
Tonga

# COMMUNICATIONS RADIO SPECTRUM RULES 2019

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## Arrangement of Sections

**Rule**


# COMMUNICATIONS RADIO SPECTRUM RULES 2019

## COMMUNICATIONS ACT 2015

*IN EXERCISE of the powers conferred by section 89 of the Communications Act 2015, makes the following Rules —*

### 1 Short Title and Commencement

(1) This Rule may be cited as the Communications Radio Spectrum Rules 2019.

(2) These Rules shall come into force on the date it is published in the Gazette or otherwise in accordance with section 10(e) of the Interpretation Act (Cap.1).

### 2 Interpretation

Subject to subsection (2), unless the the context otherwise requires, terms used in these Rules have the same meaning as in the Communications Act 2015.

In these Rules, unless the context otherwise requires —

**"Act"** means the Communications Act 2015;

**"aircraft"** includes an airship, a glider and a balloon;

**"days"** means business days;

**"existing licensee"** means the holder of an existing radiocommunication licence;

**"existing radiocommunication licence"** means radiocommunication licences issued before the coming into force of these Rules which, by their terms, are intended to operate after that date and includes -

(a) licences granted by the Minister under the Radiocommunication Act 1930; and

(b) the grant of rights to use particular spectrum bands that were assigned by way of Individual Licences issued by the Minister under section 20 of the old and repealed Communication Act 2000 prior to the commencement of these Rules.

**"harmful interference"** means any emission, radiation or induction which-

(a) endangers the functioning of a radio navigation service or other safety service; or

(b) seriously degrades, obstructs or repeatedly interrupts a radiocommunications service operating in accordance with the Act and these Rules;

**"ITU Convention"** means the Constitution and Convention of the International Telecommunication Union signed on 22 December 1992 as amended from time to time;

**"licensee"** means the holder of a radio spectrum licence;

**"radiocommunication"** means any transmission emission or reception of signs, signals, impulses, writing, images, sounds, data or information of any kind by means of electromagnetic waves in the radio spectrum;

**"radiocommunications service"** means a service intended for the provision of radiocommunications;

**"radio equipment"** means equipment that emits radio frequency energy and which is required for the transmission of radio signals;

**"Radio Regulations"** means the Radio Regulations published by the International Telecommunication Union in pursuance of recommendations of the World Radio Conferences, as amended from time to time, and includes the appendices to those Radio Regulations and any additional Regulations;

**"receiver"** means an electronic device that receives incoming modulated radio waves and converts them into the original signals;

**"ship"** includes every kind of vessel or floating or submerged craft of any size, not being a ship that is permanently moored;

**"station"** means 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 radiocommunications service;

**"transmitter"** means an electronic device that generates and amplifies a carrier wave, modulates it with a meaningful signal derived from speech or other sources, and radiates the resulting signal from an antenna;

**"type approved"** means type approved pursuant to the Communications Technical Rules 2018;

**"use"** in relation to a station or radio equipment, includes repair or adjust.

**NOTE-** The following terms are defined in the Act-

- communications service;
- competitive process;
- network operator;
- network operator licence;
- Regulator;
- valuable state resource.

# PART II – SPECTRUM LICENSING

## DIVISION 1 – GENERAL

### 3 Administration of radio spectrum licensing

In issuing, refusing to issue, varying, suspending or cancelling a radio spectrum licence to any person the Regulator shall comply with the procedures and requirements specified in these Rules.

### 4 Types of radio spectrum licences

The categories of radio spectrum licences are specified in Schedule 1.

**NOTE**- Under section 90(1) of the Act, a radio spectrum licence is required to-

(a) establish, operate or use a radiocommunications service;

(b) install, operate or use any radio transmitting equipment; or

(c) establish, operate or use any apparatus or radiocommunication service in any place or on board any ship or aircraft registered in the Kingdom.

### 5 Licence exempt spectrum use

(1) The use and ownership of the radio equipment listed in Schedule 2 is exempt from spectrum licensing provided that --

(a) the use of the equipment is within the frequency bands specified for such purposes in the National Frequency Allocation Table;

(b) the use of the equipment is consistent with the relevant technical restrictions specified in Schedule 3;

(c) the equipment is type approved; and

(d) the ownership and use of the equipment does not cause interference to licensed radio equipment authorised by the Regulator.

(2) The ownership and operation of radio equipment that is exempt from spectrum licensing is not protected from interference. The owners and operators of such equipment must accept any interference that may be caused by other radio equipment operating under these Rules or from licensed radio equipment.

## 6 Fees

(1) The fees payable in respect of a radio spectrum licence issued on an administrative basis shall be --

(a) the fee amounts specified in Schedule 1;

(b) invoiced by the Regulator on the date of issue or renewal of the licence and thereafter annually on the anniversary of the date or issue or renewal; and

(c) paid by the licensee to the Regulator no later than 20 days of the date of invoice; and

(d) paid by cash or a cheque drawn on a business account, delivered to a payment intake point as notified by the Regulator from time to time.

NOTE- Under the transitional arrangements in subsections 29(9–10) of these Rules, the first invoice for spectrum fees under section 7 will not be rendered or payable until 1st July 2019 in relation to cellular block assignments, fixed links block assignments, or land mobile block assignments that have been made by the Regulator in replacement of existing radiocommunication licences anytime from the date of commencement of these Rule to the 30th June 2019.

(2) The fees payable in respect of a radio spectrum licence issued through a competitive process shall be the amount payable as a result of the competitive process.

## 7 Register of radio spectrum licences

For the purposes of section 91 of the Act, the register of radio frequency spectrum assignments shall record-

(a) all radio communications licences issued, renewed or transferred;

(b) any variations to those licences; and

(c) any authorisations or variations lodged pursuant to rule 14.

