Fixed Links	Short range high capacity microwave systems in the bands 71-76 GHz/81-86 GHz

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
74 - 76 GHz FIXED FIXED - SATELLITE (space - to - Earth) MOBILE ROADCASTING BROADCASTING - SATELLITE Space research (space - to - Earth) 5.561 5.559A	FIXED FIXED - SATELLITE (space - to - Earth) MOBILE ROADCASTING BROADCASTING - SATELLITE Space research (space - to - Earth)	• Fixed Links	Short range high capacity microwave systems in the bands 71-76 GHz/81-86 GHz
76 - 77.5 GHz RADIO ASTRONOMY RADIOLOCATION Amateur Amateur - satellite Space research (space - to - Earth) 5.149	RADIO ASTRONOMY RADIOLOCATION Amateur Amateur - satellite Space research (space - to - Earth)	• Road transport and traffic telematics (RTTT) in the band 76 – 77 GHz (ITU-R Rec. SM.1538 and ITU-R Rec. M.1452)	
77.5 - 78 GHz AMATEUR AMATEUR - SATELLITE RADIOLOCATION 5.559B Radio astronomy Space research (space - to - Earth) 5.149	AMATEUR AMATEUR – SATELLITE RADIOLOCATION Radio astronomy Space research (space - to - Earth)		

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
78 - 79 GHz RADIOLOCATION Amateur Amateur - satellite Radio astronomy Space research (space - to - Earth) 5.149 5.560	RADIOLOCATION Amateur Amateur - satellite Radio astronomy Space research (space - to - Earth)		
79 - 81 GHz RADIO ASTRONOMY RADIOLOCATION Amateur Amateur - satellite Space research (space - to - Earth) 5.149	RADIO ASTRONOMY RADIOLOCATION Amateur Amateur - satellite Space research (space - to - Earth)		
81 - 84 GHz FIXED 5.338A FIXED - SATELLITE (Earth - to - space) MOBILE MOBILE - SATELLITE (Earth - to - space) RADIO ASTRONOMY Space research (space - to - Earth) 5.149 5.561A	FIXED 5.338A FIXED - SATELLITE (Earth - to - space) MOBILE MOBILE - SATELLITE (Earth - to - space) RADIO ASTRONOMY Space research (space - to - Earth)	• Short range high capacity microwave systems in the bands 71-76 GHz/81-86 GHz	
84 - 86 GHz FIXED 5.338A FIXED - SATELLITE (Earth - to - space) MOBILE RADIO ASTRONOMY 5.149	FIXED FIXED - SATELLITE (Earth - to - space) MOBILE RADIO ASTRONOMY	• Short range high capacity microwave systems in the bands 71-76 GHz/81-86 GHz	

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
86 - 92 GHz EARTH EXPLORATION - SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340	EARTH EXPLORATION - SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive)		All emissions prohibited in this band
92 - 94 GHz FIXED 5.338A MOBILE RADIO ASTRONOMY RADIOLOCATION 5.149	FIXED MOBILE RADIO ASTRONOMY RADIOLOCATION	• Fixed Links	Very high capacity short range microwave links in the band 92-95 GHz
94 - 94.1 GHz EARTH EXPLORATION - SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active) Radio astronomy 5.562 5.562A	EARTH EXPLORATION - SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active) Radio astronomy	• Fixed Links	Very high capacity short range microwave links in the band 92-95 GHz
94.1 - 95 GHz FIXED MOBILE RADIO ASTRONOMY RADIOLOCATION 5.149	FIXED MOBILE RADIO ASTRONOMY RADIOLOCATION	• Fixed Links	Very high capacity short range microwave links in the band 92-95 GHz

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
95 - 100 GHz FIXED MOBILE RADIO ASTRONOMY RADIOLOCATION RADIONAVIGATION RADIONAVIGATION - SATELLITE 5.149 5.554	FIXED MOBILE RADIO ASTRONOMY RADIOLOCATION RADIONAVIGATION RADIONAVIGATION - SATELLITE		-
100 - 102 GHz EARTH EXPLORATION - SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340 5.341	EARTH EXPLORATION - SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive)		All emissions prohibited in this band
102 - 105 GHz FIXED MOBILE RADIO ASTRONOMY 5.149 5.341	FIXED MOBILE RADIO ASTRONOMY		-
105 - 109.5 GHz FIXED MOBILE RADIO ASTRONOMY SPACE RESEARCH (passive) 5.562B 5.149 5.341	FIXED MOBILE RADIO ASTRONOMY SPACE RESEARCH (passive)		-

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
109.5 - 111.8 GHz EARTH EXPLORATION - SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340 5.341	EARTH EXPLORATION - SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive)		All emissions prohibited in this band
111.8 - 114.25 GHz FIXED MOBILE RADIO ASTRONOMY SPACE RESEARCH (passive) 5.562B 5.149 5.341	FIXED MOBILE RADIO ASTRONOMY SPACE RESEARCH (passive)		-
114.25 - 116 GHz EARTH EXPLORATION - SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340 5.341	EARTH EXPLORATION - SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive)		All emissions prohibited in this band
116 - 119.98 GHz EARTH EXPLORATION - SATELLITE (passive) INTER - SATELLITE 5.562C SPACE RESEARCH (passive) 5.341	EARTH EXPLORATION - SATELLITE (passive) INTER - SATELLITE SPACE RESEARCH (passive)		-
119.98 - 122.25 GHz EARTH EXPLORATION - SATELLITE (passive) INTER - SATELLITE 5.562C SPACE RESEARCH (passive) 5.138 5.341	EARTH EXPLORATION - SATELLITE (passive) INTER - SATELLITE SPACE RESEARCH (passive)	• ISM band	

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
122.25 - 123 GHz FIXED INTER - SATELLITE MOBILE 5.558 Amateur 5.138	FIXED INTER - SATELLITE MOBILE Amateur	• ISM band	
123 - 130 GHz FIXED - SATELLITE (space - to - Earth) MOBILE - SATELLITE (space - to - Earth) RADIONAVIGATION RADIONAVIGATION - SATELLITE Radio astronomy 5.149 5.554	FIXED - SATELLITE (space - to - Earth) MOBILE - SATELLITE (space - to - Earth) RADIONAVIGATION RADIONAVIGATION - SATELLITE Radio astronomy		-
130 - 134 GHz EARTH EXPLORATION - SATELLITE (active) 5.562E FIXED INTER - SATELLITE MOBILE 5.558 RADIO ASTRONOMY 5.149 5.562A	EARTH EXPLORATION - SATELLITE (active) FIXED INTER - SATELLITE MOBILE RADIO ASTRONOMY		-
134 - 136 GHz AMATEUR AMATEUR - SATELLITE Radio astronomy	AMATEUR AMATEUR - SATELLITE Radio astronomy		-

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
136 - 141 GHz RADIO ASTRONOMY RADIOLOCATION Amateur Amateur - satellite 5.149	RADIO ASTRONOMY RADIOLOCATION Amateur Amateur - satellite		-
141 - 148.5 GHz FIXED MOBILE RADIO ASTRONOMY RADIOLOCATION 5.149	FIXED MOBILE RADIO ASTRONOMY RADIOLOCATION		-
148.5 - 151.5 GHz EARTH EXPLORATION - SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340	EARTH EXPLORATION - SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340		All emissions prohibited in this band
151.5 - 155.5 GHz FIXED MOBILE RADIO ASTRONOMY RADIOLOCATION 5.149	FIXED MOBILE RADIO ASTRONOMY RADIOLOCATION		-

