Isabelle Mauro
Director General
dg@gsoasatellite.com

BoR PC10 (24) 11

4 November 2024

GSOA response to BEREC on Work Programme for 2025

Introduction

GSOA is the only global non-profit association of the entire satellite ecosystem that brings members together and serves as the premier platform for worldwide collaboration. As the only CEO-driven satellite association in the world, GSOA takes the lead in addressing global challenges, seizing opportunities, and providing a unified voice for the satellite industry. GSOA's vision is to help policymakers improve the state of the world by continuously bridging digital, education, health, social, gender and economic divides across diverse geographies and across mature and developing economies.

GSOA appreciates the opportunity to contribute to BEREC's Work Programme for 2025. Building on the input contribution submitted by GSOA in April, as well as further considering the developments and new insights from BEREC's draft work programme and other related events, GSOA aims to provide an updated perspective on the following key topics:

1. Direct-to Device (D2D) Services and the role of satellite technologies
2. Environmental responsibility
3. Satellite's role for high level connectivity
4.

1. Direct-to-Device (D2D)

With reference to the BoR (24) 151 report, that summarized the workshop held by BEREC in May, GSOA would like to highlight the significance of D2D satellite services as a vital aspect of Europe's digital connectivity landscape. According to GSOA's analysis: "The Future of Satellite Connectivity Various Approaches to Direct-to-Device Services[1]," satellite networks can expand terrestrial mobile networks in a number of ways, particularly to extend connectivity in underserved and rural areas.

D2D service presents both promising opportunities alongside some challenges. Exploring the two variants, D2D in MSS bands and D2D in MS bands, underscores the innovative landscape of satellite communications.

Satellite D2D in MSS bands leverages existing allocations and standardized protocols and frameworks, capitalizing on 3GPP NTN specifications for seamless terrestrial and satellite connectivity networks across various applications, with no additional changes to ITU Radio Regulations. This variant necessitates increased collaboration with mobile chipset vendors to support relevant MSS frequencies in their user equipment.
On the other hand, D2D in MS bands provide a solution to complement mobile coverage, addressing gaps in connectivity where traditional networks fall short, potentially using off-the-shelf mobile handsets. However, the technical and regulatory challenges of this variant are under study.

Collaboration between satellite operators, MNOs, and regulatory bodies is indispensable to realize the full potential of satellite D2D connectivity and usher in a new era of ubiquitous and seamless communications.

[1]Available here: https://gsoasatellite.com/reports_and_studies/the-future-of-satellite-connectivity-various-approaches-to-direct-to-device-services/

Isabelle Mauro
Director General
dg@gsoasatellite.com

Firstly, the global satellite industry is known for its rapid developments and broad range of applications hence GSOA believes thatregulatory frameworks i should be done in close cooperation with industry stakeholders to ensure their continued support and adaptability. GSOA advises BEREC to avoid strict restrictions that may hinder the adoption of new satellite technologies, which are critical for meeting Europe's digital ambitions.

Secondly, the workshop emphasized the necessity of cooperation between mobile and satellite network providers. To support this effort, GSOA is adamant to foster collaboration between various stakeholders, advocating for joint initiatives through our agreements with GSMA and ESA to progress the work on NTN-TN integration and best contribute to deploy 5G and (soon) 6G solutions. In order to enable integrated solutions that benefit users and guarantee broad coverage, GSOA recommends that BEREC promote projects that foster this partnership.

Thirdly, emphasizing technology neutrality within the regulatory framework is critical. Satellite-based D2D services provide unique capabilities that are essential for achieving universal connectivity objectives. BEREC's regulatory approach should support a level playing field for both satellite and terrestrial technologies.

2. Environmental responsibility

The global satellite industry is dedicated to improving its environmental footprint and it is already proactively managing its environmental impact through established best practices and technological innovations.

As detailed in the recently approved Code of Conduct on Space Sustainability[2], GSOA endorse industry space sustainability practices that will enable the world to maximize the use of, access to, and benefits from, space resources. In particular, GSOA endorses, and recommends that operators comply with certain practices aimed at mitigating the risk of in-orbit collision, minimizing the threat of non-trackable debris, preserving human life in space and limiting satellite reflectivity and the related impact on optical astronomy .

Additionally, GSOA draws attention to the efforts made to their Space Sustainability Compendium[3].

Overall, GSOA considers that a collaborative, inclusive industry-driven approach is to be successful, and GSOA further suggests that any comprehensive perspective includes the role of satellites in enabling greener ICT solutions (e.g. by reducing terrestrial infrastructure requirements in remote areas), in a balanced and holistic view.

GSOA members look forward to contributing to the BEREC external workshop on environmental footprint of satellite constellations to be held in Q3 2025.

3. Role of satellite communications for high level of connectivity

GSOA welcomes the EU's commitment to improving digital connection but argues that the EU Digital Decade objectives should be approached with an inclusive and realistic way. Based on GSOA's perspective, a one-size-fits-all strategy may not be suitable to address the diverse needs of Europe's regions and populations.

[2] Available at: https://gsoasatellite.com/wp-content/uploads/GSOA-Code-of-Conduct-Paper.pdf
[3] Available at: https://gsoasatellite.com/space-sustainability-compendium/

Isabelle Mauro
Director General
dg@gsoasatellite.com

The satellite industry has a critical role in providing connectivity to remote and underserved areas where terrestrial networks are not viable. GSOA's members are already implementing solutions that extend digital access to these communities, ensuring that no region is left behind. GSOA advocates for BEREC to implement a technology-neutral approach, leveraging the unique capabilities of satellite services including coverage, reliability and ease of deployment, to achieve meaningful connectivity for all.

GSOA's aim would be that everyone, everywhere in Europe, should have the opportunity to access digital resources, which would foster economic growth and social inclusion across the continent.

Conclusion

GSOA remains committed to promoting the best interests of the global satellite sector while ensuring that European residents benefit from cutting-edge and equitable connectivity solutions.

GSOA advocates for BEREC to safeguard a flexible regulatory environment that honours industrial knowledge, encourages innovation, and promotes sustainable growth without imposing unnecessary limitations.

GSOA members very much look forward to contributing to BEREC's activities in 2025 and in 2026.