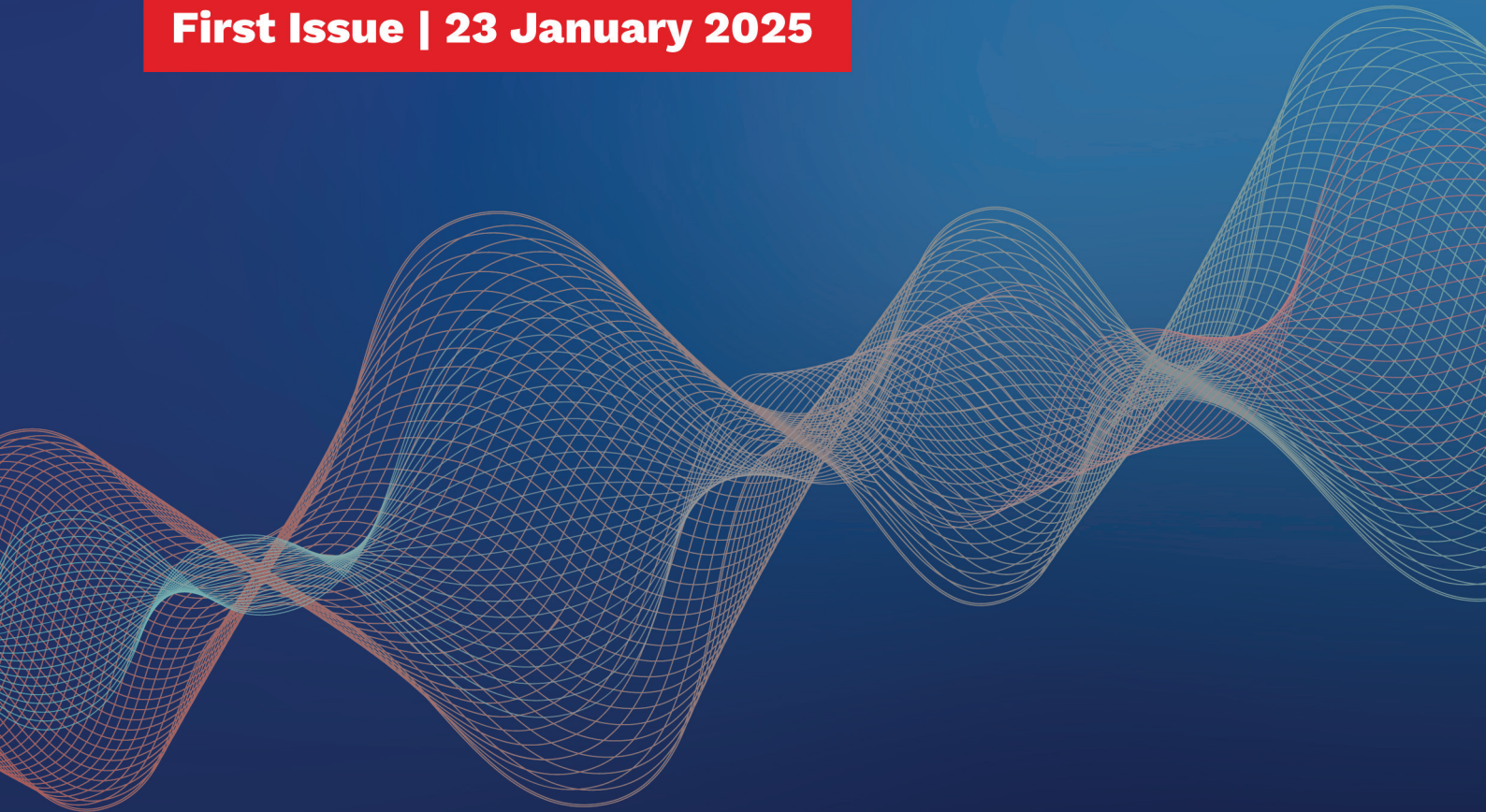




Authority for
Info-communications
Technology
Industry of Brunei Darussalam

Station Licence Guidelines

First Issue | 23 January 2025



Station Licence Guidelines

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Revision

This document will be reviewed from time to time as and when necessary.

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**Block B14, Simpang 32-5,
Kampung Anggerek Desa,
Jalan Berakas BB3713,
Brunei Darussalam**

Email: info@aiti.gov.bn
Telephone: +(673) 232 3232
Fax: +(673) 238 2447
Website: www.aiti.gov.bn

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Purpose

This document consists of information on licence categories, definitions, fees, and registration procedures for the different Operating licences issued by Authority for Info-communication Technology Industry (AITI). This document aims to assist users in determining the fees and licence categories that applies to their radio-communication equipment to operate.

Introduction

An operating licence is required to own, possess and operate any radio-communications equipment in Brunei Darussalam. It consists of the following details:

- the type and the number of radio-communication equipment;
- the operating radio frequencies and the bandwidth;
- the level of radio emission;
- the site names and locations at which the radio-communications equipment are installed; and
- the validity period of the licence.

Operating licences are valid for a period of 1(one) year. Applicants must apply through the AITI Online Services portal with complete details and provide any necessary documentation.

AITI will only process complete applications with the required documents. If any information is missing, AITI Officers will return the application to the applicant for further clarification.