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
155.5 - 158.5 GHz EARTH EXPLORATION - SATELLITE (passive) 5.562F FIXED MOBILE RADIO ASTRONOMY SPACE RESEARCH (passive) 5.562B 5.149 5.562G	EARTH EXPLORATION - SATELLITE (passive) FIXED MOBILE RADIO ASTRONOMY SPACE RESEARCH (passive)		-
158.5 - 164 GHz FIXED FIXED - SATELLITE (space - to - Earth) MOBILE MOBILE - SATELLITE (space - to - Earth)	FIXED FIXED - SATELLITE (space - to - Earth) MOBILE MOBILE - SATELLITE (space - to - Earth)		-
164 - 167 GHz EARTH EXPLORATION - SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340	EARTH EXPLORATION - SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive)		All emissions prohibited in this band
167 - 174.5 GHz FIXED FIXED - SATELLITE (space - to - Earth) INTER - SATELLITE MOBILE 5.558 5.149 5.562D	FIXED FIXED - SATELLITE (space - to - Earth) INTER - SATELLITE MOBILE		-
174.5 - 174.8 GHz FIXED INTER - SATELLITE MOBILE 5.558	FIXED INTER - SATELLITE MOBILE		-

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
174.8 - 182 GHz EARTH EXPLORATION - SATELLITE (passive) INTER - SATELLITE 5.562H SPACE RESEARCH (passive)	EARTH EXPLORATION - SATELLITE (passive) INTER - SATELLITE SPACE RESEARCH (passive)		-
182 - 185 GHz EARTH EXPLORATION - SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340	EARTH EXPLORATION - SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive)		All emissions prohibited in this band
185 - 190 GHz EARTH EXPLORATION - SATELLITE (passive) INTER - SATELLITE 5.562H SPACE RESEARCH (passive)	EARTH EXPLORATION - SATELLITE (passive) INTER - SATELLITE SPACE RESEARCH (passive)		-
190 - 191.8 GHz EARTH EXPLORATION - SATELLITE (passive) SPACE RESEARCH (passive) 5.340	EARTH EXPLORATION - SATELLITE (passive) SPACE RESEARCH (passive)		All emissions prohibited in this band
191.8 - 200 GHz FIXED INTER - SATELLITE MOBILE 5.558 MOBILE - SATELLITE RADIONAVIGATION RADIONAVIGATION - SATELLITE 5.149 5.341 5.554	FIXED INTER - SATELLITE MOBILE MOBILE - SATELLITE RADIONAVIGATION RADIONAVIGATION - SATELLITE		-

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
200 - 202 GHz EARTH EXPLORATION - SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340 5.341 5.563A	EARTH EXPLORATION - SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive)		All emissions prohibited in this band
202 - 209 GHz EARTH EXPLORATION - SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340 5.341 5.563A	EARTH EXPLORATION - SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive)		All emissions prohibited in this band
209 - 217 GHz FIXED FIXED - SATELLITE (Earth - to - space) MOBILE RADIO ASTRONOMY 5.149 5.341	FIXED FIXED - SATELLITE (Earth - to - space) MOBILE RADIO ASTRONOMY		-
217 - 226 GHz FIXED FIXED - SATELLITE (Earth - to - space) MOBILE RADIO ASTRONOMY SPACE RESEARCH (passive) 5.562B 5.149 5.341	FIXED FIXED - SATELLITE (Earth - to - space) MOBILE RADIO ASTRONOMY SPACE RESEARCH (passive)		-
226 - 231.5 GHz EARTH EXPLORATION - SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340	EARTH EXPLORATION - SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive)		All emissions prohibited in this band

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
231.5 - 232 GHz FIXED MOBILE Radiolocation	FIXED MOBILE Radiolocation		-
232 - 235 GHz FIXED FIXED - SATELLITE (space - to - Earth) MOBILE Radiolocation	FIXED FIXED - SATELLITE (space - to - Earth) MOBILE Radiolocation		-
235 - 238 GHz EARTH EXPLORATION - SATELLITE (passive) FIXED - SATELLITE (space - to - Earth) SPACE RESEARCH (passive) 5.563A 5.563B	EARTH EXPLORATION - SATELLITE (passive) FIXED - SATELLITE (space - to - Earth) SPACE RESEARCH (passive)		-
238 - 240 GHz FIXED FIXED - SATELLITE(space - to - Earth) MOBILE RADIOLOCATION RADIONAVIGATION RADIONAVIGATION - SATELLITE	FIXED FIXED - SATELLITE(space - to - Earth) MOBILE RADIOLOCATION RADIONAVIGATION RADIONAVIGATION - SATELLITE		-
240 - 241 GHz FIXED MOBILE RADIOLOCATION	FIXED MOBILE RADIOLOCATION		-

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
241 - 248 GHz RADIO ASTRONOMY RADIOLOCATION Amateur Amateur - satellite 5.138 5.149	RADIO ASTRONOMY RADIOLOCATION Amateur Amateur - satellite	• ISM band	
248 - 250 GHz AMATEUR AMATEUR - SATELLITE Radio astronomy 5.149	AMATEUR AMATEUR - SATELLITE Radio astronomy		-
250 - 252 GHz EARTH EXPLORATION - SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340 5.563A	EARTH EXPLORATION - SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive)		All emissions prohibited in this band
252 - 265 GHz FIXED MOBILE MOBILE - SATELLITE (Earth - to - space) RADIO ASTRONOMY RADIONAVIGATION RADIONAVIGATION - SATELLITE 5.149 5.554	FIXED MOBILE MOBILE - SATELLITE (Earth - to - space) RADIO ASTRONOMY RADIONAVIGATION RADIONAVIGATION - SATELLITE		-

Frequency bands *RR Region 3 Allocation with relevant footnotes*	***Allocation in Samoa*** *(All footnotes mentioned in left hand side column apply respectively)*	***Radio Usage***	***Remarks***
265 - 275 GHz FIXED FIXED - SATELLITE (Earth - to - space) MOBILE RADIO ASTRONOMY 5.149 5.563A	FIXED FIXED - SATELLITE (Earth - to - space) MOBILE RADIO ASTRONOMY		-
275 - 3 000 GHz (Not allocated) 5.565	(Not allocated)		-

National Frequency Allocation Table Footnotes

SMO 1

The frequency allotted to Independent state of Samoa for use exclusive use for aeronautical mobile (OR) service within the area of Independent state of Samoa are as follows:

S. No.	Carrier (reference) Frequency (in kHz)
1	3 125
2	4 733
3	5 684
4	6 703
5	9 028
6	9 034
7	11 259
8	13 209
9	15 097
10	17 970

Note:

1. For use of the carrier (reference) frequencies 3 023 kHz and 5 680 kHz which are intended for worldwide common use, see No. 26/3.4**.**
2. A bandwidth of up to a maximum of 2.8 kHz, situated wholly within the frequency channel concerned should be utilizable.
3. The frequencies should only be used for Telephony (J3E, SSB, suppressed carrier) and Telegraphy (including Automatic Data transmission) {A1A, A1B, F1B; (A,H)2(A,B); (R,J)2(A,B,D); J(7,9)(B,D,X)}
4. All other operational characteristics include the Power limits of emission and limits to unwanted emission shall be in accordance with the Appendix 26 of the Radio Regulations 2016

SMO 2

Allotment for the BSS in the frequency bands 11.7 - 12.2 GHz for Independent state of Samoa as per RR Appendix 30. Details of the allotment are as follows:

General Details

Beam ID :	**SMO05700**
Nominal Orbital Position	-178.00°
Longitude of Bore-sight	-171.70°
Latitude of Bore-sight	-13.87°
Major axis (Space Station Antenna)	0.60°

	Minor axis (Space Station Antenna)	0.60°
	Orientation (Space Station Antenna)	90.00
	Space station: antenna gain / code	48.88 (co - polar) / R13TSS
	Earth station: antenna gain / code	35.50 / MODRES
	Polarization	CR
	E.I.R.P	58.6
	Designation of Emission	27M0G7W