DIVISION 2 – ISSUE OF LICENSES ON AN ADMINISTRATIVE BASIS

## 8 Licence eligibility

(1) Subject to subsection (2), the following persons are eligible to apply for and hold a radio spectrum licence, or to act pursuant to a radio spectrum licence-

(a) a company as defined under the Companies Act 1995;

(b) a natural person who is a citizen of the Kingdom and of at least 18 years of age;

(c) a partnership, one of the members of which is a citizen of the Kingdom and of at least 18 years of age;

(d) a charitable trust, incorporated society, or other body organised under a law of the Kingdom that has capacity to contract;

(e) a government school, recognised school or registered school under the Education Act 2013;

(f) an entity listed in Schedule 1 of the Public Service Act 2002; or

(2) In the case of --

(a) an Aircraft Radio Station licence, an applicant must also be an authorised representative of the person in legal possession of an aircraft registered in the Kingdom;

NOTE- The Regulator will liaise with the Director of Civil Aviation in the Ministry of Infrastructure before issuing an Aircraft Radio Station licence to confirm the eligibility of the applicant, and also after issuing a licence to confirm that the installation of the radio equipment meets relevant safety requirements.

(b) a Cellular Block Assignment licence, an applicant must also be network operator or have a decision pending on an application to the Regulator for a network operator licence;

(c) a Ground Based Aeronautical Station licence, an applicant must also be an authorised representative of an airfield in the Kingdom;

NOTE- The Regulator will liaise with the Director of Civil Aviation in the Ministry of Infrastructure before issuing a Ground Based Aeronautical Station licence to confirm the eligibility of the applicant, and also after issuing a licence to confirm that the installation of the radio equipment meets relevant safety requirements.

(d) a Ship Radio Station licence, an applicant must also be an authorised representative of a vessel registered in the Kingdom;

NOTE- As Tonga is a signatory to the International Convention for the Safety of Life at Sea (SOLAS), merchant / commercial vessels registered in the Kingdom must conform with Global Maritime Distress Safety System (GMDSS) equipment requirements.

NOTE- Vessels that are not registered in the Kingdom do not require a radio spectrum licence issued by the Regulator while they are in Tongan waters provided that they hold a relevant licence issued by the national regulatory authority in the country where they are registered.

(e) Radio Amateur licence, an applicant must also hold an Restricted Radio Operator Certificate of Proficiency issued by the Tonga Maritime

Polytechnic Institute or other recognized operator certificate of proficiency to be confirmed by the Regulator prior to application.

## 9 Process of submitting an application

(1) An application for a radio spectrum licence must-

(a) be in written or electronic form;

(b) be in the form specified by the Regulator;

(c) contain -

(i) the particulars of the applicant;

(ii) the information specified in the application form;

(iii) sufficient supporting information to demonstrate the applicant's need for a radio spectrum licence;

(iv) sufficient supporting information to demonstrate the applicant's ability to install and operate the proposed ratio equipment within the technical constraints that would be specified in such a licence and without causing undue interference to other licensees; and

(v) such other information as may be required by the Regulator.

(2) The Regulator may request from the applicant -

(a) any information required but not provided under subsection (1); and

(b) such further information which the Regulator considers relevant to its decision whether to issue the licence.

## 10 Procedure for processing licence applications

(1) The Regulator shall -

(a) process applications for radio spectrum licences in the order received; and

(b) endeavour to complete its processing of the application for a radio spectrum licence and make a decision to grant or refuse the application within 20 days of receipt of all relevant information.

(2) The Regulator may advise the applicant in writing within the period of 20 days from receipt of all relevant information that the Regulator will take longer than 20 days to determine the application. Such advice should indicate the estimated additional time required and the reason for the extended period of consideration of the application.

(3) If the Regulator decides to grant an application for a radio spectrum licence, the Regulator will give the applicant-

(a) an invoice for the purposes of section 7; and

(b) a written copy of its licence upon payment of the invoice within the time specified in section 7.

(4) If the Regulator has not provided the applicant with advice of the kind set out in subsection (2) then after the expiry of 20 days from the receipt of all relevant information the application shall be deemed to have been refused by the Regulator.

## 11 Matters to consider for a licence application

Before deciding whether to grant or refuse an application for a radio spectrum licence, the Regulator shall consider-

(a) whether the applicant is eligible to apply for and hold a radio spectrum licence;

(b) whether radiocommunication from the radio equipment authorised under the radio spectrum licence would have the potential to cause harmful interference to any other radio equipment authorised under any other radio spectrum licence;

(c) whether or not the spectrum proposed to be used by the licensee has been declared a valuable state resource;

(d) the applicable licence conditions;

(e) whether the applicant has the ability to install and operate the radio equipment within the technical constraints that would be specified in the radio spectrum licence;

(f) any minimum standards of proficiency required of the applicant; and

(g) such other matters as the Regulator considers relevant.

## 12 Duration and renewal of a radio spectrum licence

(1) A radio spectrum licence shall remain in force for the period specified in Schedule 1 from the date of issue or renewal unless the licence is surrendered, suspended or revoked.

(2) A licensee that wishes to renew its radio spectrum licence shall-

(a) submit an application for renewal to the Regulator not later than 40 days before the expiry of the licence;

(b) confirm that the details contained in the licence are still valid, and

(c) submit such information that the Regulator may require.

(3) Before deciding whether to grant or refuse the application for renewal of a radio spectrum licence, the Regulator shall consider the matters specified in section 12.

(4) If the Regulator does not receive an application for renewal pursuant to subsection (2) then, upon the expiry of the radio spectrum licence, the frequency or frequencies that were specified in the expired licence -

(a) will be quarantined from assignment and spectrum licensing for a period of 60 days; and

(b) shall not be assigned or licensed to any person for the duration of the quarantine period other than the person to whom the frequency or frequencies were previously assigned.

(5) If the person to whom a particular frequency was previously assigned wishes to be reassigned that same frequency as provided for under subsection (4)(b), then-

(a) that person must submit an application for a radio spectrum licence in accordance with section 10;

(b) the Regulator may extend the duration of the quarantine period by a maximum of 20 days; and

(c) the Regulator shall process the application pursuant to sections 11 and 12.

## 13 Transfer of a radio spectrum licence

(1) A licensee may, with the prior written consent of the Regulator, transfer a radio spectrum licence to another person provided that-

(a) the licensee has paid all applicable licence fees that are due and payable before the proposed date of transfer; and

(b) the person to whom the radio spectrum licence is to be transferred-

(i) is eligible to apply for and hold a radio spectrum licence;

(ii) has the ability to install and operate the radio equipment within the technical constraints specified in the radio spectrum licence; and

(iii) has the minimum standards of proficiency that may be required of holders of such licences.

