St Helena

Application Form for Licence for:

a Permanent Earth Station (PES), a Telemetry Tracking and Command Earth Station (TT&C) or a Receive Only Earth Stations (ROES), or the respective Temporary Authorisations.

PREAMBLE

1. Introduction

The provisions given below may not be complete and provide only a guidance.

The St Helena Government (SHG) reserves the right to wave, grant, or refuse a licence request, and reserves the right to annul or modify the conditions and fees. From time to time, fees are subject to review.

2. Definitions

- a. Fixed Satellite Service: A radiocommunication service between earth stations at given positions, when one or more satellites are used; the given position may be a specified fixed point or any fixed point within specified areas; in some cases this service includes satellite to-satellite links, which may also be operated in the inter-satellite service; the fixed-satellite service may also include feeder links for other space radiocommunication service
- **b.** Earth station: The ITU definition of an earth station applies, i.e.:
 - i. A station located either on the Earth's surface or within the major portion of the earth's atmosphere and intended for communication with one or more space stations; or with one or more stations of the same kind by means of one or more reflecting satellites or other objects in space.
 - ii. ITU Regulations require that receiving stations should use equipment with technical characteristics appropriate for the class of emission concerned; in particular, selectivity should be appropriate having regard to RR No. 3.9 on the bandwidth of emissions.
 - iii. For the purpose of licensing by the Authority of St. Helena, other technical limitations on the earth station characteristics may apply.

Earth Station Licences for operation in the Fixed Satellite Service bands typically provide for radio transmissions (uplinks) to specific orbital satellite positions, using transponders or spot frequencies that have been independently assigned by satellite operators.

- **c. Permanent Earth Station (PES):** For the purposes of Licensing by the authority of St Helena, a PES is defined as being an earth station:
 - i. whose antenna(s) is(are) fixed on the ground and are connected by appropriate radio spectrum to one or more satellites;
 - ii. whose transmit (Tx) and receive (Rx) frequencies conform to SHG's frequency allocations and the ITU table of allocation (see Article 5 of the ITU Radio Regulations)

- and allocated to the Fixed Satellite Service (FSS), Space Operation Service (SOS), Mobile Satellite Service (MSS), Broadcasting Satellite Service (BSS), Earth Exploration Satellite Service (EESS) and Space Research Service (SRS);
- iii. which provide feeder-link connectivity to satellites that off-load and up-load data/ information (through its radio frequency signals) between the satellite segment and the ground network access points;
- iv. which provides a radio link to a single satellite or multiple satellites in the geostationary orbit (GSO), or non-geostationary orbit (NGSO) that have been brought into use as notified to the ITU, or intended to be in less than 2 years from the date of the application;
- v. and, which is not intended to provide any communication services to the public.
- **d. Telemetry Tracking and Command (TT&C) Station:** For the purposes of Licensing by the authority of St Helena, a TT&C Station is defined as being an earth station:
 - i. whose antenna(s) is(are) fixed on the ground and are connected by appropriate radio spectrum to one or more satellites;
 - ii. whose transmit (Tx) and receive (Rx) frequencies conform to SHG's frequency allocations and the ITU table of allocation (see Article 5 of the ITU Radio Regulations) and allocated to the Fixed Satellite Service (FSS), Space Operation Service (SOS), Mobile Satellite Service (MSS), Broadcasting Satellite Service (BSS), Earth Exploration Satellite Service (EESS) and Space Research Service (SRS);
 - which provide Telemetry, Tracking and Command (TT&C) capabilities, for the provision and determination of spacecraft position, health and its manoeuvring in space, and/or controlling the spacecraft payload;
 - iv. which provides a radio link to a single satellite or multiple satellites in the geostationary orbit (GSO), or non-geostationary orbit (NGSO) that have been brought into use as notified to the ITU, or intended to be in less than 2 years from the date of the application;
 - v. and, which is not intended to provide any communication services to the public.
- **e. Receive Only Earth Station (ROES):** For the purposes of Licensing by the authority of St Helena, a Receive Only Earth Station is defined as being an earth station:
 - i. whose receive antenna(s) is(are) fixed on the ground and are connected by appropriate radio spectrum to one or more satellites;
 - ii. whose receive (Rx) frequencies conform to SHG's frequency allocations and the ITU table of allocation (see Article 5 of the ITU Radio Regulations) and allocated to the Fixed Satellite Service (FSS) in 3600-4200 MHz, or Meteorological Satellite Service, or Earth Exploration Satellite Service or Space Research Service (SRS) in 1670-1710 MHz, 7750-7900 MHz and 25.5-26.5 GHz;
 - iii. that operate with the aim to provide connectivity to satellites (such as off-load data and information from a space station), or provides telemetry/tracking signals for monitoring the health and control of the spacecraft;
 - iv. which provides a radio link to a single satellite or multiple satellites in the geostationary orbit (GSO), or non-geostationary orbit (NGSO) respectively, that have been brought into use as notified to the ITU, or intended to be in less than 2 years from the date of the application.
- **f. Satellite System:** is defined as a space system using one of more satellites.