Approval of applications will depend on the frequency to be used, as it may require coordination with other countries at the monthly Frequency Assignment Committee, Singapore, Malaysia and Brunei Darussalam (FACSMAB) meetings. Applicants requiring specific frequencies for the station must also fill in the Frequency tab on AITI Online Services and submit supporting document such as equipment specification and network diagram.

Should applicants require any assistance with their application via AITI Online Services, please contact AITI's officers at frequency.assignment@aiti.gov.bn.

Note:

It is advisable for users to renew their licence 3 months before the expiry date, and to ensure all details within that licence is up to date.

Operating Licence Category Definitions and Fees

Operating licences are categorized into seven (7) types:

- I. Aeronautical;
- II. Amateur Radio;
- III. Broadcasting Station;
- IV. Satellite;
- V. Maritime;
- VI. Land; and
- VII. Radio-determination.

The definitions and fees for each category and sub-category are detailed below.

I. Aeronautical

1. Aeronautical Fixed Station (AEF)

This licence authorizes the operation of a transceiving radio equipment of a fixed ground station used in airport which is used to communicate with aircrafts e.g. communications from ground control to a pilot.

Frequency Registration Procedure:

- i. Pursuant to Volume V of Annex 10 to the Convention on International Civil Aviation Organization (ICAO), when registering for a frequency, the applicant shall liaise with the Department of Civil Aviation (DCA) to obtain an acknowledgment from the ICAO and therewith to share the documented acknowledgement with AITI.
- ii. The frequency usage fee is applicable per location in accordance with the frequency bands allocated by ICAO, which is strictly for aeronautical use only.
- iii. Formula applied for the use of the radio frequency spectrum is as stipulated in Division II, second formula titled “Land Mobile, trunked radio, telemetry, fixed point-to-point, aeronautical and maritime (localized use)” under the Telecommunications (Radio-Communication) Regulations, 2013.

2. Aircraft Station (AEM)

This licence authorizes the operation of a transceiving radio equipment of an on-board aircraft station which is used to communicate with other aircrafts, ground stations or L-Band satellites e.g. communications from pilot to ground, or communications from pilot to pilot.

Frequency Registration Procedure:

- i. Pursuant to Volume V of Annex 10 to the Convention on ICAO, when registering for a frequency, the applicant shall obtain an acknowledgment from ICAO, and therewith share the documented acknowledgement with AITI.
- ii. The frequency usage fee is not applicable for AEM so long as it operates in the aeronautical frequency bands that were allocated in accordance with ICAO, which is strictly for aeronautical use only.

3. Unmanned Aerial Vehicle (UAV)

This licence authorises the individual, companies and/or organisation to operate a industry/ military grade aeronautical Unmanned Aerial Vehicle (UAV) specifically its payload transmitter that uses any licence bands that is determined by AITI.

Frequency Registration Procedure:

- i. The remote controller use to control UAV will be licenced under RST.
- ii. The operating licence will be applied to the payload transmitter of the UAV.
- iii. Where the connectivity is utilizing a licenced cellular network provider services such as 3G, LTE or 5G, then licence or frequency assignment is not needed.
- iv. Formula applied for use of the radio frequency spectrum, use the formula as stipulated in Part III, Division 2 titled “Land Mobile, trunked radio, telemetry, fixed point-to-point, aeronautical and maritime (localised use)” under the Telecommunications (Radio-communication) Regulations, 2013.

4. Equipment Fees for Aeronautical Licences

No	AITI Code	Type and Category	Licence Class
1	AEF	Aeronautical Station - Aeronautical Fixed Station	BND \$25.00 per transceiving radio
		Ground station	
2	AEM	Aeronautical Station - Aircraft Station	BND \$25.00 per transceiving radio
		Aircraft Station Aeronautical Mobile (Ground-to-Air) Aeronautical Mobile Earth Station Aeronautical Radar (Aircraft)	
3	UAV	Unmanned Aerial Vehicle (UAV)	BND \$25.00 per transceiving radio
		Unmanned Vehicle	

II. Amateur Radio

1. Advanced Class (AMA / AL')

This licence authorizes the operation of an amateur radio station, either home based or in the form of a mobile station, in all of the amateur radio frequency bands as determined by AITI.

Frequency Registration Procedure:

- i. Coordination is not required unless the amateur station utilises any frequency band outside of the amateur radio frequency bands as determined by AITI.

2. Standard Class (AMS / AL')

This licence authorizes the operation of an amateur radio station, either home based or in the form of a mobile station, in a limited range within the amateur radio frequency bands as determined by AITI.

Frequency Registration Procedure:

- i. Coordination is not required unless the amateur station utilises any frequency band outside of the amateur radio frequency bands as determined by AITI.

3. Equipment Fees for Amateur Radio Licences

No	AITI Code	Type and Category	Licence Class
1	AMA / AL'	Amateur Radio - General	BND \$25.00 per equipment
		Advanced Class	
2	AMS / AL'	Amateur Radio - Restricted	BND \$25.00 per equipment
		Standard Class	

III. Broadcasting Station

1. AM (BCA)

This licence authorizes the operation of a transmitting equipment of an AM radio station e.g. mixer and transmitter.