Notes:

a. *Minimum Equivalent Protection Margin (EPM) should be as per as per Table 6B of the Appendix 30 of the RR*

b. *Requirements of article 9 and 11 of RR to be fulfilled*

SMO 3

Allotments for the BSS Feeder uplink in 17.3-18.1 GHz for Independent state of Samoa as per RR Appendix 30A Details of the allotment are as follows:

1. **Basic characteristics of the entry for Samoa in the Region 3 feeder link Plan in the frequency band 17.3 - 18.1 GHz**

Beam ID :	**SMO05700**
Nominal Orbital Position	-178.00°
Longitude of Boresight	-171.70°
Latitude of Boresight	-13.87°
Major axis (Space Station Antenna)	0.60°
Minor axis (Space Station Antenna)	0.60°
Orientation (Space Station Antenna)	90.00
Space station: antenna gain	48.88 (co - polar)
Earth station: antenna gain / code	57.00 / MODTES
Polarization	CL
E.I.R.P	84.0
Designation of Emission	27M0G7W

Notes:

a. Minimum Equivalent Protection Margin (EPM) should be as per as per Table 3B2 of the Appendix 30A of the RR

b. Requirements of article 9 and 11 of RR to be fulfilled

SMO 4

Allotment plan for Fixed-satellite service in the frequency bands 4 500-4 800 MHz and 6 725-7 025 MHz for Independent state of Samoa as per RR Appendix 30B. Details are as follows:

Allotment Name: SMO00000

	Frequency Bands: **4500 – 4800 MHz (Space to Earth)** **6725 – 7025 MHz (Earth to Space)** **Nominal Orbital Position** 125.50°E **Longitude of Boresight** 172.10° **Latitude of Boresight** -13.70° **Major axis of the elliptical cross - section half - power beam** 1.60° **Minor axis of the elliptical cross - section half - power beam** 1.60° **Orientation of the ellipse** 90.00 **Earth station E.I.R.P. density** - 9.6 dB (W/Hz) **Satellite E.I.R.P. density** - 41.1 dB (W/Hz)
SMO 5	Allotment plan for Fixed-satellite service in the frequency bands 10.70-10.95 GHz, 11.2-11.45 GHz and 12.75-13.25 GHz for Samoa as per RR 2012 Appendix 30B. Details of the are as follows: **Allotment Name: SMO00000** **Frequency Bands:** **10.70 – 10.95 GHz (Space to Earth)** **11.20 – 11.45 GHz (Space to Earth)** **12.75 – 13.25 GHz (Earth to Space)** **Nominal Orbital Position** 125.50°E **Longitude of Boresight** -172.10° **Latitude of Boresight** -13.70° **Major axis of the elliptical cross - section half - power beam** 0.80° **Minor axis of the elliptical cross - section half - power beam** 0.80° **Orientation of the ellipse** 90.00 **Earth station E.I.R.P. density** - 6.6 dB (W/Hz) **Satellite E.I.R.P. density** - 24.6 dB (W/Hz)
SMO 6	Assignments to High capacity Fixed wireless systems within band 5925 – 6425 MHz in accordance with ITU - R recommendation F.383 - 8
SMO 7	Assignments to Fixed wireless systems within band 7110 – 7900 MHz in accordance with ITU - R recommendation F.385 - 10
SMO 8	Assignments to Fixed wireless systems within band 7725 – 8500 MHz in accordance with ITU - R recommendation F.386 - 8
SMO 9	Assignments to Fixed wireless systems within band 10.0 – 10.68 MHz in accordance with ITU - R recommendation F.747 - 1. Block allocation to the Fixed services also catered for within band 10.15 – 10.3GHz and 10.5 – 10.65GHz in accordance with ITU - R recommendation F.1568 - 1

SMO 10	Assignments to Fixed wireless systems within band 12.75 – 13.25 GHz in accordance with ITU - R recommendation F.497 - 7
SMO 11	Assignments to Fixed wireless systems within band 17.70 – 19.70 GHz in accordance with ITU - R recommendation F.595 - 10
SMO 12	Assignments to Fixed wireless systems within band 21.20 – 23.60 GHz in accordance with ITU - R recommendation F.637 - 4
SMO 13	Assignments to Fixed wireless systems within band 24.50 – 26.50 GHz in accordance with ITU - R recommendation F.748 - 4
SMO 14	Assignments to Fixed wireless systems within band 27.50 – 29.50 GHz in accordance with ITU - R recommendation F.748 - 4
SMO 15	Assignments to Fixed wireless systems within band 31.00 – 31.30 GHz in accordance with ITU - R recommendation F.746 - 10 (Annex - 6)
SMO 16	Assignments to Fixed wireless systems within band 37.00 – 39.50 GHz in accordance with ITU - R recommendation F.749 – 2

Band Number	Symbols	Frequency range *(lower limit exclusive, upper limit inclusive)*	Corresponding metric subdivision
4	**VLF** (Very Low Frequency)	3 to 30 kHz	Myriametric waves
5	**LF** (Low Frequency)	30 to 300 kHz	Kilometric waves
6	**MF** (Medium Frequency)	300 to 3 000 kHz	Hectometric waves
7	**HF** (High frequency	3 to 30 MHz	Decametric waves
8	**VHF** (Very High Frequency)	30 to 300 MHz	Metric waves
9	**UHF**	300 to 3 000 MHz	Decimetric waves

		(Ultra High Frequency)		
	10	**SHF**	3 to 30 GHz	Centimetric waves
		(Super High Frequency)		
	11	**EHF**	30 to 300 GHz	Millimetric waves
		(Extremely High Frequency)		
	12		300 to 3 000 GHz	Decimillimetric waves

Annex C: Channelling Strategies for Major Wireless

Channelling Strategies for Major Wireless Services

S. No.	Band	Service	Proposed Channeling/band plan Strategy
1.	**118 - 136 MHz**	VHF Aeronautical services	
2.	**156.025 - 157.425** and **160.625 - 162.025 MHz**	VHF Maritime channels	International Maritime channels
3.	**350 - 360 MHz**	Terrestrial PMR services for Security agencies	channeling of 12.5 KHz bandwidth and 10MHz duplex spacing
4.	**360 - 380 MHz**	Commercial Tetra Services	See Figure 1as an example for two licensees
5.	**380 - 400 MHz**	Tetra Mobile radio services for Security agencies	As per demand of security agencies
6.	**400 - 410 MHz**	Metrological services	channeling of 12.5 KHz bandwidth and 5MHz duplex spacing is proposed
7.	**410 - 450 MHz**	Commercial PMR services and telemetry services (Both Simplex and Duplex)	A channeling of 12.5 KHz bandwidth and at least 10MHz duplex spacing is proposed (Band center at 430 MHz).
8.	**450 - 470 MHz**	cellular mobile services especially for IMT deployment	See Figure 2 (proposed reassignment for two assignments based on FDD systems)

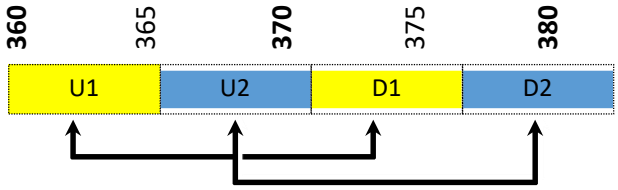

Fig 1: 360-380 MHz band plan

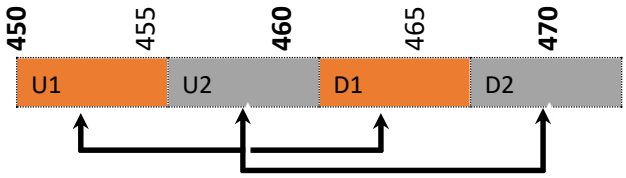

Fig 2: 450 – 470 MHz band plan (Proposed)