- **g. Satellite Network:** is defined as a satellite system or a part of a satellite system consisting of only one satellite and the cooperating earth stations.
- **h. Geostationary Orbit (GSO)**: the orbit of a spacecraft that lies on the equatorial plane of the Earth and at radius from the centre of the Earth of 42,164 km, and whose altitude from the mean sea level is 35,786 km. A space object on the GSO will have the same angular rotation with the Earth rotation and thus remain fixed in the sky as seen from someone on the Earth.
- i. Geostationary satellite: a space object located on the geostationary orbit at a given longitude (the geocentric angle from the Greenwich meridian to the space object). A GSO satellite is seen to be remaining at a fixed position in the sky, usually measured by its azimuth (Az) and its elevation (el).
- j. Non-Geostationary Orbit (NGSO): an orbit that is not GSO, and thus any space craft on such orbit will not be fixed with to the Earth's rotation. There are many types of NGSO, such as Low Earth orbit (LEO), Medium Earth orbit (MEO), High Elliptical orbit (HEO). Some NGSO can also be circular (radius is constant or eccentricity is zero), or elliptical (eccentricity is greater than 0 and no more than 1).
- **k. Non-Geostationary satellite**: a space object located at a NGSO. This means that the azimuth, elevation and distance from any point on the Earth surface change all the time.
- 3. With regard to radiocommunications equipment, the **Telecommunications Ordinance** (as modified in 2020/21) provides that an individual licence is required for the installation or use of a permanent Earth station (PES), **Telemetry Tracking and Command (TT&C) and Receive Only Earth Stations (ROES)** unless the said equipment is licence exempt. Non-compliance with this requirement is a breach of the said Ordinance.
- 4. **Receive Only Earth Stations** are usually exempt from such licensing, and as such these facilities are not protected. For those operators that require a licence, the Ordinance provides for a licence for ROES to recognise the use of the receive spectrum by such stations.
- 5. The ROES operator may **voluntarily inform** SHG of their ROES unprotected installations and operations.
- 6. The SHG can issue a **Temporary licence** with the following conditions:
 - a. The application form is duly filled in and submitted;
 - b. The operation of the equipment is on a non-interference and non-protected basis;
 - c. The payment of the required fee is made after the application is submitted. Proof of payment must be provided;
 - d. Such authorisation will be valid from the date when SHG receive notice that the applicable fees (See Annex 1) have been paid and up to a maximum period of 6 months thereafter.
 - e. A letter document with the Temporary licence will be issued to the licensee.
 - f. The licence can be renewed, through a new application, and subject to a case by case review.