Frequency Registration Procedure:

- HF Broadcasting frequencies in the band allocated exclusively for the Broadcasting Service between 5950 – 26100 kHz intended for seasonal broadcasting must be coordinated at Asia-Pacific Broadcast Union-HFC short-wave schedule co-ordination meeting first.
- The HF Broadcast frequencies then needs to be registered with the regional Asia-Pacific Broadcast Union Bureau Radio (ABU/BR) Master International Frequency Register (MIFR), after which they are to be registered with FACSMAB.
- Frequency usage fee is applicable per location.
- Formula applied for the use of the radio frequency spectrum is as stipulated in Division I “Broadcasting, cellular, land mobile or trunked radio, wireless broadband access” under the Telecommunications (Radio-Communication) Regulations, 2013.

2. FM (BCF)

This licence authorizes the operation of a transmitting equipment of an FM Radio station e.g. mixer and transmitter. The licence is applied to the FM transmitter module.

Frequency Registration Procedure:

- Frequency usage fee is applicable per location in range of 87.5 MHz – 108 MHz (analogue), 1452 – 1492 MHz (DAB - Digital Audio Broadcast).
- Formula applied for the use of the radio frequency spectrum is as stipulated in Division I “Broadcasting, cellular, land mobile or trunked radio, wireless broadband access” under the Telecommunications (Radio-Communication) Regulations, 2013.

3. TV (BCT)

This licence authorizes the operation of the transmitting equipment of the Analog/Digital Television Terrestrial station. e.g. mixer and transmitter.

Frequency Registration Procedure:

- i. Frequency usage fee is applicable per location within Analogue or Digital Terrestrial TV in Broadcasting Bands III, IV and V.
- ii. Formula applied for the use of the radio frequency spectrum is as stipulated in Division I “Broadcasting, cellular, land mobile or trunked radio, wireless broadband access” under the Telecommunications (Radio-Communication) Regulations, 2013.

4. Equipment Fees for Broadcasting Station Licences

No	AITI Code	Type and Category	Fee
1	BCA	Broadcasting Station - AM	BND \$100.00 per transmitting equipment
		AM	
2	BCF	Broadcasting Station - FM	BND \$100.00 per transmitting equipment
		FM	
3	BCT	Amateur Radio - Restricted	BND \$100.00 per transmitting equipment
		TV	

IV. Satellite

1. Satellite Earth Station (FSS)

This licence authorizes the operation of the whole Earth station system determined by the size of the parabola antenna that is used as a central gateway for transmitting and receiving e.g. Telisai Earth station.

Frequency Registration Procedure:

- i. Frequency usage fee is applicable per location based on satellite frequency band, and will apply to both the uplink and downlink frequencies of the station.
- ii. Formula applied for the use of the radio frequency spectrum is as stipulated in Division II, first formula titled “Microwave, satellite uplink and downlink and radar” under the Telecommunications (Radio-Communication) Regulations, 2013.

2. Remote Terminal Earth Station (FSV)

This licence authorizes the operation of a Very Small Aperture Terminal (VSAT), transportable, and any other remote earth terminal system used to communicate with orbiting satellites e.g. whole VSAT system antenna, semi-portable station.

Frequency Registration Procedure:

- i. All subscriptions for Remote Terminal Earth Stations must go through a Brunei licenced Service Provider.
- ii. Frequency usage fee is applicable per location based on allowed frequency provided by Brunei licenced Service Providers. The remote site frequency usage fee will apply to both the uplink and downlink frequencies of the station.
- iii. Formula applied for the use of the radio frequency spectrum is as stipulated in Division II, first formula titled “Microwave, satellite uplink and downlink and radar” under the Telecommunications (Radio-Communication) Regulations, 2013.

3. Aeronautical Mobile Earth Station (ASM)

This licence authorizes the operation of a transceiving radio equipment for aeronautical mobile satellite services used in aircraft which it enables to communicate with satellite to provide services such as internet connectivity on-board aircraft.

Frequency Registration Procedure:

- i. All subscriptions for Aeronautical Mobile Earth Station must go through a Brunei licenced Service Provider.
- ii. The frequency usage fee is applicable per provider based on the allowed frequency.
- iii. Formula applied for the use of the radio frequency spectrum is as stipulated in Division II, first formula titled “Microwave, satellite uplink and downlink and radar” under the Telecommunications (Radio-Communication) Regulations, 2013.

4. Satellite News Gathering (SNG)

This licence authorizes the operation of a whole fixed or mobile earth station system for the purpose of domestic or international news casting.

Frequency Registration Procedure:

- i. Frequency usage fee is applicable per location.
- ii. Formula applied for the use of the radio frequency spectrum is as stipulated in Division II, first formula titled “Microwave, satellite uplink and downlink and radar” under the Telecommunications (Radio-Communication) Regulations, 2013.

5. Earth Station Weather Satellite (FSW)

This licence authorizes the operation of the earth terminal system used for transceiving weather/climate information of the earth. e.g. meteorological weather satellite.

Frequency Registration Procedure:

- i. Frequency usage fee is applicable per location.
- ii. Formula applied for the use of the radio frequency spectrum is as stipulated in Division II, first formula titled “Microwave, satellite uplink and downlink and radar” under the Telecommunications (Radio-Communication) Regulations, 2013.

