Wednesday, June 21, 2023

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**Subject: Multiassociation Support for the Administrative Assignment of Satcom Spectrum concerning TRAI's Consultation Paper No. 6/2023 – Assignment of Spectrum for Space-based Communication Services.**

As trade associations and professional societies, the undersigned organizations represent the global ecosystem of space and satellite communications services, a fast-growing commercial sector approaching $400 billion annually. Still, satellite communication provides incalculable value to society as a critical link for the rural and blue economies, disaster management, and life-saving communications, as well as supporting safe and secure aviation and maritime communication. The satcom value to society is clear, not only for a broad set of users, but also as the drive for technological innovation. Satcom spectrum use is based on long-standing international norms that administer spectrum via a recognized process of assignment on a non-exclusive basis predicated on non-interference. While as signatories we support spectrum auctions as one important way to allocate spectrum, we oppose the auctioning of spectrum for space-based satellite communications and strongly advocates that India utilizes international norms and processes that administratively assign spectrum for space-based satellite communication services. The rationale for this position is based on the following:

- **Satcom economics**: Satcom services provide a unique value to society, including cost-effective and ubiquitous coverage of rural areas, rugged terrain, and maritime territories. These connections, including rail, bus, aviation, and nautical users, are central to the Prime Minister's *Digital India* vision. The use of auctions for satcom services will raise prices, reduce investment, and limit the availability of these services to the rural population and industrial users, such as extractive services and the blue economy.

- **Universal Service and Access**: India has a large section of the rural population which may best be served with satellite backhaul for 5G telephony services, as it may not be pragmatic or financially viable to do so via the terrestrial network architecture. Thus, progress and advances in satellite communication technology can play a significant role in programs such as the government of India's e-Governance vision and connectivity for financial inclusion, health, and other programs grounded on connectivity.

- **Non-exclusivity of Fixed Satellite Service (FSS) spectrum**: FSS spectrum use operates on a principle of non-exclusivity, in contrast with the exclusive rights that are secured through terrestrial mobile spectrum auctions. FSS employs robust and time-tested International Telecommunication Union (ITU) coordination mechanisms to effectively resolve interference amongst different networks/systems, allowing multiple geostationary orbit (GSO) and non-geostationary orbit (NGSO) operators to utilize the same spectrum efficiently, which also ensures broad availability of satellite communications. Auctioning FSS spectrum unnecessarily introduces a limiting factor that stifles efficient utilization and innovation. Therefore, a shared, non-exclusive approach to FSS spectrum assignment, following globally accepted norms, is crucial for maximizing the socio-economic benefits of satellite technology.

- **Band Fragmentation**: If auctioned, satellite spectrum may be separated into sub-optimal frequency blocks to bidders on an exclusive basis. This may result in the fragmentation of the bands that are now shared by all satellite services and will be inefficient in utilizing the shared limited resource of the satellite spectrum.

- **International Norms**: A long-standing process managed by national jurisdictions and the ITU has supported the development of a high-performing satcom industry. This system works and has helped promote a global sector valued at approximately one hundred billion dollars. The proposal to auction spectrum undermines this process and will inhibit Indian industry from benefiting from the sector's economic and societal benefits. TRAI also acknowledged this in para 3.122 of the Consultation Paper, noting that countries like the U.S. and Brazil that tried auctioning domestic orbital slots have reverted to administrative assignment.

- **Barriers to entry**: As satellite spectrum is non-rivalrous in nature, multiple satellite operators can use the same spectrum in the same geographical location without diminishing the availability of that spectrum for others. When a resource has such characteristics and can be used this way, auctioning satellite spectrum is inefficient, exclusionary, and anti-competitive. For example, administrative assignment in the broadcast services allows the C-Band to be shared between 350 broadcasters and more than 1,700 distribution platform operators (DPOs) for channel uplink and downlink. If this spectrum were to be auctioned, many of these broadcasters and DPOs would not have the resources to acquire the necessary spectrum. Hence auctioning creates entry barriers to the market for spectrum, may reduce pluralism, and might impact local language content as many small broadcasters currently in the market would be deprived of the opportunity to broadcast their channels.

- **Auctioning satellite spectrum is not in the public interest; proceeding with it could lead to market failure**: As previously cited, auctioning of satellite spectrum is not in the public interest. Even the Supreme Court, in the Presidential Reference to the 2G spectrum judgement (a judgement on the terrestrial spectrum that was

assigned on an exclusive basis), emphasised that "Auction may be the best way of maximising revenue, but revenue maximisation may not always be the best way to serve the public good." Drawing from this judgement and the fact that satellite spectrum can be shared amongst multiple service providers without diminishing what is available to others, administrative assignment is the most viable way to achieve this objective.

For the reasons outlined above, we collectively support the administrative assignment of spectrum based on long-standing norms for the global sector. We look forward to a positive response.

## Signatories

**Asia Video Industry Association (AVIA)**

**Global Satellite Operators Association (GSOA)**

**Satellite Industry Association (SIA)**

**Satellite Industry Association - India (SIA-India)**

**Space & Satellite Professionals International (SSPI)**

**U.S. Chamber of Commerce (USCC)**

**U.S.-India Business Council (USIBC)**