- g. ROES do not require a Temporary licence and can operate freely on a non-interference and non-protected basis.
- 7. The radiocommunications PES, TT&C Station or ROES licences, issued under the said Ordinance does not authorise the provision of other electronic communications services / networks. A separate authorisation is required for the provision of other services / networks.
- 8. Refer to Attachment 1 to this Form for information on **fees/charges** to the PES, TT&C Station and ROES licences.
- 9. As the island of St Helena is many hundreds of kilometres from any nearby country, there is no need to perform any international terrestrial coordination with such countries.
- 10. The operator **must not establish, install and operate** any PES **and/or TT&C Station** unless it has obtained a licence from the St Helena Government.
- 11. Once the application for a full PES, TT&C Station or ROES licence is submitted, the SHG will endeavour to issue a radiocommunications PES, TT&C Station or ROES licence within 60 days from the receipt of the correctly completed form and payment of the applicable fees.
 - **a.** Administrative fee: The Administrative fee of the application must be paid before the licence is submitted as per Table in Annex 1 and evidence of such payment must be provided with this application. Such fee is not reimbursable;
 - **b.** Licence fee: Upon examination of the licence application, the applicant will receive an invoice for the payment of the licence fee. The licence will be issued once such fee is paid.
- 12. When the application is submitted, the SHG will determine if the applicant may have to perform frequency coordination with other users of the spectrum. Only if there is a requirement to coordinate with other SHG government bodies, SHG will request the applicant to perform such coordination. If applicable, only after such coordination is terminated can SHG issue the PES, TT&C Station or ROES licence. The applicant could request the issuance of a temporary licence (on a non-interference and non-protected basis) while such coordination is being finalised. SHG may or may not issue such Temporary licence.
- 13. SHG **shall not be held liable** in any way if a radiocommunications PES, TT&C Station or ROES licence, is issued after the aforesaid 60-day period.
- 14. Duly completed applications must be sent to the St Helena Authority by email, at the email provided below. Incomplete applications will be returned to the applicant. Email of the SHG:

- Title: Karen Yon

Email address: Karen.Yon@sainthelena.gov.sh

- 15. Once the licence is issued, or while the application is being processed by SHG, **any changes** to be affected to the installations of the applicant must be notified to SHG as soon as possible. Such notification may cancel or delay further the issuance of the application.
- 16. **Renewal of Licence**: Within 60 days before the period of validity of the licence ends, the licensee may request to renew the licence for the Permanent Earth Station, TT&C Earth station, or Receive Only Earth Stations by submitting a formal letter to SHG requesting its renewal and stating also that nothing has changed from its current licence. In such case, no new application form is required. Within 30 days of receiving the letter, SHG will issue a response letter to the licensee informing that the licence has been either granted or cancelled (for reasons to be provided by SHG). The applicant will provide proof that the appropriate fees have been paid.
- 17. Once the applicant receives the PES, TT&C Station or ROES licence, any changes to the licence conditions, equipment operations or technical characteristics, etcetera, must be reported to the SHG immediately. Failing to do so may annul the licence.
- 18. This application and its information will be treated **confidentially**, unless the court of St Helena requires to disclose it for legal purposes.

APPLICATION FORM

Part A: Applicant's Details

A.1	Type of Licence requested, mar	k an X in one box:
	 New PES and/or TT&C Static Variation of Existing PES and Temporary PES and/or TT&C New ROES Licence Variation of Existing ROES L Temporary ROES Licence 	d/or TT&C Station Licence C Licence
A.2 Name	General Information of Person or Entity in whose Name the L	icence is required, and Trade Name if applicable.
	ame of Person or Entity] ade Name]	
Passp	ort Number, Tax Number or Company Re ch a photocopy of such document(s) to th	_
. [Pa	assport, Tax or Company Registration number]
Addre	ess	
Telep	hone	Mobile
E-mai	il	

A.3 Is the billing address same as above? Yes				
f No, provide the details of the billing address.				
·				
Note that if the contact should change, you should notif	ry the St Helena Registrar immediately in writing.			
A.4 Administrative contact point, if differ	ent than above			
Name	Surname			
Telephone	Mobile			
E-mail				
Note that if the contact should change, you should notif	ry the St Helena Registrar immediately in writing.			
A.5 Technical contact point, if different th	an above			
Name	Surname			
Telephone	Mobile			
E-mail				

Note that if the contact should change, you should notify the St Helena Registrar immediately in writing.

