

### gsr@itu.int

Cosmas Luckyson Zavazava Director ITU Development Sector Place des Nations Ch-1211 Geneva 20 Switzerland

Re: "Charting the course of transformative technologies for positive impact"

Dear Mr. Zavazava,

Intelsat hereby submits it views on the theme for this year's Global Symposium for Regulators (GSR-24), on "Charting the course of transformative technologies for positive impact".

In the field of telecommunications, several transformative technologies have emerged and are rapidly evolving. The technologies include the use of IoT, AI, next-generation of satellite and mobile networks, as well as the integration of software in the telecommunications infrastructure. Satellite technology, particularly with advancements like Low Earth Orbit (LEO) and High Throughput Satellites (HTS), complements terrestrial solutions and offers cost-effective broadband access where traditional networks are impractical. In the present submission we discuss the challenges and opportunities faced by regulators from deployment of emerging technologies.

What are the challenges and opportunities faced by policy makers and regulators in embracing transformative technologies for greater impact?

Policy makers and regulators face a number of challenges and opportunities when embracing transformative technologies.

#### Challenges include:

- Rapid technological advancement outpacing regulatory frameworks, due to bureaucracy or lack of resources at regulatory level.
- Lack of harmonization across regions complicating regulation and deployment
- High deployment costs inhibiting implementation in remote areas, such as 5G in rural regions.

### However, opportunities arise:

- Emerging technologies like satellite networks offer solutions, providing backhaul connectivity for cellular networks in remote areas.
- Advancements in satellite terminals and new-generation satellites expected to reduce costs and enhance feasibility.
- By leveraging transformative technologies, policy makers and regulators can promote equitable access to essential services and drive sustainable development.

# What are the key regulatory measures and guiding principle to follow to foster positive and inclusive impact of transformative technologies?

To foster positive and inclusive impacts of transformative technologies like satellite technology, regulatory measures must prioritize regulatory certainty, multi-stakeholder collaboration, and innovative regulation.

- Streamline and simplify regulatory processes, reducing bureaucratic barriers such as complex application forms.
- Harmonize regulatory processes on frequency allocation and licensing within regions and globally to enhance regulatory certainty.
- Develop regulatory framework for new technologies, as Earth-stations in motion (ESIMs) or or multi-orbit (GSO and NGSO) connectivity.
- Consider the impact on consumers, market players, investment flows, and national development when introducing regulations.
- Enable terrestrial and multiorbital infrastructure: Foster co-functionality of terrestrial and multiorbital infrastructure to ensure scalable and flexible network expansion.
- Ensure sufficient spectrum availability to support satellite technology deployment and innovation.
- Collaborate with international organizations and industry representatives: encourage private sector participation in regulatory consultations.

# How to drive positive behaviours of market players? How to minimize risks while maximizing benefits?

Firstly, fostering collaboration and knowledge sharing among market players can encourage the development of industry-wide standards and best practices, thereby raising the overall level of responsibility and accountability.

Secondly, governments may provide subsidies, grants, or tax incentives to companies that prioritize ethical considerations, sustainability, and social impact in their operations but also to stimulate private sector investment in less commercial services, as broadband infrastructure in remote and rural areas. Lower regulatory costs and reduction of the market access barriers (indirect costs) can considered as incentives.

Lastly, telecommunications regulators should establish robust, clear and transparent regulatory frameworks. To that end, regulators are recommended to proceed to continuous monitoring and evaluation of market dynamics, along with industry and international collaboration, in order to adapt regulatory measures proactively in response to emerging challenges and opportunities.

We hope that this information is helpful, and we remain at your availability for any further information or clarification.

Respectfully submitted,

