



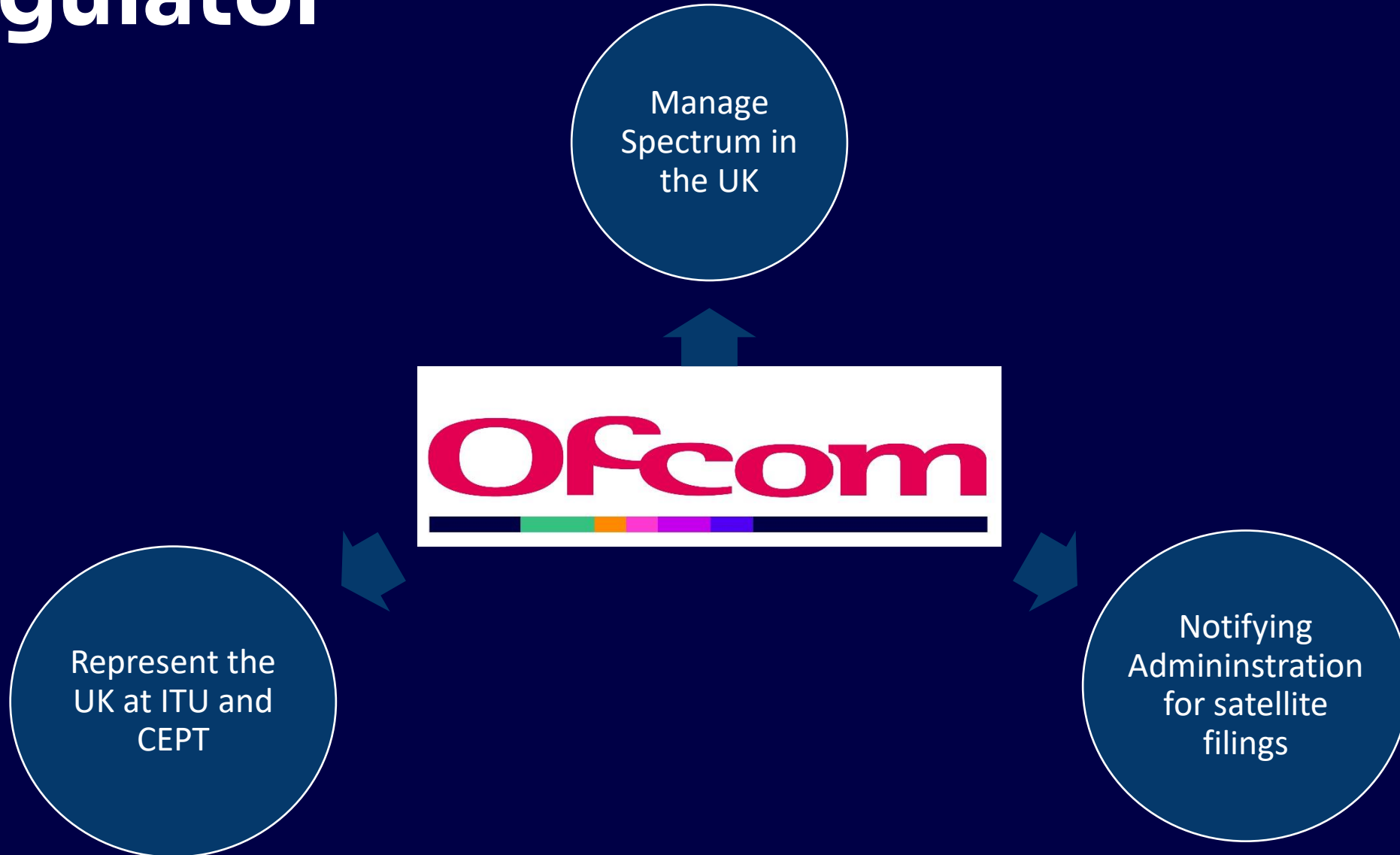
# NGSO Earth Station (Gateway) Authorisations in the UK