Part B: Information regarding the Network / Service provided

B.1 State the purpose of use of the PES / TT&C Station / ROES and provide details on the type of services to be delivered						
· · · · ·						
		ovided (e.g., Fixed Satelli ice, Amateur, Satellite Se	te Service, Mobile Satellite ervice)			
B.3 Is the installation	of the earth station	temporary or permanent?				
Temporar	Ту					
Permaner	nt					
a) If permanent, what i	s the intended start dat	te of the operations?				
Period start (DD/MM/	YY)					
	b) If Temporary, then provide information on the timeframe for which a licence is being requested and why (note that the maximum licensing period is 6 months and then it can be reapplied for only once more)					
Period start (DD/MM/YY) Period end (DD/MM/YY)						
B.4 Fee Payment State the fees payable f	or your application (as	per Fees in Annex 1)				
Band and Satellite type	Rand and Satellite type Number of Antennas Administrative fee payable Total Yearly Spectrum use fee					
		(GBP)	payable (GBP)			

	TOTAL:	TOTAL:

Note: The Application fees must be paid before the submission of this application. Proof must be provided at submission stage.

Part C: Technical Information - Satellite Network, or Satellite System

a)	ITU Fili	ing Denomination
b)	ITU Cir	rcular
c)	ITU Cir	cular Number
d)	Notifvi	ing Administration
,	,	
e)	Name	of Satellite Operator
f)	Addres	ss of the Satellite Operator
g)	Satellit	te Network/System Information i. GSO Satellite Information (if applicable) Satellite Network Name
	ii)	Orbit Longitude (deg)
	i)	ii. NGSO Satellite Information (if applicable) Satellite System Name
	ii)	Orbit Height (km)
	iii)	Number of Satellites

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h) Status of Notification and Bringing into Use of the Satellite Network/System
1	
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iv) Number of Orbital Planes

PART D: Technical Information of the PES, TT&C Station or ROES

C.1 Administrative information	
a) Earth station site name	
b) Earth station site operator's name	
c) Station's site operator point of contact	
Name	Surname
Telephone	Mobile
E-mail	
d) Station's site address of the proposed site of the ante	nna installation(s)
e) Attach to this application form a map / diagram / plandeployed/located at the above address	n of where the antenna(s) will be
f) Geographical coordinates of the centre point of the St	ation site
i. Latitude South	Deg Min · Sec
ii. Longitude West	Deg Min Sec
g) Number of Stations at the Station site	

h)	Number of antennas at the Station site, if different than "g." above	
i)	Details on the type of radio equipment (where applicable) and the schematic of Station site. Submit separate pages if necessary.	installations on the
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PART E: Additional Information

- Payment of the Administrative fee must be done before submitting this application.
 Annex 1 provides the fees for such Administrative fees. If you require a receipt please ask the SHG office.
- 2. Additional information in Annex 2 must be submitted with this application. Failure to submit this information may delay the issuance of the licence.

C.2 Provide technical information for each Station/Antenna. If installing more than one Station/Antenna, repeat this page for each of the stations. For ROES, provide only the Receive Antenna information.

a) For each antenna, if more than one

	Antenna Location				
Antenna Number	Latitude	Longitude	Antenna Base height above sea level (m)	Height of antenna centre from antenna base (m)	

Note: Antenna Number (sequential starting from 1)

a. For GSO:

Station Elevation (deg)	Station Azimuth (deg)		

b. For NGSO:

