

**Body of European Regulators for
Electronic Communications
(BEREC)**

**Public consultation on the draft BEREC
Strategy 2026-2030**

Contact information:

Satelio IoT Services, S.L.
Carrer de Berlin 61
Esc. A Entresuelo
08029 Barcelona
Spain

 [@sateliot.com](mailto:info@sateliot.com)

Date: 15th of July 2025

Introduction

Sateliot is an European-headquartered satellite telecommunications company pioneering the use of 3GPP's 5G NB-IoT Non-Terrestrial Networks (NTN) standard, a technology published in June 2022 within Release 17, and updated in the more recent releases.

Our company is actively engaged in contributing to the ongoing development of the European regulatory and technology ecosystems. Most recently, we have submitted responses to the Commission's Consultation on the use of 2GHz MSS spectrum bands for mobile satellite systems and the Commission's Call for Evidence for an Evaluation and Impact Assessment: Digital Networks Act.

We are committed to engaging in all processes that seek to prepare Europe to best benefit from emerging technologies. As such, Sateliot welcomes this opportunity to contribute to the Body of European Regulators for Electronic Communications (BEREC) consultation on the Strategy for 2026-2030.

BEREC's role as the main body for cooperation and exchange of information between national European regulators makes this Strategy a key point of engagement for emerging European technology providers, such as Sateliot.

Sateliot thanks BEREC for the opportunity to submit this response and welcomes any further engagement.

I. MARKET AND TECHNOLOGICAL DEVELOPMENTS

BEREC correctly identifies one such emerging technology in Non-Terrestrial Networks (NTNs) and the role NTNs play in enhancing network capacity and coverage for the Internet of Things (IoT). It is worth noting that the European continent has high levels of quality terrestrial network coverage, but can nevertheless benefit from embracing complementary 5G NTN IoT connectivity. IoT devices, especially the moving ones, may move into lower coverage areas, or in the case of logistics and offshore infrastructure, be completely removed from terrestrial coverage.

However, it is not only in areas of no or limited terrestrial connectivity where these services are important, but also by serving as a redundancy layer for network resilience, where terrestrial infrastructure is damaged or destroyed through natural disasters. This is vital for critical infrastructure, and such technology will become an essential component of Europe's digital infrastructure.

BEREC correctly notes that the modern European citizen has an increasing demand for environmentally sustainable technologies and practices, but will still demand connectivity and communication services. In the case of 5G NB-IoT NTN, the IoT devices that are connected are small and efficient with low power demands. Additionally, IoT plays a role in sustainable operations and environmental monitoring, including devices that monitor air and water usage and quality, emissions, and leakages or failures in mining, oil and gas infrastructure, allowing issues to be remedied before catastrophic failure.

Sateliot also notes BEREC's acknowledgement that standards promote diversity and supply. This was a motivation behind Sateliot establishing its business as the first company globally to deploy satellite services using the 5G NB-IoT NTN standard, which is natively integrated into 3GPP specifications. This ensures seamless interoperability between satellite and terrestrial mobile networks, allowing standard IoT devices to remain connected globally at low cost. This is achieved without the need for custom hardware or proprietary protocols, allowing Sateliot's wholesale connected mobile network operator (MNO) partners to extend their coverage footprints efficiently, without deploying additional terrestrial infrastructure.

II. POLICY AND LEGISLATIVE DEVELOPMENTS

The Strategy's alignment with the EU's Digital Decade targets and recent legislative developments, including the proposed Digital Networks Act (DNA), Gigabit Infrastructure Act (GIA), and the upcoming review of the European Electronic Communications Code (EECC) is of paramount importance.

We particularly support BEREC's proactive role in contributing to the European Commission's initiatives and consultations, such as the White Paper on Europe's digital infrastructure needs, which recognizes the potential of innovative connectivity solutions, including NTNs, to bridge coverage gaps in underserved areas.

As a satellite IoT operator leveraging 3GPP-standardized NB-IoT over NTN, Sateliot encourages BEREC to further incorporate NTN-specific considerations into its forward-looking regulatory agenda, particularly in relation to the following:

1. Licensing frameworks for direct-to-device satellite connectivity

The emergence of NTNs capable of direct-to-device (D2D) services warrants closer regulatory attention. These services are complementary to terrestrial networks and often do not fit neatly within traditional

licensing regimes. BEREC can play an important role in supporting flexible, proportionate licensing approaches which account for the new nature of service provision under D2D. The review of the European Electronic Communications Code represents just such an opportunity.

2. Avoiding regulatory fragmentation in the Digital Networks Act

While the DNA aims to accelerate connectivity infrastructure deployment, Sateliot urges BEREC to emphasize the importance of technology neutrality and open NTN-terrestrial integration in its advisory role. A siloed approach risks excluding innovative satellite operators from the digital infrastructure policy ecosystem. Instead, we advocate that the DNA be crafted in a manner that promotes co-investment and seamless interoperability between terrestrial and non-terrestrial systems.