(2) The person to whom a radio spectrum licence is transferred shall assume responsibility for the fulfilment of all obligations and responsibilities that apply to the holder of that licence.

DIVISION 3 – ISSUE OF LICENCES THROUGH A COMPETITIVE PROCESS

### 14 Valuable state resources

In the event that the Minister determines that demand for access to a particular part or parts of the spectrum exceeds, or is likely to exceed, the available spectrum, then the Regulator will-

(a) develop, through public consultation, a fair and transparent method by which the Regulator will issue one or more licences of that spectrum; and

(b) amend these Rules so that the licensing process is set out herein at least 30 days before the licensing process is to commence.

NOTE- Section 89 of the Act provides for the Regulator to specify in these Rules an alterative method for issuing spectrum licences (such as by way of auction, tender, commercial negotiations or other market-based allocation) if the Regulator considers that demand for a particular part or parts of the spectrum is likely to exceed supply.

## PART III – LICENCE CONDITIONS

### 15 Standard conditions of a radio spectrum licence

(1) A radio spectrum licence is subject to the following conditions-

(a) the licensee must comply with --

(i) the Act, these Rules, the conditions of its radio spectrum licence, and all other applicable regulations, rules, declarations, standards and other secondary instruments made by the Regulator under the Act or these Rules;

(ii) all directions given to it by the Regulator in relation to the licensee's use of spectrum;

(iii) the requirements of all relevant international conventions including the International Convention for the Safety of Life at Sea and the ITU Convention and the recommendations made under that convention;

(b) the licensee shall pay all applicable fees and levies as and when they fall due;

(c) the licensee shall ensure that any radio equipment that is used or operated under its radio spectrum licence-

(i) is type approved;

(ii) is used and operated in accordance with the requirements, terms, conditions and limitations specified in its radio spectrum licence;

(iii) does not exceed the specified output powers, emission parameters or geographic unit specified in the licence without the prior written approval of the Regulator; and

(iv) is used and operated only by trained and certified operators;

(d) the licensee shall take all necessary steps to ensure that -

(i) no harmful interference is caused and to eliminate any such interference;

(ii) the operation of any radio equipment causing harmful interference ceases until such time as the interference has been eliminated;

(e) the licensee shall ensure that non-ionising radiation emissions from the radio equipment operated by the licensee are within the limits specified by the guidelines and radiation emission standards adopted and published by International Commission on Non-Ionizing Radiation Protection or its successors;

(f) the licensee shall not make any material change to an approved site or station except with the prior written consent of the Regulator;

(g) the licensee shall coordinate with other radio spectrum licensees within the same geographic area before deploying or using any radio equipment to minimise the potential for inference;

(h) the licensee shall maintain accurate up to date records of the technical parameters of the radio equipment, and location of each station deployed under its licence and shall make those records available to the Regulator for inspection upon request;

(i) the licensee shall allow any person authorised in writing by the Regulator to have access to and inspect the licensee's radio equipment, installations and associated documentation to enable the Regulator to ensure that the radio equipment is being used in accordance with the terms and conditions of the licence.

(2) For the avoidance of doubt, nothing in these terms and conditions absolves a licensee from any requirement in the Act or other law to obtain any approvals, consents, licences, permissions or authorisations that may be necessary for complying with the national regulatory framework.

## 16 Additional conditions of a radio spectrum licence

(1) Subject to subsection (2), the Regulator may specify the following conditions in a radio spectrum licence - -

(a) the frequency, bandwidth, and type of emission that may be used by the licensee;

NOTE- The Regulator may define the frequency that may be used by the licensee by specifying a centre frequency and associated bandwidth, or a frequency range, or a frequency block.

NOTE- Aeronautical and maritime licence frequency bands are internationally agreed and set out in the International Telecommunication Union's Radio Regulations.

(b) the precise geographic co-ordinates where the licensee may deploy radio equipment;

(c) the maximum allowed transmitter power at a site;

(d) the purpose for which radio equipment may be used by the licensee;

(e) any other technical parameters that may be deemed necessary by the Regulator.

(2) A licensee that has been assigned a frequency block-

(a) may deploy any radio equipment at any site within its designated segment of spectrum and geographic area;

(b) may decide how it will manage the deployment of radio equipment within its designated segment of spectrum and geographic area;

(c) may decide the nature of the communications services that it wishes to deliver by radio communication within its designated segment of spectrum and geographic area;

(d) may decide which technology it wishes to use; and

(e) responsible for managing the potential for interference to other radio spectrum licensees utilising adjacent frequencies.

NOTE- The Regulator will only assign a frequency block under the following types of radio spectrum licence-

Cellular Block Assignment, Fixed Links Block Assignment, and Land Mobile Block Assignment.

## 17 Variation of licence conditions

(1) A radio spectrum licence may be varied during its term in either of the following ways --

(a) as agreed in writing between the Regulator and the licensee following a written application by the licensee; or

(b) subject to subsection (3), by the Regulator in its sole discretion.

(2) Before deciding whether to grant or refuse an application under subsection (1)(a), the Regulator shall consider the matters specified in section 12.

(3) Prior to varying a licence under subsection (1)(b), the Regulator shall --

(a) issue a written notice to the licensee setting out-

(i) the reasons for the proposed variation; and

(ii) the details of the proposed variation

(b) provide a period of at least 30 days during which the licensee may make a written submission to the Regulator in response to the notice;

(c) consider any submission made by the licensee pursuant to subsection (3)(b) (2)(b); and

(d) issue a written declaration to the licensee setting out the details and effective date of the variation.

(4) If the Regulator varies a licence pursuant to subsection (1)(b), the Regulator shall --

(a) provide a copy of the amended licence to the licensee; and

(b) record the variation in the register of spectrum assignments.