Station Minimum Elevation (deg)	Station Maximum Elevation (deg)	Station Azimuth Range (deg)	

b) Antenna Parameters

	Antenna or Dish Size (m)	Transmit		Receive		
Antenna Type		Tx Peak Gain (dBi)	Tx 3dB Beamwidth (deg)	Rx peak Gain (dBi)	Rx 3dB Beamwidth (deg)	System Noise temperature (K)

Total losses (line + feeder) for Transmit Antenna (dB)	Total losses (line + feeder) for Receive Antenna (dB)		

c) Reference antenna radiation pattern

Transmit Reference Antenna radiation pattern	Receive Reference Antenna radiation pattern			

Input in table above if known (e.g., ITU-R Recommendation S.580). If not known, provide the antenna radiation diagram on a separate sheet.

d) Transmit Radio Parameters

Transmit Carrier Frequency								
Lower Frequency Boundary	Upper Frequency Boundary	Authorised Bandwidth (MHz)	Polarisation	Modulation Type	Emission Code	Maximum Input Power to Antenna	Maxim um EIRP (dBW)	Maximum EIRP spectral density (dBW/Hz)
(kHz/MHz/GHz)						Feed (dBW)		
			•••	•••	•••			

e) Receive Antenna Parameters

Receive Car	Receive Carrier Frequency						
Lower Frequency Boundary	Upper Frequency Boundary	Authorised Maximum Filter Bandwidth	Authorised Signal Bandwidth (MHz)	Polarisation	Modulation Type	Emission Code	Minimum Signal (C/N₀) (dB.Hz)
(kHz/MHz/GHz)		(kHz/MHz)					()

Part E: Declaration

By submitting this application and ticking this consent box, I ar	n hereby:
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- a. Grant explicit consent to the St Helena Government to process my personal information solely for the purpose of processing this application.
- b. Grant explicit consent to disclose the information contained in this application to any government official, or entity (such as St Helena Airport Ltd or the Civil Aviation Authority)
- c. Declare that you have read and understood the Preamble section and Annexes to this form;
- d. Declare that the information provided in this application is accurate and complete in all respect.
- e. Declare that I am authorised to submit this application.
- f. Grant my explicit consent to the St Helena Authority to disclose the technical information contained in my application for frequency coordination and registration purposes.

Date of application (DD/MM/YY)	
Full name of signatory	
Title	
Passport Nationality and Number	
On behalf of (if applicable)	
Signature in full	
(Electronic signatures are accepted)	

ANNEXES

ANNEX 1: Fees for PES, TT&C Station and ROES licence

1. Applicable Fees

	Band and Satelli	te type	Administrative fee per application per Band (GBP)	Yearly Spectrum use fee per Antenna per Band (GBP)
	C-band	GSO		8,500
	2 22	NGSO		2,500
	Ku-band	GSO	1000	5,000
		NGSO		1,500
	Ka-band	GSO		3,500
	i ka sana	NGSO		1,000
Permanent	Amateur Satellite Ser	vice (AMSS)	10	25
Earth Stations	< 1 GHz (UHF/VHF)			
Stations	Mobile Satellite Ser	vice (MSS)		
	Earth Exploration Satellit	e Service (EESS)	250	500
	Space Operation Se	rvice (SOS)		
	Space Research Ser	vice (SRS)		
	Earth Exploration (EESS)	1 to < 3 GHz	500	750
	Space Operation (SOS)	3 to < 10 GHz	500	750
	Space Research (SRS)	10 to 31 GHz	500	750
TT&C Earth	TT&C Earth <3 GHz		250	750
Stations	≥ 3 GHz		250	750
	Meteorological and EESS	1690-1710 MHz	250	750
Receive Only Earth	Monitoring Stations	3600-4200 MHz	250	750
Stations	Meteorological and EESS	7750-7900 MHz	250	750
	Meteorological and EESS	25.5-26.6 GHz	250	750

2. Fees for temporary (non-commercial) application of PES, TT&C Station or ROES licence

a. The fees for the temporary application, whose validity is 6 months are 150 GBP/SHP