3. Clarifying roles across the Regulatory Frameworks

Sateliot acknowledges the work undertaken by the Commission, BEREC, and the respective Member States in ensuring Europe's regulatory framework is modernised and prepared for emerging technology. The Digital Markets Act, Data Act, Digital Services Act, and Artificial Intelligence Act all represent such initiatives. However, Sateliot appreciates BEREC's call for regulatory simplification and coordination. For satellite IoT operators entering European markets, overlapping or conflicting regulatory scopes between the terrestrial and satellite providers may deter innovation and cross-border scalability. We encourage BEREC to promote clarity on jurisdictional and definitional boundaries, especially as services increasingly blur the lines between electronic communications and unified connectivity services.

4. Recognizing satellite infrastructure in environmental and resilience policy tools

We welcome BEREC's attention to sustainability and resilience in the policy context and recommend that future instruments (such as the EU Action Plan on Cable Security, the EU Cloud and AI Development Act) recognize the unique redundancy, reach, and energy efficiency contributions of satellite systems, especially in ensuring continuity of connectivity during natural or infrastructure-related disruptions, as well as ongoing monitoring of physical infrastructure.

III. HIGH-LEVEL STRATEGIC PRIORITIES

Sateliot welcomes BEREC's proposal and clear alignment with the strategic objectives of the European Electronic Communications Code (EECC). The structure of the Strategy around five well-defined and interlinked priorities seems appropriate. We offer the following perspectives and suggestions with respect to the high-level priorities, particularly focusing on NTNs and D2D. Satellite IoT solutions can complement and accelerate these objectives

1. Priority 1: Promoting full connectivity and the Digital Single Market

As a 5G NB-IoT NTN provider, we emphasize the unique potential of direct-to-device satellite connectivity to extend the reach of terrestrial mobile networks, particularly in remote, rural, and maritime areas that remain underserved. The standardized integration of NTNs into terrestrial ecosystems enables seamless roaming and continuity of service for massive IoT applications such as agriculture, transportation, energy, and environmental monitoring.

We encourage BEREC to further promote:

- Pro-competitive and harmonized licensing frameworks for satellite-based NB-IoT connectivity.
- A technology-neutral implementation of the Digital Decade targets, ensuring that satellite and hybrid solutions are fully eligible for meeting EU coverage goals.
- Regulatory clarity on spectrum use, interference mitigation, and jurisdictional oversight in cases of NTN deployment across multiple Member States.

We align with the Strategy's recognition of satellite-operator and MNO cooperation, which encourages the inclusion of guidance on open, interoperable frameworks to avoid vendor lock-in and promote innovation in NTN-terrestrial integration.

2. Priority 2: Supporting competition-driven and open digital ecosystems

Our business model is wholesale-only, supporting mobile network operators and IoT providers with additional NTN capacity without competing directly in retail markets. To implement this strategic and innovative approach, an open competitive ecosystem is required.

We advocate that BEREC:

1. Recognises the role of wholesale-only NTN providers in strengthening competition and diversifying market structures.
2. Provide guidance on fair access and interconnection terms between NTNs and terrestrial mobile operators, to avoid anti-competitive bottleneck, and
3. Support the co-existence of vertical and horizontal models for IoT delivery, enabling end-users to benefit from diverse service options.

In addition, BEREC emphasises the coherent implementation of the DMA and upcoming regulations (such as the DNA, Cloud and AI Development Act) is timely. We support BEREC's intention to align these instruments with telecom sector realities and urge that such coordination include emerging IoT-specific concerns, such as data portability, fair access to cloud processing, and infrastructure-based competition.

3. Priority 3: Empowering end-users

Sateliot operates on a wholesale business model without reaching the end-users directly. However, despite the models, it is people who ultimately benefit from the deployment of IoT devices, and ensuring those devices are connected at all times and are resilient and redundant.

As such, we encourage BEREC to:

- 1) Consider non-consumer-facing connectivity models (like ours) when evaluating the impact of regulation on end-user empowerment. Satellite IoT supports beneficiaries indirectly through its partners.
- 2) Support standards-based interoperability for IoT devices and connectivity services, which promotes user choice and avoids the locked market of proprietary solutions.
- 3) Recognise the resilience and redundancy benefits of satellite IoT services in safeguarding service continuity for vulnerable and underserved end-users as well as key infrastructure assets such as pipelines, wind farms, solar panels or environmental monitoring devices.

4. Priority 4: Contributing to environmentally sustainable, secure and resilient digital infrastructures

The focus on environmentally sustainable, secure and resilient infrastructure is an important priority and is welcomed by Sateliot. The foundational purpose of utilising a satellite connection is for its resilience and security. Once in orbit, the satellites themselves have little to no impact on the terrestrial environment, burning up in the atmosphere at the end of the life cycle. Satellite systems are more difficult to infiltrate through cyberattacks (though not invulnerable) and with the emergence of D2D, even the relatively vulnerable ground station is now an IMT user terminal.