6. Land Mobile Earth Station (RSM)

This licence authorizes the operation of a mobile (handheld) earth station capable of surface movement within the geographical limits of the country that connect to orbiting satellite. e.g. satellite phones, BGAN terminal.

Frequency Registration Procedure:

- i. Usage of satellite phones or BGAN must go through Brunei licenced Service Provider, unless the system is a part of Global Maritime Distress and Safety System (GMDSS).

7. Maritime Mobile Earth Station (MSM)

This licence authorizes the operation of a transceiving radio equipment of a maritime mobile satellite services used on-board vessel which it enables to communicate with satellite to provide internet connectivity for on-board vessel.

Frequency Registration Procedure:

- i. All subscriptions for Maritime Mobile Earth Station must go through a Brunei licenced Service Provider.
- ii. The frequency usage fee is applicable per terminal based on the allowed frequency.
- iii. Formula applied for the use of the radio frequency spectrum is as stipulated in Division II, first formula titled “Microwave, satellite uplink and downlink and radar” under the Telecommunications (Radio-Communication) Regulations, 2013.

8. Equipment Fees for Satellite Licences

No	AITI Code	Type and Category	Fee
1	FSS	Earth Station - Satellite Earth Station	See table below
		Satellite Earth Station	
2	FSV	Earth Station - Remote Terminal Earth Stations	See table below
		Very Small Aperture Terminal (VSAT) Aeronautical VSAT (onboard aircraft) Maritime VSAT (onboard vessel)	
3	ASM	Aeronautical Mobile Earth Station	BND \$25.00 per unit
		Aeronautical Earth Station in Motion (A-ESIM)	
4	SNG	Earth Station - Satellite News Gathering	BND \$25.00 per unit
		Satellite system for domestic/international news coverage	
5	FSW	Earth Station - Weather Satellite	See table below
		Weather Satellite for gathering climate information	
6	RSM	Radio Station - LMES (Land Mobile Earth Station)	BND \$25.00 per unit
		Land Mobile Earth Station	
7	MSM	Maritime Mobile Earth Station	BND \$25.00 per unit
		Maritime Earth Station in Motion (M-ESIM)	

For Satellite Earth Station (FSS), Remote Terminal Earth Stations (FSV) and Earth Station Weather Satellite (FSW) licences, the fees are determined by the size of antenna as follows:

Earth Station Antenna Size:	Annual Fees
$X \leq 0.3\text{m}$	BND \$150.00
$0.3\text{m} < X \leq 0.6\text{m}$	BND \$300.00
$0.6\text{m} < X \leq 1.2\text{m}$	BND \$600.00
$1.2\text{m} < X \leq 1.8\text{m}$	BND \$1,200.00
Above 1.8m	BND \$2,400.00

V. Maritime

1. Coast Station (MAF)

This licence authorizes the operation of the transceiving radio used by the coast stations to communicate with ships/vessels or other coastal stations.

Frequency Registration Procedure:

- i. Frequencies of coast stations operating in the Maritime Mobile band allocated in Radio Regulations must be registered. Users are to ensure that they conform to the instructions of operation pertaining to the spot frequencies, channel spacing and mode of operation as specified in Appendices (17, 18 and 25) and Recommendations of the ITU Radio Regulations where appropriate.
- ii. Frequency usage fee is not applicable under the above conditions. Strictly for maritime use only.
- iii. All new Coast Station licencees will be assigned a Call Sign and MMSI from AITI.

2. Ship Station (MAM)

This licence authorizes the operation of the transceiving radio used by ships/vessels which communicates with other vessels, coast stations or satellites (excluding systems defined under Remote Terminal Earth Station).

Frequency Registration Procedure:

- i. Upon application, the applicant is required to provide any supporting document such as authorization letter, Merchant Shipping and/or Licence to Operate (LTO) Documents along with their application.
- ii. Frequencies of ship stations operating in the Maritime Mobile band allocated in Radio Regulations need not be registered. Users are to ensure that they conform to the instructions of operation pertaining to the spot frequencies, channel spacing and mode of operation as specified in Appendices 17, 18 and 25, and Recommendations of the ITU Radio Regulations where appropriate.
- iii. Frequency usage fee is not applicable when using maritime allocated frequencies as mentioned in para (ii) above.
- iv. All new Ship Station licencees will be assigned a Call Sign and MMSI from AITI. However, foreign vessels that have their own Call Sign and MMSI do not need to be assigned new Call Signs or MMSI, unless requested by the applicant.

3. Maritime Mobile M.1174 (MAT)

This licence authorizes the operation of a transceiving maritime mobile radio, specifically walkie-talkies, within their ships and vessels. The frequency band for this maritime mobile radio is restricted to a range between 450MHz and 470MHz as outlined in the ITU Recommendation M.1174 Channelling Plan of the ITU Radio Regulations.

Frequency Registration Procedure:

- i. Upon application, the applicant is required to provide any supporting document such as authorization letter, Merchant Shipping and/or Licence to Operate (LTO) Documents along with their application.
- ii. Users are to ensure that they conform to the instructions pertaining to the spot frequencies, channel spacing and mode of operation as specified in Recommendation M.1174 Channeling Plan of the ITU Radio Regulations where appropriate.
- iii. The frequency usage fee is applied for on-board communications offshore use only.
- iv. Formula applied for the use of the radio frequency spectrum is as stipulated in Part III, Division II titled “Land mobile, trunked radio, telemetry, fixed point-to-point, aeronautical and maritime (localised use)” under the Telecommunications (Radio-communication) Regulations, 2013.