BAND PLANS FOR CELLULAR MOBILE SERVICES

1. 880 – 960 MHz Band

Cellular assignments in E-GSM band

880	890 – 925 P-GSM	935
E-GSM	Band Gap	E-GSM
Up Link		Down Link
10 MHz		10 MHz

Cellular assignments in P-GSM band

890 - 897	897 – 898	898 - 915	915 - 935	925 – 942	942 – 943	943 – 960
A	GB	B	Band Gap and EGSM	A	GB	B
7.0 MHz	1.0 MHz	17.0 MHz		7.0 MHz	1.0 MHz	17.0 MHz
Up Link				Down Link		
25 MHz				25 MHz		

2. 1710 – 1880 MHz

1710 - 1730	1730 – 1735	1735 - 1755	1755 – 1760	1760 - 1780	1780 - 1785	1785 – 1805	1805 – 1825	1825 - 1830	1830 – 1850	1850 - 1855	1855 - 1875	1875 - 1880
B	GB*	A	GB*	Vacant	GB*	Band Gap	B	GB*	A	GB*	Vacant	GB*
20 MHz	5 MHz	20 MHz	5 MHz	20 MHz	5 MHz	C	20 MHz	5 MHz	20 MHz	5 MHz	20 MHz	5 MHz
Up Link							Down Link					
75 MHz							75 MHz					

Note:
20 MHz Band Gap has been allocated for "C. Service Provider" project
** Each 5 MHz GB can be allocated for further future requirements of operators.*

3. 1920 - 2170 Band

1920	1980 - 2110	2170
Vacant	Band gap	Vacant
Up Link		Down Link
60 MHz		60 MHz

Note:
The regulator to implement migration of fixed services to clear the band for future IMT services

4. 2500 – 2690 MHz Band (E-UTRA Band 7)

2500	2570 - 2620	2690
Vacant	Band gap	Vacant
Up Link		Down Link
70 MHz		70 MHz

Note:
The regulator to implement migration of fixed services to clear the band for future IMT services

5. 703 – 803 MHz Band (Based on *APT-700 Band* plan)

703 - 718	718 - 733	733 - 748	748 – 758	758 – 773	773 – 788	788 – 803
A	B	C	Band Gap	A’	B’	C’
15.0 MHz	15.0 MHz	15.0 MHz		15.0 MHz	15.0 MHz	15.0 MHz
Up Link				Down Link		
45 MHz				45 MHz		

6. Requirements for Security Agencies

Any future RF requirements of the security agencies may be addressed by adopting the 3GPP E-UTRA Band 18 or Band 27 with preference being for the later.

Note:
Band specifications are based on the 3GPP release 12 document 3GPP TS 36.104 which is latest at the time of writing this recommendation.

Annex D: Frequency Bands for Short Range Devices (SRDs)

S.No.	Typical Application Type	Authorized Frequency Bands / Frequencies (channel spacing)	Maximum Field Strength / RF Output power	Harmonized Standard Reference	Remarks (Emission type, duty cycle, other restrictions etc)
Non Specific Short range Devices					
1	ISM	6765.00 kHz – 6795.00 kHz	42 dBµA/m at 10 m	FCC Part 15 EN 300 220 EN 300 330	
2	ISM	13.5530 MHz – 13.5670 MHz	42 dBµA/m at 10 m	FCC Part 15 EN 300 220 EN 300 330	
3	ISM, CB	26.9570 MHz – 27.4050 MHz	42 dBµA/m at 10 m E.R.P 10mW	EN 300 220 EN 300 330	
4	ISM	40.66 MHz – 40.70 MHz	E.R.P 10mW	EN 300 220	
5	ISM	433.05 MHz – 434.79 MHz	E.R.P 10mW	EN 300 220	
6		868.00 MHz – 868.60 MHz	E.R.P 25 mW	EN 300 220	
7		868.70 MHz – 869.20 MHz	E.R.P 25 mW	EN 300 220	
8		869.40 MHz – 869.65 MHz	E.R.P 100 mW	EN 300 220	
9		869.70 MHz – 870.00 MHz	E.R.P 25 mW	EN 300 220	
10		915.00 MHz – 925.00 MHz	E.R.P 25 mW	EN 300 220-2	
11	SRC/DECT	1880.00 MHz – 1900.00 MHz	E.I.R.P 100 mW	EN 300 220	
12	ISM, WLAN, Bluetooth	2400.00 MHz – 2483.50 MHz	E.I.R.P 10 mW	EN 300 440 EN 300 328	Indoor use only
13	WLAN	5470.00 MHz – 5725.00 MHz	E.I.R.P 25 mW	EN 300 440	Indoor use only

14	ISM, WLAN	5725.00 MHz – 5875.00 MHz	E.I.R.P 25 mW	EN 300 440	Indoor use only
15	ISM	24.00 GHz – 24.2500 GHz	E.I.R.P 100 mW	EN 300 440	
16	ISM	61.00 GHz – 61.50 GHz	E.I.R.P 100 mW	FCC Part 15	
17	ISM	122.00 GHz – 123.00 GHz	E.I.R.P 100 mW		
18	ISM	244.00 GHz – 246.00 GHz	E.I.R.P 100 mW		
RADIODETERMINATION APPLICATION *Including SRD radar systems, Equipment for Detecting Movement and Alert. Radio-determination is defined as 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*					
18		10.50 GHz – 10.60 GHz	E.I.R.P 500 mW	EN 300 440	
19		24.05 GHz – 24.25 GHz	E.I.R.P 100 mW	EN 300 440 EN 302 288	
20		57.00 GHz – 64.00 GHz	E.I.R.P -41.3 dBm/MHz	EN 302 372	
21		75.00 GHz – 85.00 GHz	E.I.R.P -41.3 dBm/MHz	EN 302 372	
ROAD TRANSPORT AND TRAFFIC TELEMATICS (RTTT)					
22		76.00 GHz – 77.00 GHz	55 dBm peak E.I.R.P -50 dBm average power - 23.5 dBm	EN 301 091	For pulse radar only. Vehicle and infrastructure radar systems
INDUCTIVE APPLICATIONS					

Include for example car immobilizers, animal identification, alarm systems, cable detection, waste management, personal identification, wireless voice links, access control, proximity sensors, antitheft systems including RF anti-theft induction systems, data transfer to handheld devices, automatic article identification, wireless control systems and automatic road tolling.					
23		9.00 kHz – 148.50 kHz	72 dBµA/m at 10m	EN 302 291 EN 300 330	
24	Security device	315.00 kHz – 400.00 kHz	13.5 dBµA/m at 10 m	EN 302 291 EN 300 330	
25		6765.0 kHz – 6795.0 kHz	42 dBµA/m at 10 m	EN 302 291 EN 300 330	
26		7400.0 kHz – 8800.0 kHz	9 dBµA/m at 10 m	EN 302 291 EN 300 330	
27		13.553 MHz – 13.567 MHz	60 dBµA/m at 10 m	EN 302 291 EN 300 330	
28	Wireless microphone/ Remote Control	26.957 MHz – 27.283 MHz	42 dBµA/m at 10 m ERP 10mW	EN 302 291 EN 300 330	
29	Wireless microphone	830.00 MHz – 850.00 MHz	E.R.P 10mW	EN 300 220	
MODEL CONTROL *Solely for the purpose of controlling the movement of the model (e.g. in the air, on land or over or under the water surface.*					