# PART IV – LICENCE SUSPENSION AND REVOCATION

## 18 Suspension or revocation of a licence

(1) The Regulator may, by notice in writing, suspend or revoke a radio spectrum licence in any of the following circumstances-

(a) the licensee has failed to comply with any of the provisions of the Act or these Rules;

(b) the licensee is in breach of any conditions of its licence;

(c) the licensee fails to pay the applicable licence fee by the due date;

(d) the licensee has ceased to fulfil the eligibility requirements set out in section 9;

(e) the licensee --

(i) enters into receivership or liquidation;

(ii) takes any action for its voluntary winding-up or dissolution;

(iii) enters into any scheme of arrangement; or

(iv) the subject of any order that is made by a competent court or tribunal for its compulsory winding-up or dissolution;

(f) where the Regulator considers that it would be in the public interest to do so, including the public interest in the efficient utilisation of spectrum.

(2) Before suspending or revoking a licence under subsection (1), the Regulator shall --

(a) notify the licensee in writing of the proposed action specifying its reasons; and

(b) give the licensee at least 30 days within which to --

(i) rectify the circumstances giving rise to the Regulator's right to suspend or revoke the radio spectrum licence; and

(ii) make submissions to the Regulator in relation to the proposed action; and

(c) take into account --

(i) whether the licensee has rectified the circumstances giving rise to the Regulator's right to suspend or revoke the licence; and

(ii) any submissions made by the licensee; and

(ii) whether the proposed action is appropriate with regard to the objects of the Act.

(3) Subject to subsection (4), no suspension or revocation of a licence shall take effect until the Regulator has --

(a) complied with the obligations specified in subsection (2); and

(b) notified the licensee of its decision and the date on which the suspension or revocation shall be effective.

(4) Notwithstanding subsection (2) and (3), the Regulator may immediately --

(a) suspend or revoke a licence if the licensee requests the Regulator in writing to do so;

(b) suspend a licence if the licensee fails to pay the applicable licence fee by the due date; or

(c) a licence to the extent required in the case of any emergency involving harmful interference or safety of life or property.

(5) The period of a radio spectrum licence continues to run during a period of suspension.

(6) The suspension or revocation of a licence under these Rules --

(a) does not affect any obligation of the licensee to do an act, or refrain from doing an act under the Act, where the obligation arose before the suspension or revocation of the licence;

(b) may, at the discretion of the Regulator, result in a prorated refund of radio spectrum licence fees paid by the licensee under section 7.

(7) A suspension of a licence under this rule may --

(a) be for a specified period;

(b) continue until the fulfilment of a specified condition; or

(c) continue until the Regulator determines otherwise.

(8) The Regulator shall, as soon as practicable, publish its reasons for suspending or revoking the licence.

# PART V – INTERFERENCE

## 19 Radio equipment causing interference

Subject to the terms of its radio spectrum licence, a licensee shall --

(a) operate radio equipment in such a manner as not to cause harmful interference to any radio equipment operated under any radio spectrum licence; and

(b) comply with a direction of the Regulator in that regard.

## 20 Interference disputes

(1) In the case of an interference dispute the Regulator will confirm whether the licensees that are party to the dispute are operating within the terms and conditions of their radio spectrum licences.

(2) If the Regulator determines that both parties are operating within the terms and conditions or their radio spectrum licences, the Regulator will encourage the parties to attempt to reach a mutually agreed solution.

(3) If a conciliator is not agreed between the Parties within 7 days, the Regulator may appoint a conciliator for the purpose of facilitating an agreement pursuant to subsection (2) --

(a) on such terms and conditions as the Regulator may determine and specify in the instrument of appointment; and

(b) at the expense of the parties to the dispute.

(4) If the Regulator believes that a negotiated solution pursuant to subsection (2) is unlikely, the Regulator will --

(a) amend the radio spectrum licence, in accordance with section 18, of the licensee that is party to the dispute who was issued its radio spectrum licence most recently; and

(b) assign, at no cost, an alternative frequency or set of frequencies to that licensee.

NOTE- For the purposes of subsection (4)(a) the dates of issue of radio spectrum will be the date when the spectrum was first issued to the relevant licensee or to any other licensee who has transferred the frequency assignment under section 14.

# PART VI - COMPLIANCE AND ENFORCEMENT

## 21 Information gathering power

(1) The Regulator may by written notice order a licensee to give the Regulator, within the period and in the manner specified in the notice, information that in

the Regulator's opinion is necessary for its effective control, planning, administration, management or licensing of the radio frequency spectrum.

(2) A licensee ordered to provide information under subsection (1) shall-

(a) comply with the written order; and

(b) ensure that the information provided pursuant to the written order is true, accurate and complete.

## 22 Access and inspection powers

Where the Regulator has a reasonable cause to believe that any radio equipment or electrical or other equipment or machinery is causing or is likely to cause harmful interference to radio equipment, the Regulator, or its authorised representative, may at all reasonable times enter -

(a) any place on or at which; or

(b) any vessel, aircraft or vehicles in or on which; the equipment or machinery is or is believed to be and inspect or test it.

## 23 Power to issue directions

(1) Where the Regulator has a reasonable cause to believe that any radio equipment or electrical or other equipment or machinery is causing or is likely to cause harmful interference to radio equipment or to radiocommunications services that are supplied under a radio spectrum licence, the Regulator may by written notice direct a licensee to take specified action or refrain from taking specified action.

(2) A licensee given a direction under subsection (1) shall comply with the direction.

## 24 Modification, restriction and closedown of a radio spectrum licence

The Regulator, or its authorised representative, may require that particular radio equipment, or any part of the radio equipment, be modified, restricted in use, or temporarily or permanently removed from use immediately or on expiry of a specified period --

(a) if in the opinion of the person a breach in the terms of the licence has occurred or is occurring;

(b) if the use of the radio equipment is causing or contributing to undue interference to the use of other authorised radio equipment; or

(c) in the event of a national emergency being declared.

### 25 Interference from licence exempt radio equipment

If the use of radio equipment that is exempt from spectrum licensing under section 6 causes interference to radiocommunications services that are supplied under a radio spectrum licence, the Regulator may direct the operator or user of the radio equipment that is causing the interference to--

(a) change frequency;

(b) reduce power; or

(c) cease operation.

## PART VII – TRANSITIONAL PROVISIONS

### 26 Saving of existing radiocommunication licences

(1) Subject to subsection (2), each existing radiocommunication licence shall remain valid and in force in accordance with its terms until that existing licence-

(a) expires;

(b) is replaced by one or more radio spectrum licences issued under these Rules; or

(c) is surrendered by way of a written notice to the Regulator.