3. Payment of Administrative fees:

Bank Transfer information are as follows:

- Within St Helena Bank of St Helena; Account Name: SHG Receivables,
 Reference: 'Earth Station Licence [NAME]'. Acc: 61000003.
- From the UK Natwest Bank, London, Sort code: 60-83-68 for CHAPS
 & BACS, Account name: Crown Agents Bank. Account number:
 33770030. Reference: SHG General Account 33770030. Crown Agents
 Bank, St. Nicholas House, Sutton, Surrey, SM1 1EL, United Kingdom
- From outside the UK or St Helena: Natwest Bank, London, SWIFT:
 NWBKGB2L. Account name: Crown Agents Bank. SWIFT: CRASGB2L.

 International Bank Account Number (IBAN):
 GB30CRAS60836833770030. Reference: SHG General Account
 33770030

If there are any queries then contact Bank of St Helena or Crown Agents Bank. Note that a £2.50 charge will be payable to Crown Agents.

ANNEX 2: Additional documents to submit with this application, if applicable

- 1. Frequency coordination (of PES, TT&C Station or ROES) with other spectrum users in St Helena, if applicable:
 - a. Provide a written statement which details the results of such coordination.
- 2. For the Out-of-Band and Spurious emissions limitations of PES, TT&C Station installation:
 - a. Provide a written statement that the equipment complies with relevant limits of ITU-R Recommendations¹ or equivalent.
- 3. Receiver Filter: For PES, TT&C Station and ROES, the SHG strongly encourages the applicant to adopt a receiver filter for each channel used, to ensure efficient use of spectrum and protection of its installation from adjacent band interference.
 - a. Provide a written statement on the status of the above filter(s).
- 4. For the EMF (electro-magnetic force) limitations of PES, TT&C Station installation:
 - a. Provide a written statement which states that the PES, TT&C Station equipment (which includes all of its structure, cables, antennas, etc.) complies with either the EU COUNCIL RECOMMENDATION (1999/519/EC-12 July 1999)², or ICNIRP³ guidelines.
- 5. For PES, TT&C Station the limitations due to airport proximity:
 - a. Provider a written statement which states that the equipment complies with the ECC Report 272⁴.
 - b. Provide relevant technical analysis that shows the situation.
- 6. ITU satellite coordination, if applicable.
 - a. Provide a brief status of the ITU coordination of the satellite system/network that the PES, TT&C Station or ROES will connect to.
- 7. Provide evidence that the Application fee of the application has been paid.

¹ ITU-R Recommendation SM.329, "Unwanted emissions in the spurious domain". ITU-R Recommendation SM.1540,

[&]quot;Unwanted emissions in the out-of-band domain falling into adjacent allocated bands". ITU-R Recommendation SM.1541, "Unwanted emissions in the out-of-band domain".

²https://op.europa.eu/en/publication-detail/-/publication/9509b04f-1df0-4221-bfa2-c7af77975556/language-en

³ International Commission on Non-Ionizing Radiation Protection

⁴https://www.ecodocdb.dk/document/1028

ANNEX 3: Checklist to support the application process

This checklist is offered as a guidance on the application process.

•	Have you filled in the Application form relevant to your needs?	
• for	Have you provided the information in Annex 2 of the Application m?	
•	Have you paid the Administrative fees?	
•	Do you need a receipt for the Administrative fee payment?	
• fee	If you request of a receipt for payment of the Administrative e, have you sent a request to SHG?	
•	Have you submitted the Licence Application form?	
•	Have you received the invoice from SHG to pay the Licence fees?	
	If more than 60 days passed since you submitted an Application m, and have not received the Licence, you can send an email to G to get an update on the licence process.	
• ser	Have you received a request to coordinate with terrestrial vices in St Helena?	
	If yes, coordinate with such services and once concluded, informe SHG.	
• sat	Has the Satellite Operator provided status of coordination of its cellite system/network?	
•	If yes, provide this to SHG.	