

APPLICATION FORM

Fixed Satellite Earth Station Licences in the Fixed Satellite Service in Spectrum Above 3GHz

Teleport Facility Licence

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NOTES FOR APPLICANTS FOR TELEPORT FACILITY LICENCE

- 1. Please refer to the Guidelines Document (01/32) prior to completing this application form.
- 2. Part 1 of the application form covers general details of the applicant and of the Teleport Facility, and must be completed in all cases.
- 3. Part 2 of the application form relates to the technical aspects of the individual satellite earth stations that form part of the Teleport Facility. Part 2 Section I must be completed once for each individual satellite earth station of the Teleport Facility. Section II must also be completed for each of the satellite earth stations that require international co-ordination. A complete guide to individual questions contained within Part II can be found in Annex 1.
- 4. Part 3 of the application form is a declaration by the applicant and must be completed in all cases.
- 5. A Co-ordination Fee must be submitted along with the completed application form of €100,000

For additional information on the calculation of fees due see Section 10 and Annex G of the Guidelines.

- 6. Your application will be evaluated on the material in the application form together with any supplementary information requested by the Commission.
- 7. A Wireless Telegraphy Licence issued under these regulations does not absolve the licensee from complying with any other statutory obligations. Thus, it may also be necessary to apply for a telecommunications service licence¹.
- 8. Every effort will be made to process applications quickly so that licences can be issued at the earliest possible date. To facilitate speed of processing, please ensure that your application is complete and clearly set out. Incomplete applications may be returned requiring resubmission.

¹ See ComReg web site: <u>http://www.comreg.ie/</u> for information on telecommunications service licences.

APPLICATION FOR TELEPORT FACILITY LICENCE

ALL SHADED SECTIONS MUST BE COMPLETED

PART 1

GENERAL INFORMATION

Contact Details

APPLICANT DETAILS

1.	Full Name of the Company, firm or person	
2.	Registered Number in the Companies Registration Office	
3.	Business Address	
4.	Phone No.	
5.	Fax No.	
6.	E-mail	
7.	Address to which the licence is to be sent, if different from above	

CONTACT DETAILS²

1.	Name	
2.	Business Address	
3.	Phone No.	
4.	Fax No.	
5.	E-Mail	

 $^{^{2}}$ If the contact person is not the same as the person(s) in the Applicant Details section, the applicant must nominate a technical contact who will be in a position to act for the applicant and to furnish information about the application if called upon to do so.

GENERAL LICENCE DETAILS

Type of Service		
	s of all types of ser of each satellite earth s	

2. Other Licences

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Please indicate which of the following licences are held/have been applied for by the applicant:

- General Telecommunications Licence
- Basic Telecommunications Licence
- Other Licence(s) Please specify, giving details including reference number and date of issue:

³ For example: Voice, Data, Video, Internet, etc.

3.	Please tick the appropriate box)
	□ New Teleport Facility Licence
	□ Modification to an existing Teleport Facility Licence
4.	Number of earth stations in Teleport Facility:
5.	Intended date of bringing Teleport Facility into use: D M Y
6.	Name of Location of Teleport Facility ⁴ :

⁴Location of central control of teleport facility

PART 2

SECTION I: Earth Station Details

To be completed for each satellite earth station to be licensed as part of the Teleport Facility.

1. Earth Station Reference Name:

2. Earth Station Details	
2.1 : Intended date of bringing Earth Station into	operation: D M Y
2.2: Longitude: Degrees W	2.3: Latitude: Degrees
2.4: Site Height (a.s.l)	2.5: Antenna Height (a.g.l)

3. Frequency, Bandwidth & Emission Details				
Transmit Carrier Frequency (MHz)	Transmit Bandwidth (kHz)	Receive Carrier Frequency (MHz)	Receive Bandwidth (kHz)	Max. EIRP (dBW) ⁵

⁵ Effective Isotropic Radiated Power.

3 (continued) Frequency, Bandwidth & Emission Details				
Transmit Carrier Frequency (MHz)	Transmit Bandwidth (kHz)	Receive Carrier Frequency (MHz)	Receive Bandwidth (kHz)	Max. EIRP (dBW) ⁶
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			L	
More on attachment	number:		L	<u>.</u>

⁶ Effective Isotropic Radiated Power.