4. Unmanned Surface Vessel (USV)

This licence authorises the individual, companies and/or organisation to operate a industry/ military grade Maritime Unmanned Surface Vessel (USV) vehicle specifically its payload transmitter that uses any licence bands that is determined by AITI.

Frequency Registration Procedure:

- i. The remote controller use to control USV will be licensed under RST.
- ii. The operating licence will be applied to the payload transmitter of the USV.
- iii. Where the connectivity is utilizing a licensed cellular network provider services such as 3G, LTE or 5G, then licence or frequency assignment not needed.
- iv. Formula applied for use of the radio frequency spectrum, use the formula as stipulated in Part III, Division 2 titled “Land mobile, trunked radio, telemetry, fixed point-to-point, aeronautical and maritime (localised use)” under the Telecommunications (Radio-communication) Regulations, 2013.

5. Equipment Fees for Maritime Licences

No	AITI Code	Type and Category	Fee
1	MAF	Maritime Radio - Coast Station	BND \$25.00 per transceiving radio
		Coast Station	
2	MAM	Maritime Radio – Ships Station	BND \$25.00 per transceiving radio
		Ship Station (including EPIRB, AIS) Maritime Mobile (within marine band) Maritime Radar (Onboard vessel) Maritime Mobile Earth Station	
3	MAT	Maritime Mobile M.1174 -	BND \$25.00 per transceiving radio
		Maritime Mobile (within marine band 450MHz and 470MHz)	
4	USV	Unmanned Surface Vehicle (USV)	BND \$25.00 per transceiving radio
		Unmanned Vehicle	

VI. Land

1. Microwave Fixed Station (RSF)

This licence authorizes the operation of equipment that determines the operating frequency and decoding of signals used to communicate with other station. e.g. Outdoor Unit (ODU)

Frequency Registration Procedure:

- i. Frequency usage fee applicable based on approved microwave band plan per location.
- ii. Formula applied for the use of the radio frequency spectrum is as stipulated in Division II, first formula titled “Microwave, satellite uplink and downlink and radar” in Telecommunications (Radio-communication) Regulations, 2013.

2. Aero Model Control (AMC)

This licence authorizes the companies and/or organization to operate an aero model control that is functioned with a remote control outside of the Short Range Device (SRD) lists or high powered SRD (2.4GHz and 5.8GHz).

Frequency Registration Procedure:

- i. If it is not listed under SRD the frequency will be charged according to its band.

3. Repeater Station (RSP)

This licence authorizes the operation of a repeater station, equipment that receives radio signals and regenerates then retransmits. e.g. amateur radio repeater, trunk radio/Walkie-Talkie repeater.

Frequency Registration Procedure:

- i. Frequency usage fee is not applicable to cellular services/trunked radio using Spectrum Right (Spectrum Right formula is Division I), but it is applied per location to other technologies.
- ii. Formula applied for the use of the radio frequency spectrum is as stipulated in Part III, Division II, second formula titled “Land mobile, trunked radio, telemetry, fixed point-to-point, aeronautical and maritime (localised use)” under the Telecommunications (Radio-communication) Regulations, 2013.

4. Base Station (RSB)

This licence authorizes the operation of the transceiving fixed/mobile radio signals. A base station is the higher powered point of connecting/broadcast or serving radio which serves and connects the lower powered individual land radios. e.g. portable high powered manpack, cellular base station, trunk radio/Walkie-Talkie base station (not car based), high structure/tower mounted transmitter, Single Point Mooring (SPM) tower side and Frequency shift repeater (FSR).

For cellular, 3G and 4G is licensed per Radio Unit (RU) or Remote Radio Unit (RRU). For 5G is licensed per Active Antenna Unit (AAU) and RRU. As for Pico Remote Radio Unit (PRRU) will be charged per pBridge/pHub. If a single PRRU is connected directly to the Baseband Unit (BBU) then the PRRU will be charged.

Frequency Registration Procedure:

- i. Frequency usage fee is not applicable to cellular services or trunked radio using Spectrum Right (Spectrum Right formula is Division I). However, fees are applied per location to users other than Spectrum Right owners.
- ii. Formula applied for the use of the radio frequency spectrum is as stipulated in Part III, Division II, second formula titled “Land mobile, trunked radio, telemetry, fixed point-to-point, aeronautical and maritime (localised use)” under the Telecommunications (Radio-communication) Regulations, 2013.
- iii. Special attention to cellular service: Network Operators to provide AITI with the complete station lists (number of units, location name, and coordinates) every quarter.
- iv. Special attention to trunked radio: If application for RSB and RST is made, RSB frequency is to be coordinated at FACSMAB.

5. Land Mobile (RST)

This licence authorizes the operation of a transmitting fixed/mobile radio that is capable of surface movement within the geographical limits of the country. These radios are for point to point or point to base station communication. e.g. trunk radio/Walkie-Talkie car based or handheld.

