

Satellite and Earth Station Licensing

ITU

A lengthy (~several years) process for a satellite networks to be 'coordinated' and 'notified' before with the ITU before we even get involved!

- ITU maintain the Master International Frequency Register (MIFR)
- ITU deals with 'Administrators' such as ACMA – they don't deal directly with satellite operators

ACMA (see [Space Systems Regulation Webpage](#)):

- ACMA is one such administrator that might be involved in the filing of a satellite network with the ITU
- ACMA is responsible for considering and granting Apparatus Licences for the operation of earth stations. Usually this licensing is undertaken with the assistance of an accredited person

Licence Types

- Earth Segment
 - Specific Earth Station location and antenna information is recorded on licence
 - Uplinks and Downlinks
 - **"Earth"** licence (uplink)
 - **"Earth Receive"** licence (downlink)
- Space Segment
 - Covers ubiquitous operation of earth stations over wide area
 - Area of coverage recorded on licence (e.g. Australia Wide / Low Density Areas)
 - **"Space"** licence (downlinks)
 - **"Space Receive"** licence (uplinks)
 - Only some bands can be licensed this way - [Radiocommunications \(Communication with Space Object\) Class Licence 2015](#)

What information do you need to supply?

- Details of the satellite:
 - **The ITU Network Name [published by the ITU](#). This is required to proceed.**
 - Is the satellite geostationary or non-geostationary?
 - The orbital longitude if the satellite is a geostationary satellite.
- The licence purpose:
 - Communications, TTCM, and Broadcasting (permanent licenses for long term use).
 - Launch/TOSS (temporary licences for launcher and in-orbit support).

The Licensing Process:

- ACMA’s space section coordination
 - We submit an “*Information for Regulatory Assessment*” details to the ACMA satellite team:
 - ACMA will advise whether the proposed assignment is covered by the published ITU filing associated with the supplied ITU Network Name.
 - If the Network Name has not yet been recorded in the Master International Frequency Register (MIFR) ACMA will request a “**Letter of Assurance**” from the satellite operator.
 - Other ACMA checks? (If other irregularities found).
- Accredited Person’s checks and coordination.
 - Compliance with the [Australian Radiofrequency Spectrum Plan 2017 \(ASRP\)](#)
 - Coordination against same and adjacent band terrestrial services.
 - Point-To-Point Links (E.g. X-Band).
 - Public-Telecommunications Services (E.g. S-Band).
 - Compliance with the relevant Spectrum Embargos and Radio Quiet Zones
- Once approved we lodge the application with the ACMA via our on-line file transfer process. Subject to the payment of fees, and other aspects, ACMA can then grant the licence.

Summary of licence types

Segment	Earth Station Location	ITU Service Description	Direction	ACMA Licence Type	Application Form (link)
Space	Ubiquitous Area Wide	Space – Earth	Downlink	Space	Space Segment Licence Application Form
		Earth – Space	Uplink	Space Receive	
Earth	Site Specific	Earth – Space	Uplink	Earth	Earth Segment Licence Application Form
		Space – Earth	Downlink	Earth Receive	