30		26MHz, 27MHz, 76MHz;	E.R.P 100 mW	EN 300 220	
RADIO FREQUENCY IDENTIFICATION APPLICATIONS *Include for example automatic article identification, asset tracking, alarm systems, waste management, personal identification, access control, proximity sensors, anti-theft systems, location systems, data transfer to handheld devices and wireless control systems.*					
31		13.5530 MHz – 13.5670 MHz	60 dBµA/m at 10 m	EN 302 291 EN 300 330	
32		2446.00 MHz – 2454.00 MHz	E.I.R.P 500 mW	EN 300 440	Power levels above 500 mW (max E.I.R.P 4W) are restricted to use inside the boundaries of a building and the duty cycle ≤15 % in any200 ms period (30 ms on /170 ms off)
WIRELESS APPLICATIONS IN HEALTHCARE & LISTENING DEVICES					
33	Active Medical Implant	401.00 MHz – 406.00 MHz (25kHz)	E.R.P 25 µW	EN 301 839 EN 302 537	
34	Active Medical Implant	9.00 kHz – 315.00 kHz	30 dBµA/m at 10 m	EN 302 195	Duty Cycle <10%
35	Medical membrane	30.00 MHz – 37.50 MHz	E.R.P 1 m W	EN 302 510	Duty Cycle <10%

	Implants				
36	Aids for hearing impaired	169.40 MHz – 174.00 MHz (50kHz)	E.R.P 10 m W	EN 300 422	
WIRELESS AUDIO APPLICATIONS *Include for example cordless loudspeakers; cordless headphones; cordless headphones for portable use, for example portable CD, cassette or radio devices carried on a person; cordless headphones for use in a vehicle, for example for use with a radio or mobile telephone etc; in-ear monitoring, for use with concerts or other stage productions.*					
37	SRC/Cordless	47.0000 MHz	E.R.P 10 mW	EN 301 357	
38	SRC/Cordless	43.00 MHz, 46.00 MHz, 49.0000MHz;	E.R.P 10 mW	EN 301 357	
39	SRC/Cordless	2400.00 MHz – 2483.50 MHz	E.R.P 10 m W	EN 301 357	
40		863.00 MHz – 865.00 MHz	E.R.P 10 m W	EN 301 357 EN 300 220	
41		1795.00 MHz – 1800.00 MHz	E.I.R.P 20 m W	EN 301 357	
42		87.500 MHz – 108.00 MHz (200kHz)	E.R.P 5 n W	EN 301 357	
VEHICLE FITTED RADIO PRODUCTS					
43	Vehicle Immobilizer	133.00 kHz	60 dBµA/m at 10 m	EN 300 220	Modulation type: ASK, FSK

44	Passive anti-theft system Parts	134.00 kHz	70 dBµA/m at 10 m E.R.P. 10 mW (10 dBm)	EN 300 220	Class of emission: F1D Modulation type: FSK
45	Remote Keyless Entry system /Smart Key System	433.72 MHz – 434.12 MHz	75.6 dBµA/m at 3 m E.R.P. 0.1 mW	EN 300 220	Modulation type: ASK, FSK
46	Smart Key System	133.00 kHz	95 dBµA/m at 3 m	EN 300 220	Modulation type: ASK
47	TPMS (Tyre Pressure Monitoring System)	433.92 MHz	E.R.P 1 m W		Modulation type: FSK
48	Vehicle paging alarm	458.95 MHz	70 dBµA/m at 10 m E.R.P 10 mW (10 dBm)	EN 300 220	Class of emission: F1D Modulation type: FSK
49	EMV (Display) with Bluetooth	2400.00 MHz – 2483.50 MHz	E.I.R.P 2.51 mW	EN 300 328	Modulation type: GFSK, π/4 DQPSK, 8DPSK
50	Intrusion sensor	2450.00 MHz	E.I.R.P 1 m W	EN 300 328	
51	Intrusion sensor	24.15 GHz	E.I.R.P 10 m W	EN 300 440	
52	Millimeter Wave Radar	76.00 GHz – 81.00 GHz	10 W to 15 W Peak E.I.R.P 316.22 W Peak E.I.R.P	EN 301 091	Automatic cruise control, collision warning system for vehicle

53	Navigation Device (GPS Receiver)	1575.42 MHz			
54	Glass Breakage sensor (Alarm)	13.5530 MHz – 13.5670 MHz	60 dBµA/m at 10 m	EN 302 291 EN 300 330	

Annex E: Frequencies for distress and safety communications for the Global Maritime Distress and Safety System (GMDSS) (APPENDIX 15 (Rev.WRC - 15))

The frequencies to be used exclusively for Global Maritime Distress and Safety System (GMDSS) communications are given below:

A. Frequencies below 30 MHz

Frequency (kHz)	Description of usage	Notes
490	MSI	The frequency 490 kHz is used exclusively for maritime safety information (MSI). (WRC - 03)
518	MSI	The frequency 518 kHz is used exclusively by the international NAVTEX system.
***2 174.5**	NBDP - COM	
***2 182**	RTP - COM	The frequency 2 182 kHz uses class of emission J3E.
***2 187.5**	DSC	
3 023	AERO - SAR	The aeronautical carrier (reference) frequencies 3 023 kHz and 5 680 kHz may be used for intercommunication between mobile stations engaged in coordinated search and rescue operations, and for communication between these stations and participating land stations, in accordance with the provisions of Appendix **27 of RR.**
***4 125**	RTP - COM	See also No. **52.221**. The carrier frequency 4 125 kHz may be used by aircraft stations to communicate with stations of the maritime mobile service for distress and safety purposes, including search and rescue (see No. **30.11**).
***4 177.5**	NBDP - COM	
***4 207.5**	DSC	
4 209.5	MSI	The frequency 4 209.5 kHz is exclusively used for NAVTEX - type transmissions.
4 210	MSI - HF	
5 680	AERO - SAR	See note under 3 023 kHz above.
***6 215**	RTP - COM	
***6 268**	NBDP - COM	
***6 312**	DSC	
6 314	MSI - HF	
***8 291**	RTP - COM	
***8 376.5**	NBDP - COM	
***8 414.5**	DSC	
8 416.5	MSI - HF	
***12 290**	RTP - COM	
***12 520**	NBDP - COM	
***12 577**	DSC	
12 579	MSI - HF	
***16 420**	RTP - COM	

***16 695**	NBDP - COM
***16 804.5**	DSC
16 806.5	MSI - HF
19 680.5	MSI - HF
22 376	MSI - HF
26 100.5	MSI - HF

* *Except as provided in these Regulations, any emission capable of causing harmful interference to distress, alarm, urgency or safety communications on the frequencies denoted by an asterisk (*) is prohibited. Any emission causing harmful interference to distress and safety communications on any of the discrete frequencies identified in this Appendix is prohibited. (WRC - 07)*

Additional Notes:

- ***AERO – SAR:*** *these aeronautical carrier (reference) frequencies may be used for distress and safety purposes by mobile stations engaged in coordinated search and rescue operations.*
- ***DSC:*** *These frequencies are used exclusively for distress and safety calls using digital selective calling.*
- ***MSI:*** *In the maritime mobile service, these frequencies are used exclusively for the transmission of maritime safety information (MSI) (including meteorological and navigational warnings and urgent information) by coast stations to ships, by means of narrow - band direct - printing telegraphy.*
- ***MSI – HF:*** *In the maritime mobile service, these frequencies are used exclusively for the transmission of high seas MSI by coast stations to ships, by means of narrow - band direct - printing telegraphy.*
- ***NBDP – COM:*** *these frequencies are used exclusively for distress and safety communications (traffic) using narrow - band direct - printing telegraphy.*
- ***RTP – COM:*** *these carrier frequencies are used for distress and safety communications (traffic) by radiotelephony.*