Frequency Registration Procedure:

- i. Pursuant to regulation 35 of the Radiocommunication Regulation (RR), when applicants request for frequency from AITI, the following must be considered:
 - a. Applicant must have more than fifty (50) units of equipment;
 - b. And/or the requested area does not have available services from a licenced service provider.
- ii. The frequency usage fee is not applicable for trunked radio using Spectrum Right (Spectrum Right formula is Division I).
- iii. For fixed/mobile radio, frequency usage fee is applied per location.
- iv. Formula applied for the use of the radio frequency spectrum is as stipulated in Division II, second formula titled “Land Mobile, trunked radio, telemetry, fixed point-to-point, aeronautical and maritime (localized use)” in Telecommunications (Radio-communication) Regulations, 2013.
- v. Special attention to trunked radio: If application for RSB and RST is made, RSB frequency is to be coordinated at FACSMAB. Where only RST is applied, then its frequency will be coordinated.
- vi. Special attention to radio usage in rural/Search and Rescue (SAR)/maritime: If user operates in rural areas, SAR operations or maritime (rig, barge or vessel), they do not require 50 units to request for frequency (licenced band) from AITI.
- vii. Special attention for walkie-talkie: For walkie-talkies (RST) that are operated in the same location as the repeater (RSP) or base station (RSB), either one of the RST, RSP or RSB can be used to register the frequency.
- viii. Special attention for industrial grade remote controller for UAV/USV: The remote controller used to control the UAV/USV the RST licence will be applied. As for the vehicle payload transmitter the UAV/USV licence will be applied.

6. Equipment Fees for Fixed and Mobile Station Licences

No	AITI Code	Type and Category	Fee
1	RSF	Earth Station - Microwave Fixed Station	BND \$25.00 per unit
		Microwave Station	
2	AMC	Aero Model Control	BND \$25.00 per unit
		High Powered Remote Controller (outside SRD bands)	
3	RST	Radio Station - Land Mobile	BND \$25.00 per unit
		Land Mobile (Portable/Handy/Vehicle Based)	
4	RSP	Radio Station - Repeater Station	BND \$100.00 per unit
		Repeater Station Amateur Radio Repeater Station	
5	RSB	Radio Station - Based Station	BND \$100.00 per unit
		Base Station (Cellular/Fixed High Powered Centre Station)	

Note 1: For RST Land Mobile radios, the applicant must have more than fifty (50) units of equipment and/or the requested area does not have available services from a licenced service provider.

VII. Radio-determination

1. Radio Determination (RSR)

This licence authorizes the operation of a station for the purpose of transceiving signals for determining the position, velocity or other characteristics of an object (land base short range radar system), or the obtaining of information relating to these parameters. e.g. survey equipment, telemetry, speed trap, Single Point Mooring (SPM) buoy side.

Frequency Registration Procedure:

- Frequency usage fee is not applied to cellular usage using Spectrum Right (Spectrum Right formula is Division I), but it is applied per location to other technology.
- Formula applied for the use of the radio frequency spectrum is as stipulated in Division II, first formula titled "Microwave, satellite uplink and downlink and radar" in Telecommunications (Radio-communication) Regulations, 2013.

2. Maritime Radar (RDM/RDN)

This licence authorizes the operation of a radio determination system by using reference signals with radio signals reflected, or retransmitted, from the position to determine the position of object or the condition of the environment in the maritime. e.g. maritime coastal/vessel radar system.

Frequency Registration Procedure:

- i. Frequencies used by radio-location and radio-navigation systems installed on board ships in the Radiolocation and Radio-navigation bands (UHF, S and X Bands) need not be registered. For land based marine radar systems, frequency requires registration and coordination.
- ii. For above 1GHz, formula applied for the use of the radio frequency spectrum is as stipulated in Division II, first formula titled “Microwave, satellite uplink and downlink and radar in Telecommunications (Radio-communications) Regulations, 2013.
- iii. For below 1GHz, formula applied for the use of the radio frequency spectrum is as stipulated in Part III, Division II, second formula titled “Land mobile, trunked radio, telemetry, fixed point-to-point, aeronautical and maritime (localised use)” under the Telecommunications (Radio-communication) Regulations, 2013.

3. Aeronautical Radar (RDR/RDB)

This licence authorizes the operation of a radio determination system by using reference signals with radio signals reflected, or retransmitted, from the position to determine the position of object or the condition of the environment in the airspace/atmosphere. e.g. weather Doppler radar, aeronautical primary (echo location) and secondary (intelligent signal response) radar.

Frequency Registration Procedure:

- i. Frequency usage fee is applied and charged per location.
- ii. For above 1GHz, formula applied for the use of the radio frequency spectrum is as stipulated in Division II, first formula titled “Microwave, satellite uplink and downlink and radar” in Telecommunications (Radio-communication) Regulations, 2013.
- iii. For below 1GHz, formula applied for the use of the radio frequency spectrum is as stipulated in Part III, Division II, second formula titled “Land mobile, trunked radio, telemetry, fixed point-to-point, aeronautical and maritime (localised use)” under the Telecommunications (Radio-communication) Regulations, 2013.