(2) A grant of rights to use particular spectrum bands that was assigned by way of an Individual Licence issued by the Minister under section 20 of the old and repealed Communications Act 2000 prior to the commencement of these Rules will remain valid only while that Individual Licence itself remains valid and in force.

### 27 Identification of replacement licence types for existing licensees

Within 60 days of the commencement of these Rules, the Regulator shall--

(a) inform each existing licensee of the process through which replacement radio spectrum licences will be issued; and

(b) give each existing licensee an opportunity to inspect and, if necessary, correct the particulars of the replacement radio spectrum licence or licences that the Regulator proposes will replace the existing radiocommunication licence.

NOTE-- Certain types of radio equipment and spectrum use that used to require a radiocommunication licence will no longer require a licence. Therefore, some types of existing radiocommunication licence will not need to be replaced with a radio spectrum licence issued under these Rules.

## 28 Procedures for replacing existing radiocommunication licences

(1) Subject to subsection (2), and where necessary, an existing radiocommunication licence will be replaced by one or more radio spectrum licences issued by the Regulator under these Rules following a request under subsections (3) or (4) from the relevant licensee.

(2) Notwithstanding any other provisions of these Rules, an existing licensee must satisfy the eligibility criteria in section 9 in order to be issued with one or more radio spectrum licences in replacement of an existing radiocommunication licence.

(3) If a licensee wishes to have an existing radiocommunication licence replaced with one or more radio spectrum licences, the licensee must complete and submit the relevant application form, accompanied by any attachments that may be specified in that application form.

(4) The Regulator shall deem a licensee to have requested the replacement of its existing radiocommunication licence with one or more radio spectrum licences if-

(a) the existing radiocommunication licence is a grant of rights to use particular spectrum bands that was assigned by way of an Individual Licence issued by the Minister under section 20 of the old and repealed Communication Act 2000 prior to the commencement of these Rules; and

(b) the licensee requests the Regulator to replace its Individual Licence with a network operator licence or registration as a service provider pursuant to section 187 of the Act.

(5) Subject to subsection (6), the Regulator shall endeavour to complete processing of a request for a replacement licence within 30 days of receipt of all relevant information.

(6) In the event of any discrepancy between the Regulator's records and the information supplied by an existing licensee as part of its request for a replacement licence under subsection (3) or (4), the Regulator will--

(a) inform the licensee of the discrepancy;

(b) defer processing of the requested licence replacement until the identified discrepancy is resolved; and

(c) endeavour to clarify the discrepancy and complete the requested replacement of the existing radiocommunication licence as soon as practicable.

(7) Other than confirming that an existing licensee meets the licence eligibility criteria in section 9, the Regulator shall give no consideration to the criteria in section 12 when processing a request for a replacement licence.

(8) A radio spectrum licence issued by the Regulator in replacement of an existing radiocommunication licence will be--

(a) recorded in the register of spectrum assignments for the purposes of section 91(2) of the Act; and

(b) for the period specified for that licence type in Schedule 1, with such period beginning on the date of issue of the replacement licence.

NOTE- This may have the effect of extending an existing licensee's spectrum assignment and usage rights beyond that provided for under the terms of its existing radiocommunication licence.

(9) Spectrum fees will not be applied under section 7 until 1st July 2019 to the following types of radio spectrum licences that are issued by the Regulator in replacement of an existing radiocommunication licence-

(a) cellular block assignment;

(b) fixed links block assignment; and

(c) land mobile block assignment.

(10) For the purpose of the application or spectrum fees under section 7, the date of issue of replacement radio spectrum licences of the type specified in subsection (9) that are issued-

(a) anytime between the commencement of these Rules and the 30th June 2019 will be taken to be the 1st July 2019;

(b) on or after the 1st July 2019 will be the date of which the replacement licence is issued to the licensee.

Made at Nuku'alofa this day of 2019.

**Paula Ma'u**
**Chief Executive Officer**
**Ministry of Meteorology, Energy, Information, Disaster Management, Environment, Communications and Climate Change**

## SCHEDULE 1

## RADIO SPECTRUM LICENCE TYPES AND FEES

| Service category | Ref. | Licence type | Duration of licence (years) | Annual fee (TOP) (exclusive of consumption tax) |
|---|---|---|---|---|
| Aeronautical | 1 | Aircraft radio station | 5 | $100 |
| | 2 | Ground based aeronautical station | 5 | $500 |
| Broadcasting | 3 | FM radio station transmitter | 5 | $500 |
| | 4 | AM radio station transmitter | 5 | $500 |
| | 5 | Digital television station transmitter | 5 | $1000 |
| Cellular | 6 | Cellular block assignment | 15 | Per Bandwidth |
| Fixed links | 7 | Point-to-point link | 5 | $300 |
| | 8 | High frequency point-to-point link | 5 | $150 |
| | 9 | Point-to-multipoint link | 5 | Per Bandwidth |
| | 10 | Fixed links block assignment | 15 | Per Bandwidth |
| Land mobile | 11 | Base station | 5 | $50 |
| | 12 | Land mobile block assignment | 15 | Per Bandwidth |
| Maritime | 13 | Ship radio station | 5 | $50 |
| | 14 | Coastal station | 5 | $200 |
| Radio amateur | 15 | Radio amateur | 5 | $50 |
| | 16 | Repeater station | 5 | $50 |
| Satellite | 17 | Satellite earth station | 5 | $5,000 |
| | 18 | Transportable satellite earth stations | 5 | $100 |
| | 19 | VSAT terminal* | 5 | $200 |

* A VSAT terminal licence is required for terminals only if it is to be used in a frequency band shared with fixed links (e.g. 5725 – 5850 MHz)

The annual fee for radio spectrum licences that assign a frequency block is determined by the following formula-

**Annual licence fee = BV x BW x CF x GEO x FBF**

Where-

BV = Base Value (in TOP), which will be set and notified by the Regulator from time to time at a level that enables recovery through the spectrum licence fee regime of the necessary proportion of the Regulator's costs;

BW = Bandwidth (in MHz), which is the amount of bandwidth assigned to the licensee under the radio spectrum licence;

CF = Coverage Factor, which is a value between 1 and 5 that is determined by the regulator to differentiate between radio spectrum licences for individual links or transmitters and those intended to provided national coverage;

GEO = Geographical Factor, which is a value between 0.1 and 2.0 that is determined by the
Regulator to reflect whether the spectrum assignment relates to a high density (1.0) or low density (0.1) area within the Kingdom; and

FBF = Frequency Band Factor, which is a value between 0.1 and 2.0 that is determined by the Regulator to distinguish between the potential value of different portions of the radio frequency spectrum.