Satellite connectivity is most effective when employed to serve as a redundant and resilient backup to terrestrial connectivity. This is exactly what D2D purports to be, serving as a complimentary service should worst case scenarios happen in natural disasters or cyberattacks.

It is also important to note the role IoT plays in assisting the efforts in combating climate change by providing real and actionable data to scientists and serving as early warning systems in vulnerable areas such as floodplains, fault lines, and active volcanoes. IoT devices are also key in monitoring sea levels, storm buildups, wildfires and vulnerable ecosystems. Much of these devices will be connected to terrestrial infrastructure which may be damaged or destroyed, while others will be outside the scope of terrestrial coverage entirely.

Therefore, while we support BEREC's initiative to develop harmonised indicators and LCA-based methodologies for assessing digital infrastructure impacts, we recommend:

- 1) Including non-terrestrial infrastructure (especially LEO constellations) in the scope of environmental assessments.
- 2) Recognising satellite connectivity's role in enabling decarbonization in other sectors, such as smart agriculture, energy grid monitoring, and maritime logistics.
- 3) Facilitating policy instruments that account for spectrum sharing efficiencies and environmental gains of integrated terrestrial-NTN solutions.
- 4) Recognising the role of IoT in providing important climate data to inform climate modelling and early warning systems and the importance of ensuring these devices are connected and are resilient to damage.

From a cybersecurity and resilience standpoint, Sateliot supports BEREC's cooperation with ENISA and other institutions. Satellite networks offer diversified and secure data routing pathways, especially when terrestrial networks are compromised.

5. Priority 5: Strengthening BEREC's capabilities and continuous improvement

BEREC's commitment to data-driven regulation is welcome from the perspective of industry. There are several examples of jurisdictions exploring innovative spectrum management and licensing approaches for NTN and satellite IoT from around the world outside of the EU. BEREC could monitor such initiatives and assess their applicability and relevance to the European regulatory framework. In this instance, we make ourselves available as a European headquartered, globally operating company to support BEREC's work on NTN connectivity models, licensing convergence, and environmental indicators.

IV. INSTITUTIONAL AND INTERNATIONAL COOPERATION

Institutional and international cooperation are vital towards achieving any degree of harmonisation and are most important to global services such as ours and any other NGSO satellite operator. We strongly support BEREC's note that "*cooperation with EU institutions and international organisations is increasingly relevant for addressing challenges in digital markets*".

We broadly support the BERECs commitment towards continued cooperation with the European and global institutions which are detailed within the Strategy, however we wish to offer the following observations and recommendations:

1. Inclusion of non-EU actors in regulatory dialogue

BEREC's openness to cooperation with National Regulatory Authorities (NRAs) from third countries is essential in today's interconnected digital ecosystem. Satellite-based IoT services, by their nature, traverse multiple jurisdictions and provide cross-border coverage, especially in rural, maritime, and hard-to-reach areas.

It is therefore important for BEREC to:

- 1) Strengthen engagement with third-country operators and regulatory partners through formal observer mechanisms or structured dialogue channels (e.g., workshops, working groups, consultations).
- 2) Promote the sharing of best practices on licensing and market entry for NTN and D2D satellite services, drawing from experiences of regulators in Latin America, Asia-Pacific, and Africa.
- 3) Continue its tradition of memoranda of understanding (MoUs) with international regulators, with a view to fostering common frameworks for emerging technologies like NTN IoT, and hybrid NTN/terrestrial systems.

2. Leveraging BEREC's role in global regulatory convergence

As BEREC seeks to promote coherent digital regulation globally, we suggest:

- 1) Incorporating NTN-specific regulatory experiences into BEREC's contributions to these international platforms. This is most relevant concerning spectrum harmonisation, interoperability, and market access.
- 2) Supporting regulatory alignment on WRC-27 Agenda Item 1.12 and 1.13, which will address the allocation of spectrum for low-data-rate MSS and allocation of spectrum for MSS providing D2D connectivity, respectively.
- 3) Facilitating knowledge exchange on licensing innovations, such as light-licensing, shared spectrum use, and technology-neutral authorisations, which are increasingly relevant to satellite-IoT services.

Conclusively, Sateliot welcomes BEREC's evolving international orientation and stands ready to contribute as a constructive partner and trusted wholesale NTN operator. We believe that BEREC's inclusive and forward-looking approach to institutional and international cooperation can help bridge the regulatory divide between terrestrial and non-terrestrial ecosystems, ensuring that Europe's digital transformation remains both competitive and globally connected.

We stand s ready to contribute further to the BEREC's work and ongoing consultations, and to engage in dialogue with BEREC for further clarification on any aspect of this response.

Sincerely,

A black rectangular redaction box covering the signature area.

Satelio IoT Services, S.L.