4. Equipment Information ⁷	
4.1: Manufacturer:	4.2 : Model/Type:
4.3 : Type Reference:	
4.4 : Transmit Bit Rate ⁸	4.5 : Receive Bit Rate:
5. Antenna Details	
5.1: Manufacturer:	5.2 : Model/Type:
5.3 : Type Reference:	5.4: Diameter: Metres
5.5: Max. isotropic gain, Transmitting:	5.6 : Max. isotropic gain, Receiving:
$\square \square dBi (dBic^9)$	dBi (dBic)
5.7 : Please give details of polarization configuration:	5.8 : Beamwidth:
Transmit:	Transmit: Degrees
Receive:	Receive: Degrees
5.9 : Radiation Pattern ¹⁰ : Attachment Number	

6. Space Station Details		
Name of Space Station	Name of Space Station Operator	Orbital Longitude

Note: If co-ordination is required please complete PART 2 SECTION II.

⁷ Details of the High Power Amplifier section are most relevant here.

⁸ Aggregate Bit Rate for total transmissions.

⁹ For a circularly polarized antenna the gain should be expressed relative to a circularly polarized isotropic antenna.

Name of Space Station	Name of Space Station Operator	Orbital Longitude

Note: If co-ordination is required please complete PART 2 SECTION II.

¹⁰ Any reference patterns submitted must comply with ITU-R S-465

PART 2

SECTION II: Co-ordination Information

1. Earth Station Reference Name:

2. Earth Station Beam Designation¹¹

2.1: Transmit beam designation:

2.2: Receive beam designation:

3. Earth Station Transmit & Receive Details					
3.1 : Emission designation ¹² (Transmit)	3.2 : Emission designation: (Receive)				
Bandwidth Emission Designation	Bandwidth Emission Designation				

¹¹ If more than one beam is to be used please give details of each additional beam on a separate form.

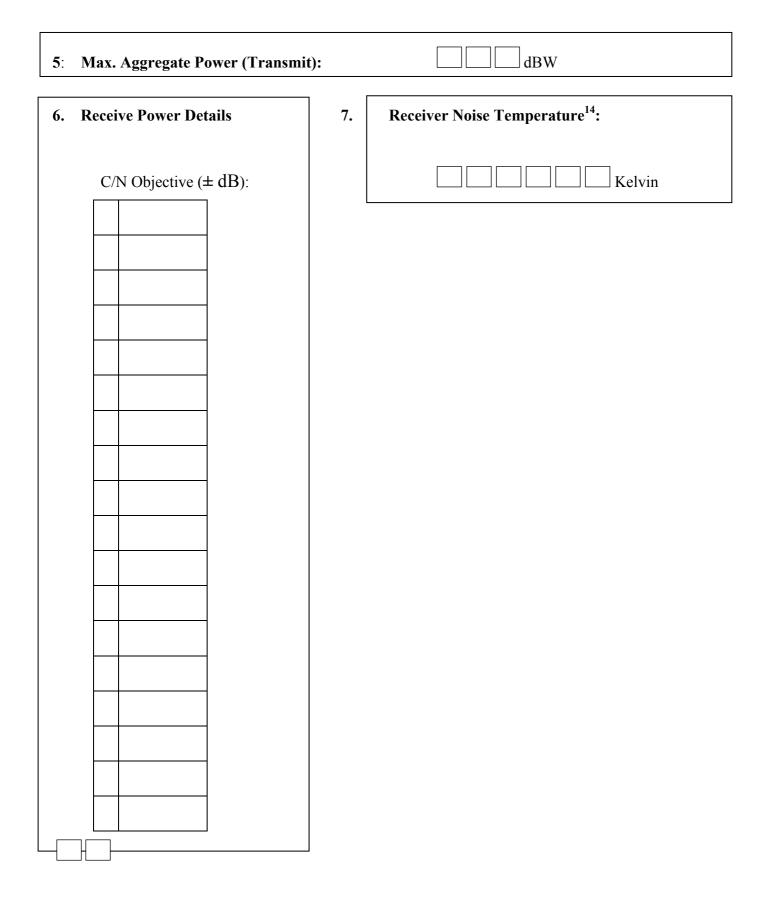
¹² See ITU-R RR Appendix S1 for emission designations