B. Frequencies above 30 MHz (VHF/UHF)

Frequency (MHz)	Description of usage	Notes
***121.5**	AERO - SAR	The aeronautical emergency frequency 121.5 MHz is used for the purposes of distress and urgency for radiotelephony by stations of the aeronautical mobile service using frequencies in the frequency band between 117.975 MHz and 137 MHz. This frequency may also be used for these purposes by survival craft stations. Use of the frequency 121.5 MHz by emergency position-indicating radio beacons shall be in accordance with Recommendation ITU-R M.690-3. Mobile stations of the maritime mobile service may communicate with stations of the aeronautical mobile service on the aeronautical emergency frequency 121.5 MHz for the purposes of distress and urgency only, and on the aeronautical auxiliary frequency 123.1 MHz for coordinated search and rescue operations, using class A3E emissions for both frequencies (see also Nos. 5.111 and 5.200). They shall then comply with any special arrangement between governments concerned by which the aeronautical mobile service is regulated.
123.1	AERO - SAR	The aeronautical auxiliary frequency 123.1 MHz, which is auxiliary to the aeronautical emergency frequency 121.5 MHz, is for use by stations of the aeronautical mobile service and by other mobile and land stations engaged in coordinated search and rescue operations (see also No. 5.200). Mobile stations of the maritime mobile service may communicate with stations of the aeronautical mobile service on the aeronautical emergency frequency 121.5 MHz for the purposes of distress and urgency only, and on the aeronautical auxiliary frequency 123.1 MHz for coordinated search and rescue operations, using class A3E emissions for both frequencies (see also Nos. 5.111 and 5.200). They shall then comply with any special arrangement between governments concerned by which the aeronautical mobile service is regulated.
156.3	VHF - CH06	The frequency 156.3 MHz may be used for communication between ship stations and aircraft stations engaged in coordinated search and rescue operations. It may also be

		used by aircraft stations to communicate with ship stations for other safety purposes (see also Note f) in Appendix 18).
***156.525**	VHF - CH70	The frequency 156.525 MHz is used in the maritime mobile service for distress and safety calls using digital selective calling (see also Nos. 4.9, 5.227, 30.2 and 30.3).
156.650	VHF - CH13	The frequency 156.650 MHz is used for ship-to-ship communications relating to the safety of navigation in accordance with Note k) in Appendix 18.
***156.8**	VHF - CH16	The frequency 156.8 MHz is used for distress and safety communications by radiotelephony. Additionally, the frequency 156.8 MHz may be used by aircraft stations for safety purposes only.
***161.975**	AIS - SART VHF CH AIS 1	AIS 1 is used for AIS search and rescue transmitters (AIS-SART) for use in search and rescue operations.
***162.025**	AIS - SART VHF CH AIS 2	AIS 2 is used for AIS search and rescue transmitters (AIS-SART) for use in search and rescue operations.
***406 - 406.1**	406 - EPIRB	This frequency band is used exclusively by satellite emergency position indicating radio beacons in the Earth-to-space direction (see No. 5.266).
1 530 - 1 544	SAT - COM	In addition to its availability for routine non-safety purposes, the band 1 530- 1 544 MHz is used for distress and safety purposes in the space-to-Earth direction in the maritime mobile-satellite service. GMDSS distress, urgency and safety communications have priority in this band (see No. 5.353A).
***1 544 - 1 545**	D&S - OPS	Use of the band 1 544-1 545 MHz (space-to-Earth) is limited to distress and safety operations (see No. 5.356), including feeder links of satellites needed to relay the emissions of satellite emergency position-indicating radio beacons to earth stations and narrow-band (space-to-Earth) links from space stations to mobile stations.
1 626.5 - 1 645.5	SAT - COM	In addition to its availability for routine non-safety purposes, the band 1 626.5- 1 645.5 MHz is used for distress and safety purposes in the Earth-to-space direction in the maritime mobile-satellite service. GMDSS distress, urgency and safety communications have priority in this band (see No. 5.353A).
***1 645.5 - 1 646.5**	D&S - OPS	Use of the band 1 645.5-1 646.5 MHz (Earth-to-space) is limited to distress and safety operations (see No. 5.375).
9 200 - 9 500	SARTS	This frequency band is used by radar transponders to facilitate search and rescue.

** Except as provided in these Regulations, any emission capable of causing harmful interference to distress, alarm, urgency or safety communications on the frequencies denoted by an asterisk (*) is prohibited. Any emission causing harmful interference to distress and safety communications on any of the discrete frequencies identified in this Appendix is prohibited. (WRC - 07)*

Additional Notes:

- **AERO-SAR** These aeronautical carrier (reference) frequencies may be used for distress and safety purposes by mobile stations engaged in coordinated search and rescue operations.
- **D&S-OPS** The use of these bands is limited to distress and safety operations of satellite emergency position indicating radio beacons (EPIRBs).
- **SAT-COM** These frequency bands are available for distress and safety purposes in the maritime mobile satellite service.
- **VHF-CH#** These VHF frequencies are used for distress and safety purposes. The channel number (CH#) refers to the VHF channel as listed in Appendix 18, which should also be consulted.
- **AIS** These frequencies are used by automatic identification systems (AIS), which should operate in accordance with the most recent version of Recommendation ITU-R M.1371. (WRC-07)

Table of transmitting frequencies in the VHF maritime mobile band

(Appendix 18 of RR-2016)

The Table below defines the channel numbering for maritime VHF communications based on **25 kHz** channel spacing and use of several duplex channels. The channel numbering and the conversion of two-frequency channels for single-frequency operation shall be in accordance with Recommendation ITU-R M.1084-5 Annex 4, Tables 1 and 3. The Table below also describes the harmonized channels where the digital technologies defined in the most recent version of Recommendation ITU-R M.1842 could be deployed.

Channel Designator	Notes	Transmitting Frequencies (MHz)		Inter--ship	Port Operations and Ship Movement		Public correspondence
		Ship Stations	*Coast Stations*		*Single frequency*	*Two frequency*	
60	*m*	156.025	160.625		x	x	x
01	*m*	156.050	160.650		x	x	x
61	*m*	156.075	160.675		x	x	x
02	*m*	156.100	160.700		x	x	x
62	*m*	156.125	160.725		x	x	x
03	*m*	156.150	160.750		x	x	x
63	*m*	156.175	160.775		x	x	x
04	*m*	156.200	160.800		x	x	x
64	*m*	156.225	160.825		x	x	x
05	*m*	156.250	160.850		x	x	x
65	*m*	156.275	160.875		x	x	x
06	*f*	156.300		x			
2006	r	160.900	160.900				
66	*m*	156.325	160.925		x	x	x
07	*m*	156.350	160.950		x	x	x
67	*h*	156.375	156.375	x	x		
08		156.400		x			
68		156.425	156.425		x		
09	*i*	156.450	156.450	x	x		
69		156.475	156.475	x	x		
10	*h, q*	156.500	156.500	x	x		
70	*f, j*	156.525	156.525	Digital selective calling for distress, safety and calling			
11	*q*	156.550	156.550		x		
71		156.575	156.575		x		
12		156.600	156.600		x		
72	*i*	156.625		x			
13	*k*	156.650	156.650	x	x		
73	*h, i*	156.675	156.675	x	x		
14		156.700	156.700		x		
74		156.725	156.725		x		
15	g	156.750	156.750	x	x		
75	*n, s*	156.775	156.775		x		
16	f	156.800	156.800	DISTRESS, SAFETY AND CALLING			
76	*n, s*	156.825	156.825		x		
17	*g*	156.850	156.850	x	x		