## SCHEDULE 2

## LICENCE EXEMPT RADIO EQUIPMENT

| Item no. | Equipment |
|---|---|
| 1 | Cordless telephones |
| 2 | Mobile terminals and other terminals for GSM, UMTS, LTE, digital broad-band mobile networks and terrestrial systems used to provide electronic communications services |
| 3 | Terminals for use for mobile satellite communications that operate under a network licence and are controlled by the mobile satellite operator |
| 4 | Citizen's Band (CB) telephones |
| 5 | Wireless LAN and broadband access equipment |
| 6 | Telecommand (remote control) equipment for use with model aircraft |
| 7 | Low power alarms for security and safety and social alarms |
| 8 | Equipment for detecting movement and providing alerts |
| 9 | Radio Frequency Identification devices (RFID) |
| 10 | Ultra Wideband (UWB) devices |
| 11 | Wireless microphones, in-ear monitoring equipment and talk-back equipment |
| 12 | Low power medical implants |
| 13 | On-site paging systems |
| 14 | PMR 446 (analogue and digital) equipment |
| 15 | VSAT terminals for fixed satellite communications operating via satellites utilising frequencies reserved for fixed satellite services |
| 16 | Mobile satellite earth stations operating in the band 14 – 14.5 GHz on board an aircraft controlled by the mobile satellite operator |
| 17 | Earth stations on mobile platforms for fixed satellite communications in the band 29.5 – 30 GHz controlled by the mobile satellite operator |
| 18 | Earth stations on board vessels in the Ku band controlled by the mobile satellite operator |
| 19 | Earth station receive only |
| 20 | Low power FM transmitters |
| 21 | Road transport and traffic telematics |

## SCHEDULE 3

## TECHNICAL RESTRICTIONS FOR LICENSE EXEMPT RADIO EQUIPMENT

| Item | Class of transmitter | Permitted operating frequency band (MHz) (lower limit exclusive, upper limit inclusive) | Maximum EIRP | Limitations |
|---|---|---|---|---|
| 1 | All transmitters | 0.000–0.014 | 200 µW | |
| 2 | All transmitters | 0.014–0.01995 | 50 µW | |
| 3 | All transmitters | 0.02005–0.07 | 7.5 µW | |
| 4 | All transmitters | 0.07–0.16 | 3 µW | |
| 5 | All transmitters | 1. 0.16–0.285<br>2. 0.325–0.415 | 500 nW | |
| 6 | All transmitters | 3.025–3.155 | 7.5 nW | |
| 7 | All transmitters | 3.5–3.7 | 30 pW | |
| 8 | All transmitters | 1. 3.7–3.95<br>2. 4.438–4.65 | 7.5 nW | |
| 9 | All transmitters | 13.553–13.567 | 100 mW | |
| 10 | All transmitters | 24–24.89 | 10 mW | |
| 11 | All transmitters | 26.957–27.283 | 1 W | 1. Separation of the operating frequency from the centre frequency of any adjacent citizen band radio channel must be at least 5 kHz.<br>2. The emission bandwidth must not exceed 10 kHz. |
| 12 | All transmitters | 1. 29.7–29.72<br>2. 30–30.0625<br>3. 30.3125–31<br>4. 36.6–37<br>5. 39–39.7625<br>6. 40.25–40.66 | 100 mW | |
| 13 | All transmitters | 40.66–41 | 1 W | |

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| 14 | All transmitters | 54–56 | 2.5 mW | |
| 15 | All transmitters | 1. 70–70.24375<br>2. 77.29375–77.49375<br>3. 150.7875–152.49375<br>4. 173.29375–174 | 100 mW | |
| 16 | All transmitters | 1. 225–242<br>2. 244–267<br>3. 273–303.95<br>4. 304.05–328.6<br>5. 335.4–399.9 | 10 µW | |
| 17 | All transmitters | 433.05–434.79 | 25 mW | |
| 18 | All transmitters | 915–928 | 3 mW | |
| 19 | All transmitters | 2400–2483.5 | 10 mW | |
| 20 | All transmitters | 5725–5875 | 25 mW | |
| 21 | All transmitters | 1. 10500–10550 2. 24000–24250 3. 61000–61500 | 100 mW | |
| 22 | Wireless audio transmitters and auditory assistance transmitters | 88–108 | 10 µW | 1. Emission must be frequency modulated and have a maximum bandwidth of 180 kHz.<br>2. Transmission in a radio channel must not originate in the licence area of a radio broadcasting station (including a repeater or translator station) operating in the same channel. |
| 23 | Wireless audio transmitters | 174–230 | 3 mW (~1.82 mW ERP) | 1. Emission must be frequency modulated and have a maximum bandwidth of 330 kHz.<br>2. Transmission in a TV channel must not originate in the licence area of a TV |

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| | | | | broadcasting station (including a repeater or translator station) operating in the same channel.<br>3. When transmitting in an unused TV channel, and in the coverage area of a TV broadcasting station (including a repeater or translator station) operating in an adjacent TV channel, the channel centre frequency of the wireless audio transmitter must be at least 200 kHz above the upper edge of the adjacent TV channel, or 400 kHz below the lower edge of the adjacent TV channel. |
| 24 | Wireless audio transmitters | 520–820 | 100 mW (~60.95 mW ERP) | 1. Emission must be frequency modulated and have a maximum bandwidth of 330 kHz.<br>2. Transmission in a broadcasting services bands channel must not originate in the coverage area of a broadcasting station or a datacasting service station (including a repeater or translator station) operating in the same channel.<br>3. The origin of a transmission in a broadcasting services |