3 (continued) Earth Station Transmit & Receive Details					
3.1: Emission desig	gnation ¹³ (Tr	ansmit)	3.2 : Emission designation: (Receive)		
Bandwidth	Emission	Designation	Bandwidth Emission Designation		
More on attachment number :					

¹³ See ITU-R RR Appendix S1 for emission designations

4. Transmit Power Details

Ma	ıx. Peak Power	Ma:	x Power Density	Mi	n. Peak Power	Min	n Power Densit
±	dBW	±	dBW/Hz	±	dBW	±	dBW/Hz
						$\left \right $	



¹⁴ See Annex 1

8. Earth Station Details	
8.1: Horizontal (Site Survey) Diagram:	Attachment Number
8.2 : Elevation Angle (of antenna):	8.3: Operating Azimuthal Angles
Degrees	From: Degrees
	To: Degrees East of true North

9. Site Shielding.

Please give details of any planned site shielding measures taken for the purposes of minimising interference that may occur to, or from, existing terrestrial or other earth stations (particularly those outside the Teleport Facility.

PART 3

DECLARATION BY THE APPLICANT

I have read the Guidelines for applicants for Teleport Facilities in the Fixed Satellite Service in spectrum above 3 GHz (01/32).

I accept that the Commission may publish information relating to licensed Teleport Facility, for the purposes of orderly and efficient spectrum management, and that certain information relating to any licence issued pursuant to this application may be contained in any such publication.

I agree to comply fully with all the terms and conditions of the licence, if granted, in accordance with the Wireless Telegraphy (Teleport Facility) Regulations, 2001.

The Commission will endeavour to minimise the potential for interference. I accept that the Commission will not be liable for any interference received from other licensed users and that I will comply with whatever the Commission requests in preventing interference being caused by this satellite earth station(s) to other licensed users of the radio spectrum.

I accept that a licence does not confer any right of ownership of the frequency spectrum. It allows the assigned frequency channel to be used during the term of the licence in accordance with the conditions of the licence.

I certify that all information provided on this form, including all documentation attached, is true and accurate.

Signature of Applicant:

Name in Block Letters:

Date:

(If applicant is a company, please state position held):

Completed Application Forms should be sent to:

The Commission for Communications Regulation,

Abbey Court,

Irish Life Centre,

Lower Abbey Street,

Dublin 1.

Each application will be technically examined, at which time an invoice will be issued. On receipt of payment the licence will be issued.

METHODS OF PAYMENT

Cheque Cheques should be crossed and made payable to The Commission for Communications Regulation D Postal Order Postal Orders should be crossed and made payable to The Commission for Communications Regulation Direct Debit/ For details of these payments please contact our Accounts Division on (01) 8049618 **Standing Order** Transfers should be made to: Bank of Ireland, 28 Lower O'Connell Street, Dublin 1. Account **D** Bank Transfer Number: 17806887. Sort Code: 90-00-33. Please forward details of date and payment and amount of payment to our Accounts Division. Credit Card Visa 🗆 Access/Mastercard Laser 🗖

Cardholder's Name:___

Cardholder's Address:

Expiry Date: ____ / ____

Signature:_____

For ComReg Use Only

ComReg File Ref.:	
Pre - Consultation Date	
Date Application Received	
Date Application Acknowledged	

Meeting / correspondence	Sent by ComReg	Received by ComReg	Comment
Date			

Date applicant advised of	
Outcome of application assessment and invoice issued.	

Date Payment Received

Licence Issued

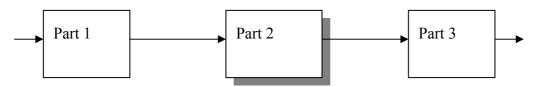
Date:

Number:

Annex 1: Guide to completing application form

Satellite Application Structure.

Parts 1, 2 and 3 must be completed in all cases.



<u> Part 2</u>



Must be completed for each satellite earth station of the Teleport Facility.



Must be completed for each of the satellite earth stations that needs coordination.

See below for individual explanations to sections contained within Part 2.

PART 2 – Section I: General Technical Details

- **1.** Earth Station Name
- 2.1 Intended date of bringing individual Earth Station into use.
- 2.2 Longitude of Earth Station DDMMSS
- **2.3** Latitude of Earth Station DDMMSS
- 2.4 Height of the antenna sight above sea level
- **2.5** Height of the antenna above ground.
- **3.** Transmitter Carrier Frequencies, Receiver Carrier Frequencies, Transmit Signal Bandwidths, Receive Signal Bandwidths, Max. EIRP's.
- **4.1.** The manufacturer of the radio equipment used must be specified. Details of the High Power Amplifier are most preferable here.
- **4.2** The particular equipment model must be specified here.