77		156.875		x			
18	*m*	156.900	161.500		x	x	x
78	*m*	156.925	161.525		x	x	x
1078		156.925	156.925		x		
2078	*mm*	161.525	161.525		x		
19	*m*	156.950	161.550		x	x	x
1019		156.950	156.950		x		
2019	*mm*	161.550	161.550		x		
79	*m*	156.975	161.575		x	x	x
1079		156.975	156.975		x		
2079	*mm*	161.575	161.575		x		
20	*m*	157.000	161.600		x	x	x
1020		157.000	157.000		x		
2020	*mm*	161.600	161.600		x		
80	*wa, y*	157.025	161.625		x	x	x
21	*wa, y*	157.050	161.650		x	x	x
81	*wa, y*	157.075	161.675		x	x	x
22	*wa, y*	157.100	161.700		x	x	x
82	*x, y, wa*	157.125	161.725		x	x	x
23	*x, y, wa*	157.150	161.750		x	x	x
83	*x, y, wa*	157.175	161.775		x	x	x
24	*w, ww, x, xx*	157.200	161.800		x	x	x
1024	*w, ww, x, xx*	157.200					
2024	*w, ww, x, xx*	161.800	161.800	x *(digital only)*			
84	*w, ww, x, xx*	157.225	161.825		x	x	x
1084	*w, ww, x, xx*	157.225					
2084	*w, ww, x, xx*	161.825	161.825	x *(digital only)*			
25	*w, ww, x, xx*	157.250	161.850		x	x	x
1025	*w, ww, x, xx*	157.250					
2025	*w, ww, x, xx*	161.850	161.850	x *(digital only)*			
85	*w, ww, x, xx*	157.275	161.875		x	x	x
1085	*w, ww, x, xx*	157.275					
2085	*w, ww, x, xx*	161.875	161.875	x *(digital only)*			
26	*w, ww, x*	157.300	161.900		x	x	x
1026	*w, ww, x*	157.300					
2026	*w, ww, x*		161.900				
86	*w, ww, x*	157.325	161.925		x	x	x
1086	*w, ww, x*	157.325					
2086	*w, ww, x*						

27	*z, zx*	157.350	161.950			x	x
1027	*z, zz*	157.350	157.350				
2027*	*z*	161.950	161.950				
87	*z, zz*	157.375	157.375		x		
28	*z, zx*	157.400	162.000			x	x
1028	*z, zz*	157.400	162.000		x		
2028*	*z*	157.400	157.400				
88	*z, zz*	157.425	157.425		x		
AIS 1	*f, l, p*	161.975	161.975				
AIS 2	*f, l, p*	162.025	162.025				

** From 1 January 2019, channel 2027 will be designated as ASM1 and channel 2028 will be designated as ASM2*

Notes:

General notes

a) Administrations may designate frequencies in the inter-ship, port operations and ship movement services for use by light aircraft and helicopters to communicate with ships or participating coast stations in predominantly maritime support operations under the conditions specified in Nos. **51.69**, **51.73**, **51.74**, **51.75**, **51.76**, **51.77** and **51.78**. However, the use of the channels which are shared with public correspondence shall be subject to prior agreement between interested and affected administrations.

b) The channels of the present Appendix, with the exception of channels 06, 13, 15, 16, 17, 70, 75 and 76, may also be used for high-speed data and facsimile transmissions, subject to special arrangement between interested and affected administrations.

c) The channels of the present Appendix, with the exception of channels 06, 13, 15, 16, 17, 70, 75 and 76, may be used for direct-printing telegraphy and data transmission, subject to special arrangement between interested and affected administrations. (WRC-12)

d) The frequencies in this table may also be used for radiocommunications on inland waterways in accordance with the conditions specified in No. **5.226**.

e) Administrations may apply 12.5 kHz channel interleaving on a non-interference basis to 25 kHz channels, in accordance with the most recent version of Recommendation ITU-R M.1084, provided:

– it shall not affect the 25 kHz channels of the present Appendix maritime mobile distress and safety, automatic identification system (AIS), and data exchange frequencies, especially the channels 06, 13, 15, 16, 17, 70, AIS 1 and AIS 2, nor the technical characteristics set forth in Recommendation ITU-R M.489-2 for those channels;

– implementation of 12.5 kHz channel interleaving and consequential national requirements shall be subject to coordination with affected administrations. (WRC-12

Specific notes

f) The frequencies 156.300 MHz (channel 06), 156.525 MHz (channel 70), 156.800 MHz (channel 16), 161.975 MHz (AIS 1) and 162.025 MHz (AIS 2) may also be used by aircraft stations for the purpose of search and rescue operations and other safety-related communication. (WRC-07)

g) Channels 15 and 17 may also be used for on-board communications provided the effective radiated power does not exceed 1 W, and subject to the national regulations of the administration concerned when these channels are used in its territorial waters.

h) Within the European Maritime Area and in Canada, these frequencies (channels 10, 67, 73) may also be used, if so required, by the individual administrations concerned, for communication between ship stations, aircraft stations and participating land stations engaged in coordinated search and rescue and anti-pollution operations in local areas, under the conditions specified in Nos. **51.69**, **51.73**, **51.74**, **51.75**, **51.76**, **51.77** and **51.78**.

i) *The preferred first three frequencies for the purpose indicated in Note a) are 156.450 MHz (channel 09),* 156.625 MHz (channel 72) and 156.675 MHz (channel 73).

j) Channel 70 is to be used exclusively for digital selective calling for distress, safety and calling.

k) Channel 13 is designated for use on a worldwide basis as a navigation safety communication channel, primarily for intership navigation safety communications. It may also be used for the ship movement and port operations service subject to the national regulations of the administrations concerned.

l) These channels (AIS 1 and AIS 2) are used for an automatic identification system (AIS) capable of providing worldwide operation, unless other frequencies are designated on a regional basis for this purpose. Such use should be in accordance with the most recent version of Recommendation ITU-R M.1371. (WRC-07)

m) These channels may be operated as single frequency channels, subject to coordination with affected administrations. The following conditions apply for single frequency usage:

– The lower frequency portion of these channels may be operated as single frequency channels by ship and coast stations.

– Transmission using the upper frequency portion of these channels is limited to coast stations.

– If permitted by administrations and specified by national regulations, the upper frequency portion of these channels may be used by ship stations for transmission. All precautions should be taken to avoid harmful interference to channels AIS 1, AIS 2, 2027* and 2028*. (WRC- 15)

mm) Transmission on these channels is limited to coast stations. If permitted by administrations and specified by national regulations, these channels may be used by ship stations for transmission. All precautions should be taken to avoid harmful interference to channels AIS 1, AIS 2, 2027* and 2028*. (WRC-15)

n) With the exception of AIS, the use of these channels (75 and 76) should be restricted to navigation-related communications only and all precautions should be taken to avoid harmful interference to channel 16, by limiting the output power to 1 W. (WRC-12)

o) (SUP - WRC-12)

p) Additionally, AIS 1 and AIS 2 may be used by the mobile-satellite service (Earth-to-space) for the reception of AIS transmissions from ships. (WRC-07)

q) When using these channels (10 and 11), all precautions should be taken to avoid harmful interference to channel 70. (WRC-07)

r) In the maritime mobile service, this frequency is reserved for experimental use for future applications or systems (e.g. new AIS applications, man over board systems, etc.). If authorized by administrations for experimental use, the operation shall not cause harmful interference to, or claim protection from, stations operating in the fixed and mobile services. (WRC-12)

s) Channels 75 and 76 are also allocated to the mobile-satellite service (Earth-to-space) for the reception of long- range AIS broadcast messages from ships (Message 27; see the most recent version of Recommendation ITU-R M.1371). (WRC-12)

t) (SUP – WRC-15) *u)* (SUP – WRC-15) *v)* (SUP – WRC-15)

w) In Regions 1 and 3:

Until 1 January 2017, the frequency bands 157.200-157.325 MHz and 161.800-161.925 MHz (corresponding to channels: 24, 84, 25, 85, 26 and 86) may be used for digitally modulated emissions, subject to coordination with affected administrations. Stations using these channels or frequency bands for digitally modulated emissions shall not cause harmful interference to, or claim protection from, other stations operating in accordance with Article **5**.