4. Equipment Fees for Radio-determination Licences

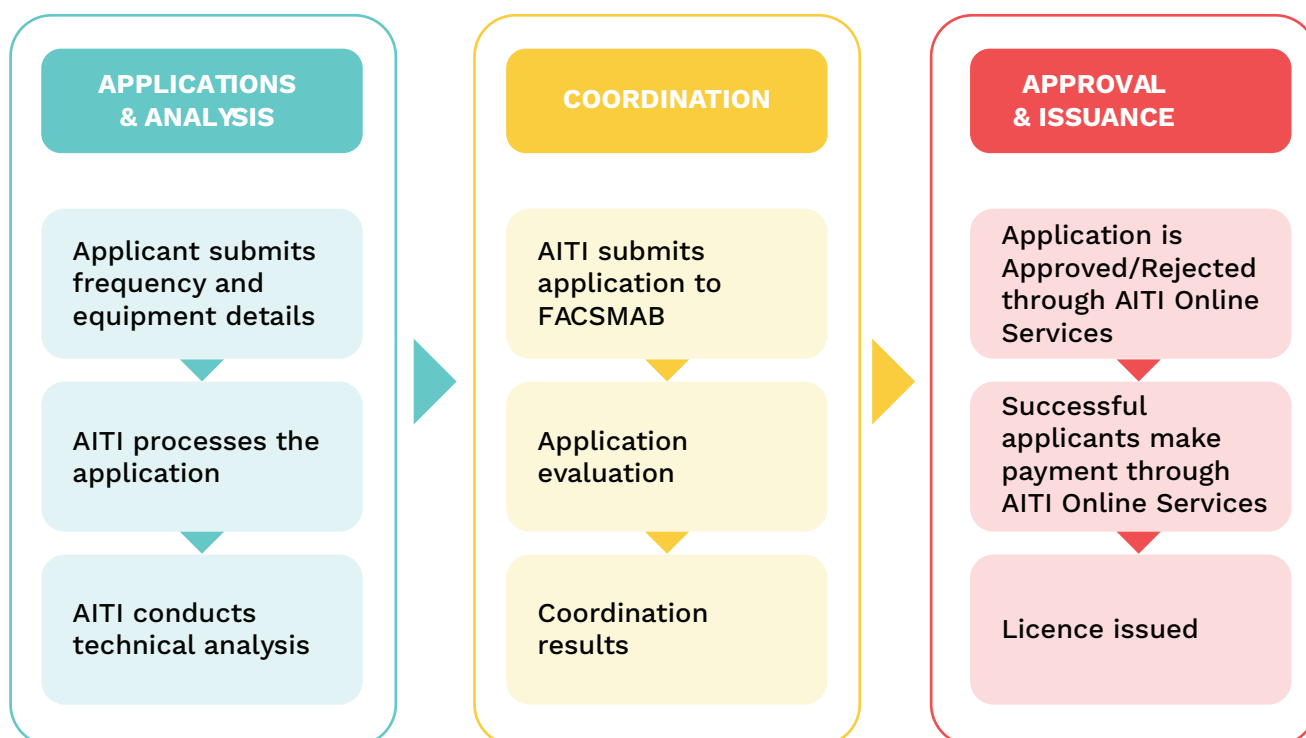
No	AITI Code	Type and Category	Fee
1	RSR	Radio Station - Radio Determination	BND \$25.00 per unit
		Radionavigation radiolocation Radiodetermination fixed	
2	RDM/ RDN	Radar Station - Maritime Radar	BND \$25.00 per unit
		Vessel radar Coastal radar	
3	RDR/ RDB	Radar Station - Aeronautical Radar	BND \$2,400.00 per unit
		Meteorological radar Aeronautical radar	

Frequency Assignment

To ensure management of interference on a regional level, AITI coordinates the frequency applications with Malaysia and Singapore in the monthly FACSMAB (Frequency Assignment and Coordination, Singapore, Malaysia and Brunei Darussalam) Meeting and the application is subject to approval from FACSMAB Members. The timeline from frequency application submission to issuance of licence is estimated to be **up to 45 days** in order to account for the monthly FACSMAB Meetings and cut off times for application submission for the cycle.

1. Frequency Assignment Coordination Procedure

The procedure for FACSMAB Frequency Coordination from Application to Approval is shown in the diagram below;



II. Application & Analysis

a) Applicant submits frequency and equipment details

- i. Applicant submits New licence or Add Frequency application on AITI Online Services.
- ii. AITI Officer will check if the frequency and equipment applied are valid according to Brunei Darussalam Radio Spectrum Plan 2019.
- iii. If applicant requires any assistance in submitting applications, they may seek advice from AITI's Frequency Assignment officers at frequency.assignment@aiti.gov.bn and provide full details of the equipment and frequency they wish to apply.

b) Processing of Application by AITI

- i. AITI Officer will check the application if the details and parameters provided are complete. If incomplete, the AITI Officer will submit the application for clarification to the Applicant.
- ii. Once completed application is submitted, AITI will prepare the application for technical analysis.

c) Technical Analysis by AITI

- i. AITI Officer will conduct the technical analysis of the frequency applied against the existing frequencies in the country and from neighboring countries.
- ii. If any issues arise with the submitted parameters, AITI will submit the application for clarification to the Applicant, and suggest new parameters to the Applicant.

