

LoRa Alliance Response to Ofcom's proposed Plan of Work 2026/27

5th of February 2026

The LoRa Alliance welcomes Ofcom's proposed Plan of Work 2026/27¹ and appreciates the opportunity to contribute to the regulatory work in the UK. OFCOM plays an important role in enabling innovation and unlocking opportunities for the UK economy as technologies evolve not only 5G or 6G as pointed out in the Overview of the Consultation, but also terrestrial LPWAN and satellites communications as demonstrated in most significant business-oriented deployments and essential IoT applications for example.

In particular, we would like to provide input to the "Enabling Wireless in the UK Economy" section, specifically the "Meeting the Growing Demand of Spectrum for Space" project. The LoRa Alliance totally agrees with the priority about "ensuring that spectrum remains an effective enabler for wireless communication for all people, businesses, and sectors".

This contribution considers recent regulatory developments within CEPT enabling the 862-870 MHz band for satellite IoT services and recommends the enablement of satellite IoT services in this band in the UK to provide "high quality, reliable, and secure networks".

LoRaWAN[®] is the leading global standard for secure, carrier-grade IoT LPWAN (Low Power Wide Area Network) connectivity. This open networking specification is designed to wirelessly connect battery-operated 'things' to the internet in regional, national, or global networks. It includes key IoT requirements such as bi-directional communication, end-to-end security, mobility, and localization services.

Operating in unlicensed radio frequency bands, LoRaWAN is known for its exceptional long-range capabilities (up to 15 km in rural areas), low power consumption, and the ability to securely connect a large number of devices to a single network through public, private, hybrid and satellite connections enabling a scalable and flexible network for diverse IoT applications.

LoRaWAN in unlicensed bands is indeed not limited to terrestrial connectivity and the existing ecosystem has already been extended via satellites. LoRaWAN[®] plays an essential role in supporting emergency response, in monitoring climate... Please see the white paper² from LoRa Alliance for further information.

Extending LoRaWAN to Satellite Networks

The IoT industry is transforming connectivity, yet rural and remote areas remain underserved. Millions of IoT devices currently operate in urban regions, but the terrestrial telecommunication infrastructure leaves significant gaps in rural and hard-to-reach areas. Satellite-IoT solutions play a pivotal role in bridging this divide by providing cost effective and seamless coverage, enabling vital services in agriculture, environmental monitoring, smart cities, and beyond. Moreover, they offer robust and resilient connectivity during disasters, supporting backup communications and facilitating use-cases such as early warning systems and assistance for disaster relief agencies.

As noted in the paragraph 2.28, "Flexible access to spectrum can enable innovative new services, such as Direct to Device Satellite services that can provide mobile connectivity in the most remote parts of the UK and other

¹ <https://www.ofcom.org.uk/about-ofcom/annual-reports-and-plans/consultation-ofcoms-plan-of-work-202627>

² <https://resources.lora-alliance.org/whitepapers/lora-alliance-white-paper-regulation-for-lorawan-satellite-august2025>

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mobile ‘notspots’ ”. This is true for cellular communications in licensed bands and LPWAN/SRD in license-exempt bands too.

The success of LoRaWAN technology over terrestrial networks has now been expanded to satellite networks, and this expansion is possible in the same frequency bands in which terrestrial networks are deployed. Fossa, Lacuna Space and Plan-S have already begun using LoRaWAN technology for addressing this connectivity challenge with their satellite networks. This enables connectivity for IoT devices anywhere to the Internet through satellite networks, unlocking new possibilities for IoT applications, IoT solution providers, and terrestrial LoRaWAN operators.

Satellite-IoT operations using licence-exempt spectrum have been validated through extensive technical studies and commercial operations. In Europe, this has translated into significant regulatory progress, notably through **ECC Report 357**, “*Regulatory analyses of satellite use in the band 862-870 MHz to communicate with terrestrial SRD*”. This work demonstrates that satellite use of the 862-870 MHz band can coexist with terrestrial short-range devices (SRD) under clearly defined technical conditions.

Building on this technical foundation, CEPT has adopted **ECC Decision (25)02**, “*Low power devices communicating with satellites (LPD-S) within the frequency range 862-870 MHz*”, in June 2025. The Decision has now entered into force and provides a harmonised regulatory framework for satellite IoT operations across CEPT member countries. The measures in ECC Decision (25)02 such as in-band and out-of-band PFD values demonstrate that satellite-IoT use of the 862-870 MHz band is technically robust, spectrum-efficient, and fully compatible with existing terrestrial services.

As shown on ECO website³, the implementation of these rules by Germany and Denmark, which has become the first European country to explicitly authorise satellite IoT communications in SRD bands under its licence-exempt framework, further demonstrates the practicality and regulatory soundness of this approach.

During the adoption of this Decision, the UK indicated that it is not in a position to implement ECC Decision (25)02 due to the regulatory approach adopted in that Decision but it is supportive of LPD-S deployment in the UK and is considering what, if any, measures may be necessary to enable this. The LoRa Alliance welcomes and appreciates the UK’s commitment to enabling satellite use of the 862-870 MHz band, which can promote greater competition in IoT market and improve the efficient use of spectrum by introducing a satellite dimension to the band currently used exclusively by terrestrial applications.

The LoRa Alliance believes that the regulatory approach set out in ECC Decision (25)02 is fully aligned with Ofcom’s objectives, including updating the authorisation framework to meet growing demand for spectrum for space-related services, increasing efficient use of spectrum by enabling satellite usage alongside terrestrial SRDs, and facilitating the adoption of new technologies.

In this context, the LoRa Alliance respectfully recommends that the enablement of satellite usage in the 862-870 MHz band be considered under the “Meeting the Growing Demand of Spectrum for Space” project. Such implementation of regulation for LPD-S would contribute to meeting demand for space services, promote competition, and facilitate emerging technologies.

Ofcom has a clear opportunity to promote competition and enhance consumer outcomes through forward-looking regulatory measures. The LoRa Alliance stands ready to collaborate further with Ofcom to foster innovation, investment, and consumer welfare in the UK telecommunications market.

³ <https://docdb.cept.org/implementation/28652>

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