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26 March 2025



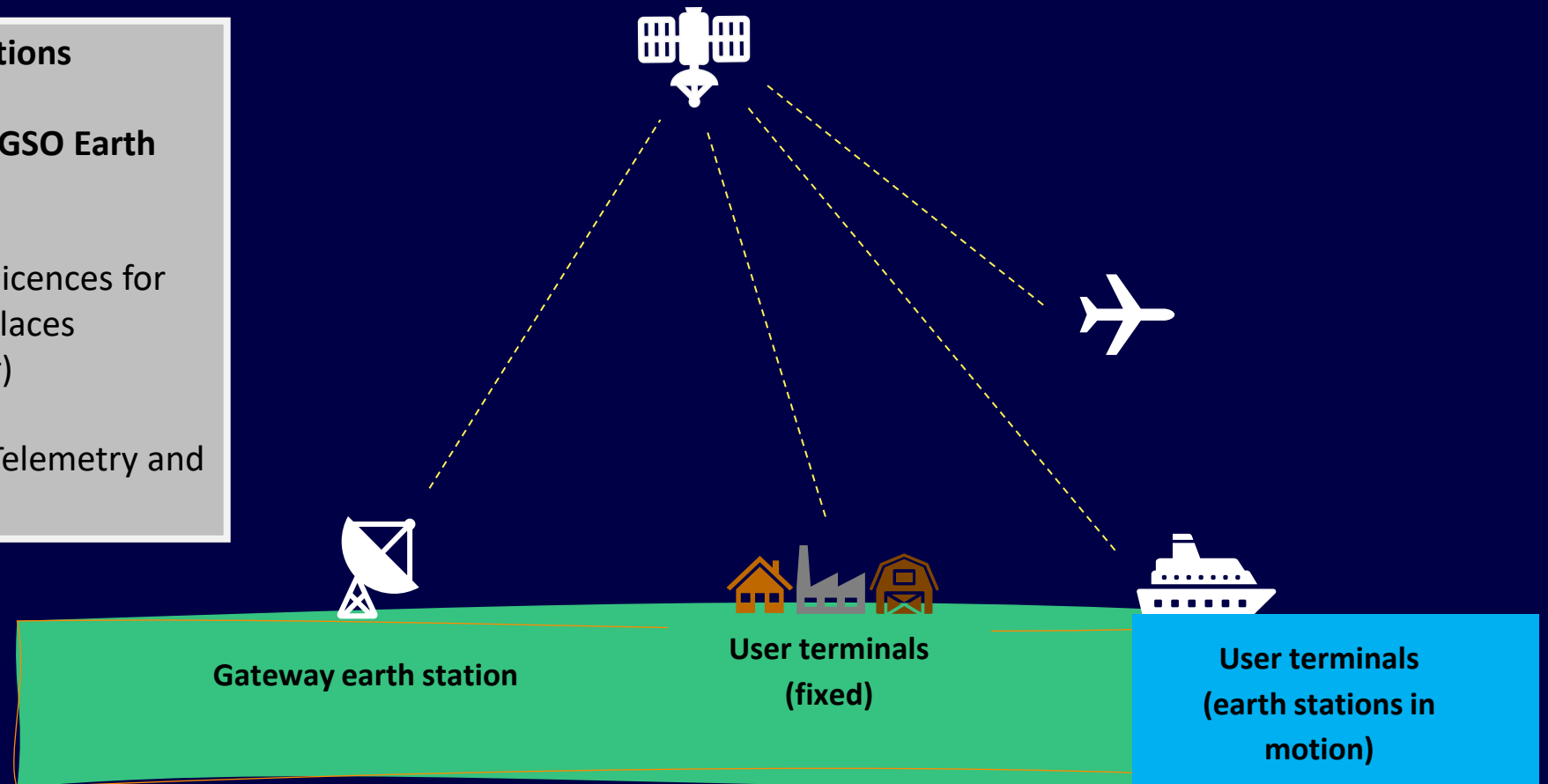
# Ofcom: UK's communications regulator



# NGSO Gateways in UK

## Relevant UK satellite authorisations

- **Permanent Earth Station & NGSO Earth Station** licences for gateways
- **NGSO Earth Station Network** licences for terminals/user earth stations (places obligations on satellite operator)
- **non-FSS** licences for Tracking Telemetry and Control