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| | | | | bands channel must be such that the resulting field strength at the nearest boundary of the coverage area of a broadcasting station or a datacasting service station using the channel does not exceed 30 dBuV/m.<br>4. When transmitting in an unused broadcasting services bands channel, and in the coverage area of a broadcasting station or a datacasting service station (including a repeater or translator station) operating in an adjacent channel, the channel centre frequency of the wireless audio transmitter must be at least 400 kHz above the upper edge of the adjacent channel, or 400 kHz below the lower edge of the adjacent channel. |
| 25 | Biomedical telemetry transmitters | 174–230 | 10 µW | |
| 26 | Biomedical telemetry transmitters | 520-668 | 11 mW | Transmission in a TV channel must not originate in the licence area of an analogue TV broadcasting station (including a repeater or |

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| | | | | translator station) operating in the same channel. |
| 27 | Telecommand or telemetry transmitters | 472.0125–472.1125 | 100 mW | |
| 28 | Telecommand or telemetry transmitters | 1. 0.07–0.119<br>2. 0.135–0.160 | 10 mW | |
| 29 | Telecommand or telemetry transmitters | 0.119–0.135 | 1.5 W | |
| 30 | Telecommand or telemetry transmitters | 1. 2400–2450 2. 5725–5795<br>3. 5815–5875 | 1 W | |
| 31 | Telecommand or telemetry transmitters | 5795–5815 | 2 W | |
| 32 | Auditory assistance transmitters | 3.155–3.4, with a carrier frequency of-<br>(a) 3.175 MHz; or<br>(b) 3.225 MHz; or<br>(c) 3.275 MHz; or (d) 3.325 MHz. | 60 µW | |
| 33 | Auditory assistance transmitters | 1. 41–42, with a carrier frequency of-<br>(a) 41.55 MHz; or<br>(b) 41.65 MHz; or<br>(c) 41.75 MHz; or<br>(d) 41.85 MHz; or (e) 41.95 MHz.<br>2. 43–44, with a carrier frequency of- | 1.3 mW | |

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| | | (a) 43.05 MHz; or<br>(b) 43.15 MHz; or<br>(c) 43.25 MHz; or<br>(d) 43.35 MHz; or (e) 43.45 MHz. | | |
| 34 | Radiofrequency identification transmitters | 1. 1.77–2.17 2. 2.93–3.58<br>3. 7.2–10.01 | 100 pW | |
| 35 | Radiofrequency identification transmitters | 1. 13.553–13.567<br>2. 918–926<br>3. 2400–2450<br>4. 5725–5795<br>5. 5815–5875<br>6. 24000–24250 | 1 W | |
| 36 | Radiofrequency identification transmitters | 5795–5815 | 2 W | |
| 37 | Radiofrequency identification transmitters<br><br>*Note-* ISO/IEC 180006c (RFID Gen. 2) refers to an inter national standard published by the International Organization for Standardization (ISO). The internation al standard is included in a docu ment titled *Info rmation Technology — Radio frequency identification for item management — Part 6- Parameters for air interface communicati ons at* | 920–926 | 4 W | 1. A transmitter mentioned in this item must comply with ISO/IEC 18000-6c (RFID Gen. 2).<br>2. Emissions in the band below 917.75 MHz must be no greater than -37 dBm EIRP.<br>3. Emissions above 926 MHz must be no greater than -33 dBm EIRP.<br>4. A transmitter mentioned in this item must not be used unless more than 1 Watt EIRP is necessary to achieve |

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| | *860 MHz to 960 MHz.* The document is numbered *ISO/IEC 18000-6-2004* and is available on the internet at h ttp-//www.saiglobal.com | | | satisfactory system performance. |
| 38 | Alarm transmitters (including security and personal safety transmitters) | 303.60–304.05 | 100 µW | |
| 39 | Home detention monitoring equipment | 314.075–314.325 | 200 µW | In a 10 second period, a single transmission must not exceed 10 milliseconds. |
| 40 | Radiodeterminati on transmitters | 24000–24250 | 1 W | |
| 41 | Radiodeterminati on transmitters | 60000–61000 | 20 mW | |
| 42 | Transmitters used for underground communications | 1. 31–32 2. 33–34 3. 35–36 4. 37–38 5. 42–43 6. 44–45 7. 70.24375–74.8 8. 75.2–77.29375 9. 77.49375–84.69375 10. 149.25–149.9 11. 150.05–151.39375 12. 152.49375–156 13. 157.45–160.6 14. 160.975–161.475 15. 162.05–173.29375 | 3.5 nW | The maximum EIRP applies at an above-ground opening associated with the underground communications. |

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| | | 16. 403–406<br>17. 406.1–420<br>18. 450–500.99375<br>19. 504.99375–510.99375<br>20. 514.99375–520 | | |
| 43 | Transmitters used for underground communications | 1. 0.5265–1.605<br>2. 87.5–108<br>3. 174–230<br>4. 519–820 | 10 µW | 1. The maximum EIRP applies to emissions from an above-ground opening associated with the underground environment.<br>2. For the augmentation of an above-ground broadcasting service and datacasting service in underground tunnels. |
| 44 | In-store DAB repeater transmitters | 174-230 | 10 µW | 1. The maximum EIRP applies to emissions measured outside the building.<br>2. For the augmentation of the co-channel DAB broadcasting services operating in the area. |
| 45 | Aquatic animal tracking transmitters | 48–49 | 10 mW | |
| 46 | Radiodeterminati on transmitters operated in radiofrequency-sh ielded enclosures | 1. 5250–7000<br>2. 8500–10600<br>3. 24050–26500<br>4. 75000–85000 | 75 nW | 1. The maximum EIRP applies outside the shielded room enclosure.<br>2. The transmitter must meet the requirements of European Telecommunications Standards Institute |