From 1 January 2017, the frequency bands 157.200-157.325 MHz and 161.800-161.925 MHz (corresponding to channels: 24, 84, 25, 85, 26 and 86) are identified for the utilization of the VHF Data Exchange System (VDES) described in the most recent version of Recommendation ITU-R M.2092. These frequency bands may also be used for analogue modulation described in the most recent version of Recommendation ITU-R M.1084 by an administration that wishes to do so, subject to not causing harmful interference to, or claiming protection from other stations in the maritime mobile service using digitally modulated emissions and subject to coordination with affected administrations. (WRC- 15)

wa) *In Regions 1 and* 3:

Until 1 January 2017, the frequency bands 157.025-157.175 MHz and 161.625-161.775 MHz (corresponding to channels: 80, 21, 81, 22, 82, 23 and 83) may be used for digitally modulated emissions, subject to coordination with affected administrations. Stations using these channels or frequency bands for digitally modulated emissions shall not cause harmful interference to, or claim protection from, other stations operating in accordance with Article **5**.

From 1 January 2017, the frequency bands 157.025-157.100 MHz and 161.625-161.700 MHz (corresponding to channels: 80, 21, 81 and 22) are identified for utilization of the digital systems described in the most recent version of Recommendation ITU-R M.1842 using multiple 25 kHz contiguous channels.

From 1 January 2017, the frequency bands 157.150-157.175 MHz and 161.750-161.775 MHz (corresponding to channels: 23 and 83) are identified for utilization of the digital systems described in the most recent version of Recommendation ITU-R M.1842 using two 25 kHz contiguous channels. From 1 January 2017, the frequencies 157.125 MHz and 161.725 MHz (corresponding to channel: 82) are identified for the utilization of the digital systems described in the most recent version of Recommendation ITU-R M.1842.

The frequency bands 157.025-157.175 MHz and 161.625-161.775 MHz (corresponding to channels: 80, 21, 81, 22, 82, 23 and 83) can also be used for analogue modulation described in the most recent version of Recommendation ITU-R M.1084 by an administration that wishes to do so, subject to not claiming protection from other stations in the maritime mobile service using digitally modulated emissions and subject to coordination with affected administrations. (WRC-15)

ww) In Region 2, the frequency bands 157.200-157.325 and 161.800-161.925 MHz (corresponding to channels: 24, 84, 25, 85, 26 and 86) are designated for digitally modulated emissions in accordance with the most recent version of Recommendation ITU-R M.1842.

In Canada and Barbados, from 1 January 2019 the frequency bands 157.200-157.275 and 161.800-161.875 MHz (corresponding to channels: 24, 84, 25 and 85) may be used for digitally modulated emissions, such as those described in the most recent version of Recommendation ITU-R M.2092, subject to coordination with affected administrations. (WRC-15)

x) From 1 January 2017, in Angola, Botswana, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Democratic Republic of the Congo, Seychelles, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe, the frequency bands 157.125-157.325 and 161.725-161.925 MHz (corresponding to channels: 82, 23, 83, 24, 84, 25, 85, 26 and 86) are designated for digitally modulated emissions.

From 1 January 2017, in China, the frequency bands 157.150-157.325 and 161.750-161.925 MHz (corresponding to channels: 23, 83, 24, 84, 25, 85, 26 and 86) are designated for digitally modulated emissions. (WRC-12)

xx) From 1 January 2019, the channels 24, 84, 25 and 85 may be merged in order to form a unique duplex channel with a bandwidth of 100 kHz in order to operate the VDES terrestrial component described in the most recent version of Recommendation ITU-R M.2092. (WRC-15)

y) These channels may be operated as single or duplex frequency channels, subject to coordination with affected administrations. (WRC-12)

z) Until 1 January 2019, these channels may be used for possible testing of future AIS applications without causing harmful interference to, or claiming protection from, existing applications and stations operating in the fixed and mobile services.

From 1 January 2019, these channels are each split into two simplex channels. The channels 2027 and 2028 designated as ASM 1 and ASM 2 are used for application specific messages (ASM) as described in the most recent version of Recommendation ITU-R M.2092. (WRC-15)

zx) In the United States, these channels are used for communication between ship stations and coast stations for the purpose of public correspondence. (WRC-15)

zz) From 1 January 2019, channels 1027, 1028, 87 and 88 are used as single-frequency analogue channels for port operation and ship movement. (WRC-15)

Annex F: Radio Frequency Allocation Chart

International Call Sign Series for Independent state of Samoa

(APPENDIX 42 (Rev. WRC - 15))

5WA – 5WZ

Note: The first two characters of each call sign (whether two letters or one number and one letter, in that order) identify the nationality of the radio station. Individual national assignments are made by Office of the Telecom Regulator in Samoa from this national allocation.

Acronyms

Item	Explanation
ADSE	Airport Surface Detection Equipment
AID	Automatic Identification
AM	Amplitude Modulation
AM(OR)S	Aeronautical Mobile (OR) Service
BC	Broadcasting Station, Sound
BSS	Broadcast - Satellite Service
BT	Broadcasting Station, Television
CB	Citizens' Band
CBRS	Citizens' Band Radio Service
COSPAS	Space System for Search of Distress Vessels (CosmicheskayaPoiskaAvariynykhSudor)
CTS	Cordless Telepoint Service
DME	Distance Measurement Equipment
DSC	Digital Selective Calling
EIRP	Effective Isotropic Radiated Power
ENG	Electronic News Gathering
EPIRB	Emergency Position Indicating Radio Beacons
EESS	Earth Exploration Satellite Service
FDD	Frequency Division Duples
FDMA	Frequency Division Multiple Access
FM	Frequency Modulation
FSS	Fixed - Satellite Service
FWA	Fixed Wireless Access
GLONASS	GLObal Navigation Satellite System
GPS	Global Positioning System
HDFSS	High Density Fixed-Satellite Service
HDTV	High Definition TV
ICAO	International Civil Aviation Organization
MS	Ship Station

MSS	Mobile Satellite Service
GMDSS	Global Maritime Distress and Safety System
GSO	Geostationary Satellite Orbit
ILS	Instrument Landing System
IMT	International Mobile Telecommunication
ISM	Industrial Scientific and Medical
LEO	Low Earth Orbit
LORAN	Long range radio navigation (system)
LPD	Low Power Device
MDS	Multipoint Distribution System
MLS	Microwave Landing System
MMDS	Multi-channel Multi-point Distribution Service
MS	Ship Station
MSI	Maritime Safety Information
MSS	Mobile Satellite Service
NAVID	Navigational Identification
NAVTEX	Navigational Telex
NBDP	Narrow Band Direct Printing
NDB	Non-Directional radio Beacon
OBTS	Outside Broadcast Television Service
PMR	Private Mobile Radio
RACON	Radar Beacon
RTP-COM	Radio Telephony Communication
RTSS	Rural Telephone Subscriber Service
RTTT	Road Transport and Traffic Telematics
SAB	Service Ancillary to Broadcasting
SAP	Service Ancillary to Program making
SAR	Search and Rescue
SARSAT	Search and Rescue Satellite-Aided Tracking
SART	Search and Rescue Transponder

SFSC	Single Frequency Single Channel
SIT	Satellite Interactive Terminal
SNG	Satellite News Gathering
SOBL	Sound Outside Broadcast Link
SSB	Single Sideband
SSR	Secondary Surveillance Radar
STL	Studio-to-Transmitter Link
TDD	Time Division Duplex
TDMA	Time Division Multiple Access
TFSC	Two Frequency Single Channel
TLMRS	Trunked Land Mobile Radiocommunication Service
TX	Transmitter
VOR	VHF Omni-Directional Range
WAS	Wireless Access System