# NGSO Licensing Updates (2021)

First authorised NGSO terminals and gateways in 2016

Introduced conditions in ESN:

- Requirement to “cooperate” with other NGSO licensees
- More powers to intervene in cases of harmful interference
- Obligation for satellite operator to hold the licence

New application process with short (20 day) consultation period

- Evidence applicant can coexist with existing licensees
- Evidence of system flexibility to accommodate other NGSOs in the future
- Evidence can protect co-frequency earth stations
- Competition check

For gateways

- Obligation to only connect to licenced NGSO systems
- Transmit within 12 months of receiving a licence

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## Non-geostationary satellite systems

Licensing updates

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**STATEMENT:**

Publication date: 10 December 2021

# Information for Applicants

We created a new website for greater transparency  
Includes guidance for applicants

Information on Earth Station network licensees:

- Amazon Kuiper
- Mangata Networks
- NSLComm Ltd
- OneWeb
- Rivada
- Starlink
- Telesat

Information on Gateway Earth Stations  
(7 connecting to Starlink)

Cofrequency Earth Stations which must be protected

## Apply for a non-geostationary satellite earth station licence (FSS)

Spectrum

Space and satellites

Licence information

Published: 1 March 2024

Last updated: 19 February 2025

Non-geostationary orbit (NGSO) satellite earth station licences are used to authorise gateway earth stations and user terminals that relay traffic via NGSO satellites that orbit the Earth.

These licences authorise the use of certain frequency bands the Ka and Ku bands allocated to the fixed-satellite service. They can be used to provide several types of service including direct-to-consumer broadband, broadband services to businesses, telcos and governments, and Internet of Things.

An NGSO satellite earth station licence is a term we use for the following two types of licences:

- *Satellite (earth station network) licence* – for NGSO use: authorises an unlimited number of **user terminals**, for example a satellite dish, to connect to the NGSO satellite system.
- *Satellite (non-geostationary earth station) licence*: authorises **gateway earth stations** connecting the NGSO satellite system to the internet or private networks.