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| | | | | (*ETSI*) Standard 302 372-1 as existing from time to time. |
| 47 | Personal alarm transmitters | 27.500–27.510 | 100 µW | |
| 48 | Transmitters used with personal alarm transmitters operating in the frequency band 27.500–27.510 MHz | 27.500–27.510 | 500 mW | Each transmission must not exceed 4 seconds over a 60 second period. |
| 49 | Alarm transmitters | 344.8–345.2 | 1 mW | The average EIRP must not exceed 100 µW-<br>(a) if the length of a pulse train does not exceed 0.1 second — in the length of one complete pulse train; or<br>(b) if the length of a pulse train exceeds 0.1 second — in the 0.1 second period during which the EIRP is at its maximum value; or<br>(c) if a transmitter operates for more than 0.1 second — in the 0.1 second period during which the EIRP is at its maximum value. |
| 50 | Radio Local Area Network transmitters used indoors | 5150–5250 | 200 mW (averaged over the entire transmission burst) | 1. If the emission bandwidth is 1 MHz or greater, the spectral density in any 1 MHz is limited to 10 mW EIRP per MHz. |

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| | | | | 2. If the emission bandwidth is less than 1 MHz, the spectral density in any 4 kHz is limited to 40 µW EIRP per 4 kHz. |
| 51 | Radio Local Area Network transmitters used indoors | 5250–5350 | 200 mW (averaged over the entire transmission burst) | 1. If the emission bandwidth is 1 MHz or greater, the spectral density in any 1 MHz is limited to 10 mW EIRP per MHz.<br>2. If the emission bandwidth is less than 1 MHz, the spectral density in any 4 kHz is limited to 40 µW EIRP per 4 kHz.<br>3. From 1 January 2006 devices operated for the first time must use Dynamic Frequency Selection (DFS) and Transmit Power Control (TPC). If TPC is not used then the maximum EIRP is limited to 100 mW. |
| 52 | Digital modulation transmitters | 915–928 | 1 W | 1. The radiated peak power spectral density in any 3 kHz is limited to 25 mW per 3 kHz.<br>2. The minimum 6 dB bandwidth must be at least 500 kHz. |
| 53 | Digital modulation transmitters | 2400–2483.5 | 4 W | 1. The radiated peak power spectral density in any 3 kHz |

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| | | | | is limited to 25 mW per 3 kHz.<br>2. The minimum 6 dB bandwidth must be at least 500 kHz. |
| 54 | Digital modulation transmitters | 5725–5850 | 4 W | 1. The radiated peak power spectral density in any 3 kHz is limited to 25 mW per 3 kHz.<br>2. The minimum 6 dB bandwidth must be at least 500 kHz. |
| 55 | Radio Local Area Network transmitters | 1. 5470–5600<br>2. 5650–5725 | 1 W (averaged over the entire transmission burst) | 1. The maximum radiated mean power density must not exceed 50 mW/MHz EIRP in any 1 MHz band.<br>2. Must use Dynamic Frequency Selection (DFS) and Transmit Power Control (TPC). If TPC is not implemented, then the maximum EIRP is limited to 500 mW. |
| 56 | Radiodetermination transmitters | 76000–77000 | 25 W | |
| 57 | Medical implant communications systems transmitters | 402–405 | 25 µW | 1. The maximum EIRP applies outside the body.<br>2. A transmitter mentioned in this item must comply with ETSI EN 301 839-2 (the standard |

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| | | | | is available at www.etsi.org.) |
| 58 | Medical implant communications systems transmitters | 1. 401–402<br>2. 405–406 | 25 µW | 1. The maximum EIRP applies outside the body.<br>2. A transmitter mentioned in this item must comply with ETSI EN 302 537-2 (see www.etsi.org). |
| 59 | Data communications transmitters used outdoors | 59000–63000 | 150 W | 1. Transmitters are limited to land and maritime deployments.<br>2. Maximum transmitter power must be 20 mW or less.<br>3. Spurious emissions outside the band must be less than -30dBm/MHz.<br>4. For outdoor use only. |
| 60 | Data communications transmitters used indoors | 57000–66000 | 20 W | 1. The average power density of any emission must not exceed 9 uW/$cm^2$ at a distance of 3m.<br>2. The peak power density of any emission must not exceed 18 uW/$cm^2$ at a distance of 3m.<br>3. Spurious emissions outside the band must be less than -30dBm/MHz. |
| 61 | Frequency hopping transmitters | 915–928 | 1 W | A minimum of 20 hopping frequencies must be used. |

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| 62 | Frequency hopping transmitters | 2400–2483.5 | 500 mW | A minimum of 15 hopping frequencies must be used. |
| 63 | Frequency hopping transmitters | 2400–2483.5 | 4 W | A minimum of 75 hopping frequencies must be used. |
| 64 | Frequency hopping transmitters | 5725–5850 | 4 W | A minimum of 75 hopping frequencies must be used. |
| 65 | Ultra-wideband short-range vehicle radar systems | 22000–26500 | See limitations | 1. The maximum radiated average power density is -41.3 dBm/MHz EIRP.<br>2. The maximum broadband radiated peak power density is 0 dBm/50 MHz EIRP.<br>3. Must meet the requirements of ETSI 302-288-1 as it applies from time to time. |
| 66 | Infrared transmitters | 187.5 THz–420 THz | 125 mW (output power) | |
| 67 | Video sender transmitters | 529–806 | 12 µW | |
| 68 | In-store pricing system transmitters | 0.0366– 0.0402 | 4.8 W | Indoor use only. |
| 69 | Radiodeterminationtransmitters | 77000–81000 | 315 W | Must meet the requirements of ETSI EN 302 264-1 as it applies from time to time. |

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| 70 | VSAT terminals using frequencies reserved for fixed satellite services | 5725 – 5850 MHz, 14 – 14.25 GHz | ≤ 55 dBW | Not for use within specified distance of an airfield runway or control tower |
| 71 | Mobile satellite earth stations on board an aircraft | 14 – 14.25 GHz | ≤ 55 dBW | Not for use within specified distance of an airfield runway or control tower |
| 72 | Earth stations on mobile platforms for fixed satellite | 29.5 – 30 GHz | ≤ 55 dBW | Not for use within specified distance of an airfield runway or control tower |
| 73 | Earth stations on board vessels in the Ku band controlled by the mobile satellite operator<br>*Note- Where necessary the Ministry of Infrastructure's Civil Aviation Division will specify the distance from an airfield runway or control tower in which the use of certain classes of transmission may not be used without a radio spectrum licence.* | 14 – 14.25 GHz | ≤ 55 dBW | Not for use within specified distance of an airfield runway or control tower |