III. Coordination

a) Submission of Application to FACSMAB by AITI

- i. Complete application is then submitted to FACSMAB for coordination to ensure management of interference on a regional level.
- ii. If application is submitted past the cut-off date for the monthly coordination, it will be deferred to the following months submission.

b) Evaluation by FACSMAB

- i. The submitted frequency application will be evaluated by FACSMAB.
- ii. Results of evaluation will be presented during FACSMAB Meetings.

c) Coordination results

- i. AITI Officer will inform the applicant of the results from FACSMAB Meeting.
- ii. Successful applications will be approved on AITI Online Services.
- iii. Unsuccessful applications through FACSMAB will be brought back to the applicant for further discussion and revision of the technical parameters.

IV. Approval & Issuance

a) Application is Approved/Rejected through AITI Online Services

- i. Applications that were successful will be approved on AITI Online Services.
- ii. If frequency is unable to be used following the discussion at FACSMAB, as well as discussions between applicant and AITI Officers, then the application will be rejected.

b) Successful applicants make payment through AITI Online Services

- i. Following Approval of the application, the Applicant may create their own invoice on their AITI Online Services portal.

c) Licence issued

- i. Once the payment has been made in full, the licence will be issued through AITI Online Services.

Radio Frequency Spectrum Fees

On 29 September 2022, AITI implemented new Spectrum fees for the usage of Radio Frequency Spectrum. Spectrum fees are divided into two fees:

- i. The initial application fee;
- ii. The spectrum usage fee.

By introducing Spectrum fees the Authority aims to:

- i. Ensure efficient use of Radio Frequency Spectrum;
- ii. Reduce spectrum hoarding;
- iii. Ensure fair opportunities to spectrum access; and
- iv. Encourage introduction of new technologies.

All new applications are subject to application fee and spectrum usage fee. All frequencies are charged per band and per location.

I. Temporary Frequency Usage

The term for Temporary Frequency Usage is no more than 3 (three) months.

a) Temporary Frequency Application Fees

Description	Fees
Temporary use	BND \$1,000.00

b) Temporary Frequency Usage Fee for Public Telecommunication Infrastructure and Service

Description	Fees
Per 1MHz of occupied band-width	BND \$1,000.00

c) Temporary Frequency Usage Fees

Description	Fees
$X \leq 25 \text{ kHz}$	BND \$100.00
$25 \text{ kHz} \leq X \leq 500 \text{ kHz}$	BND \$150.00
$500 \text{ kHz} \leq X \leq 1 \text{ MHz}$	BND \$200.00
$1 \text{ MHz} \leq X \leq 20 \text{ MHz}$	BND \$400.00
$X \geq 20 \text{ MHz}$	BND \$700.00

II. Annual Licence

The term for Annual licence is one (1) year.

a) Annual Licence Frequency Application Fees

Bandwidth (X)	Fees
All other frequencies	
$X \leq 25 \text{ kHz}$	BND \$290.00
$25 \text{ kHz} \leq X \leq 500 \text{ kHz}$	BND \$450.00
$500 \text{ kHz} \leq X \leq 1 \text{ MHz}$	BND \$700.00
$1 \text{ MHz} \leq X \leq 20 \text{ MHz}$	BND \$900.00
$X \geq 20 \text{ MHz}$	BND \$1,200.00
Satellite	
Uplink	BND \$500.00
Downlink	BND \$500.00

b) Annual Licence Frequency Usage Fees

The spectrum usage fees have been divided into four categories as shown below:-

Division I

Broadcasting, cellular, land mobile or trunked radio, wireless broadband access

Annual radio frequency spectrum fee = (Unit Price) (B) (K1)

Unit Price = BND 1,000

B = $B_{UP} + B_{DOWN}$ (assigned bandwidth in MHz or spectrum size in MHz)

Description/Band factor	K1
TV band	1.0
4.8 GHz to 7.1 GHz band (Cellular and WBA)	4.0
Radio band	6.0
2.3 GHz to 4.7 GHz band (Cellular and WBA)	8.0
1.1 GHz to 2.2 GHz band (Cellular and WBA) and land mobile or trunked radio (non-localised use)	10.0
450 MHz to 1 GHz band (Cellular and WBA)	12.0

Division II

Microwave, satellite uplink and downlink and radar

Annual fee per hop = **Unit price (F1) (F2) (N)**

Unit Price = BND 500

N = Total Number of RF Channels

Band factor	F1
1 - 4 GHz	1.2
5 - 8 GHz	1.0
9 - 14 GHz	0.8
15 - 18 GHz	0.7
19 GHz and above	0.5

Bandwidth Factor	F2
$X \leq 7$ MHz	2
$7\text{MHz} < X \leq 14$ MHz	4
14 MHz $< X \leq 28$ MHz	6
Above 28 MHz	8

Land Mobile, trunked radio, telemetry, fixed point-to-point, aeronautical and maritime (localized use)

Annual fee per channel = **BND 75 per 12.5 kHz of occupied bandwidth**

Fixed fee: high frequency (3 MHz – 30 MHz)

Annual fee per channel = **BND 50 (fixed fee)**

The Fee Calculator allows calculation of applicable fees for AITI online services. The link to fee calculator can be accessed by clicking [here](#).