- **4.3** Any EMC or R&TTE certification for radio equipment used should be quoted here. Copies of the certificates (in English) should also be included with the application.
- **4.4** Bit rate in the transmit direction.
- **4.5** Bit rate in the receive direction.
- 5.1 The manufacturer of the antenna used must be specified.
- 5.2 The particular antenna model must be specified here.
- **5.3** Any EMC or R&TTE certification for antennas used should be quoted here. Copies of the certificates (in English) should also be included with the application.
- 5.4 The diameter of the antenna, expressed in metres.
- **5.5** The maximum gain of the fixed satellite earth station antenna, in the transmitting direction, relative to an isotropic radiator. Note that in the case of a circularly polarized antenna the gain is expressed relative to a circularly polarized isotropic radiator (dBic).
- **5.6** The maximum gain of the fixed satellite earth station antenna, in the receiving direction, relative to an isotropic radiator. Note that in the case of a circularly polarized antenna the gain is expressed relative to a circularly polarized isotropic radiator (dBic).
- **5.7** Details of any polarizations being used must be specified. In the case of circular, the direction must be given (i.e. Left Handed/ Right Handed). In the case of linear polarization the orientation must specified (e.g. Horizontal, Vertical, etc.). If elliptical polarization is being used more details may be required.
- 5.8 The half power beamwidth of the antenna in degrees, at both the transmit and receive bands.
- **5.9** Radiation patterns for any antennas used are required, it may be required to provide cross-polarized radiation patterns. Note that any patterns submitted must account for the pointing accuracy.
- 6. Details of any space stations that the earth station may operate to are required here, including the Space Station's ITU registered name, the operating company or organisation of the space station and the orbital position of the space station.

PART 2 Section II: Co-ordination.

- 1. Earth Station Name (to associate each Section II with its relevant Section I).
- 2.1 The designation of the satellite beam (transmit) to be used should be that published in the relevant satellite IFRB circular appertaining to the direction requested as seen from the satellite. If more than one beam is to be used in either or both directions Part 2 Section II must be filled out for each additional beam.
- **2.2** The designation of the satellite beam (receive).
- **3.1** The emission designation must be specified in terms of the following (Transmit):

Emissions are designated according to their necessary bandwidth and classification and are classified and symbolised according to their basic characteristics and any optional additional characteristic. Modulation used only for short periods and for incidental purposes (such as for identification or calling) may be ignored, provided that the necessary bandwidth as indicated is not increased.

For classification of emissions and necessary bandwidths see ITU RR Appendix S1.

- **3.2** The emission designation must be specified for all receive frequencies.
- 4 Transmit power details of the earth station are needed for each for each carrier supplied to the input of the antenna. Maximum and minimum peak powers are expressed in dBWs. The figures for power density are expressed in dBW/Hz and are calculated by averaging over the worst 4kHz band for carriers below 15GHz or averaged over the worst 1MHz for carriers above 15GHz in accordance with ITU Recommendation SF 675-3.
- 5 The maximum aggregate power of all carriers (per transponder, if applicable) supplied to the input of the antenna.
- **6** The receiver carrier to noise objective is expressed in dB, considering clear-sky operation, for each carrier type.
- 7 Indicate the lowest total receiving noise temperature, in Kelvin (K) referred to the output of the receiving antenna of the earth station under quiet sky conditions.
- **8.1** A horizontal site survey is needed showing the elevation of the horizon for 0 360 degrees, at 5 degree intervals, around the fixed satellite earth station.

The horizon elevation angle is the angle viewed from the centre of the earth station antenna, between the horizontal plane and a ray that grazes the natural physical horizon in the direction concerned.

- **8.2** The planned elevation angle of the antenna in the direction of maximum radiation in degrees form the horizon.
- **8.3** The planned range of operating azimuthal angles for the direction of maximum radiation in degrees, East of true North.
- **9** Details of any site shielding measures being taken for the purposes of minimising interference that may occur to, or from, existing terrestrial or other earth stations. In addition it may also be useful to provide a Horizontal Plot including the significant manmade structures.