### How to apply

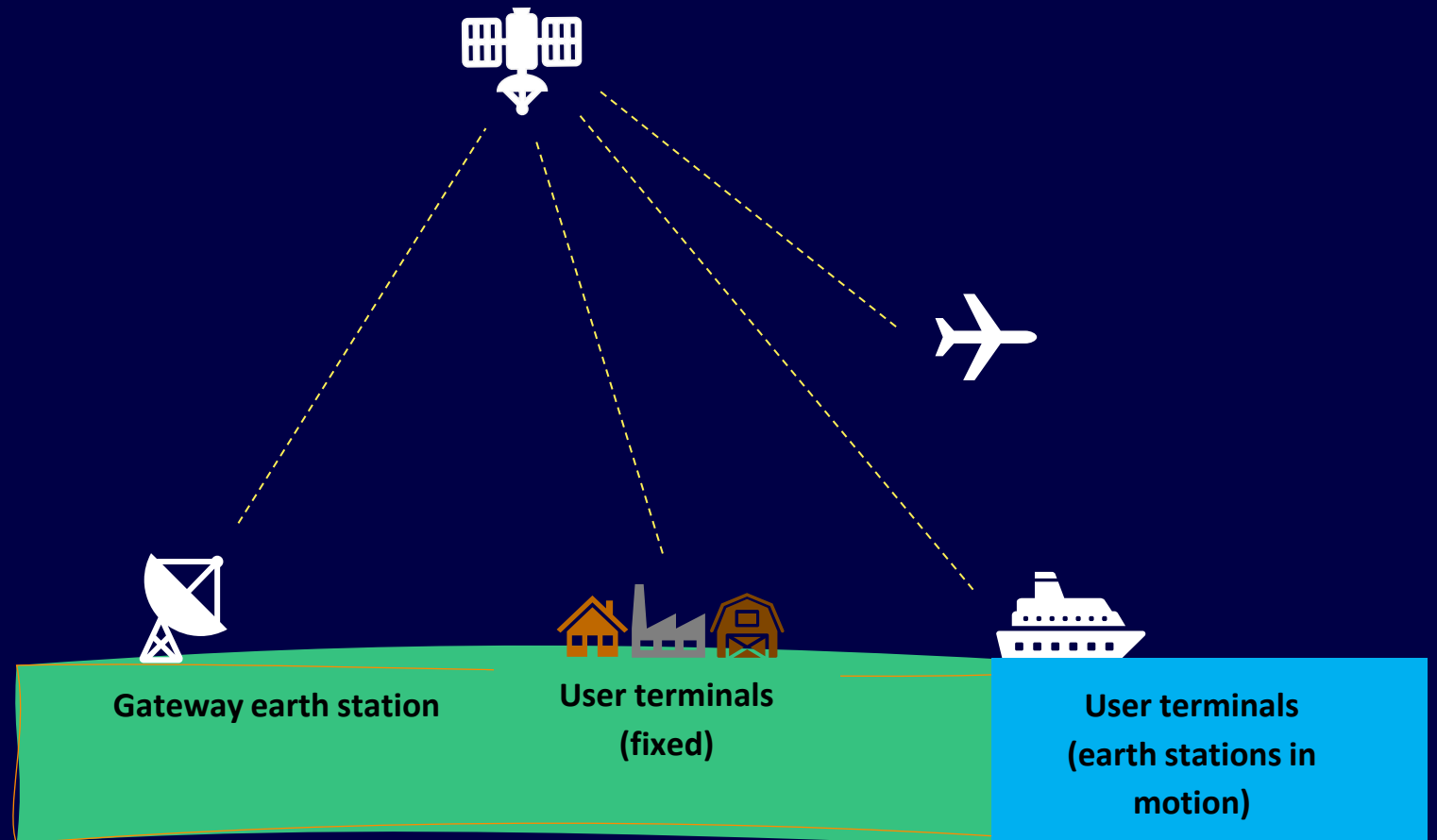
Our [NGSO satellite earth stations licence guidance \(PDF, 748.4 KB\)](#) explains how you can apply for a licence. It also covers licence fees, terms and conditions.

Use the [Satellite \(Earth Station Network\) radio licence application form – non-geostationary – OfW602 \(PDF, 674.0 KB\)](#) to apply for a licence for an NGSO **network** of user terminals.

# Gateways in UK – Ofcom approach and Space Spectrum Strategy (2022) priorities

## Relevant Space Spectrum Strategy priorities

- Access to guard bands in 28GHz (to ensure access to whole band)
- Consider protections for GSO and Radioastronomy
- Consider new frequencies for gateway earth stations in Q/V and E band
- Consider reviewing NGSO fees for gateways
- Develop NGSO Satellite Monitoring capability





# Relevant consultations & planned updates

## Completed work:

Satellite Earth Station Network Licences (2023):  
introducing protections for GSO and Radio Astronomy

Enabling access to 27.5-30GHz (January 2025):  
expanding access for gateways into spectrum previously held by Arqiva and 28GHz guard bands

Call for Input: Expanding spectrum access for satellite gateways : examining demand for gateways using Q/V and E band (March 2024)

## Our Proposed Plan of work for FY25/26 stated that we plan to:

- Review NGSO licencing framework
- Consult on extending Gateway Licences to include Q/V and E band
- Consider frequencies for ESIMs (implementing decisions from WRC-23 and WRC-19)



# Thank you

[www.ofcom.org.uk](http://www.ofcom.org.uk)