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Space Spectrum Policy Priorities1

1. In adopting spectrum allocations, regulators need to recognize the essential nature of space-based communications and consider impacts to existing space services, including satellite communications, weather, deep space and beyond.
2. Satellite communication services are part of the 5G ecosystem, and accordingly should be included in research, development, and deployment funding opportunities.
	* Broadband and 5G opportunities and definitions should be technology neutral and recognize different use cases, the majority of which are not latency sensitive and do not require symmetric speeds. Technology neutrality is not the equivalent of applying the same rules to different technologies. Instead, policy objectives should be applied in a balanced manner.
3. The space industry requires reliable, predictable, and consistent spectrum policies. Space systems are designed for multiple years of operation and under specific spectrum parameters. Space systems are difficult if not impossible to change once in orbit and operating.
4. The United States needs more vocal and transparent support from U.S. regulators for its space industry internationally. The United States should advocate for reliable, predictable, consistent satellite spectrum policies that enable regional and global harmonization, including at the International Telecommunications Union.
5. The United States needs to protect space communications, including satellite communications services, from harmful interference. Some space systems operate at lower power levels than traditional terrestrial wireless systems, which could result in harmful interference to the space operations if not properly addressed by decision-makers.
* Decisions should be based on sound technical rules using widely accepted spectrum engineering principles and practices.
* The aggregate effect of terrestrial systems must be considered depending on the space application.
* Effective and expeditious mechanisms are needed to resolve harmful interference
1. Spectrum decisions may impact the provision of space-based weather and remote sensing technologies and deep space communication and navigation and potential interference issues with these critical signals.
2. Satellites need long-term access to core dedicated spectrum in low-, mid-, and high-bands, and access to additional spectrum on a shared basis with other services in multiple bands to continue to provide services and innovative future services. Key bands for commercial satellite services include:
* The 27.5-30 GHz band remains a high-priority band for satellite broadband services. The band is currently being used by commercial satellite operators to meet the broadband demands of users in underserved and unserved communities across the United States and around the world, providing millions of connections, and connecting people wherever they live, work and travel, as well as providing essential government and enterprise services.
* Satellite operators are designing and constructing satellites that operate in the 37.5-86 GHz bands for broadband uses. It is critical long-term access remains available for these services.
* The 3600-4200 MHz band has been the workhorse in providing global satellite services for decades. The FCC has repurposed the 3700-4000 MHz portion of this spectrum for terrestrial 5G services in CONUS, in collaboration with satellite service providers. However, key satellite services continue to be provided in OCONUS and continued access for satellite services remains essential.
* The 12 GHz band remains a critical band for Direct Broadcast Satellite (DBS) and non-geostationary satellite orbit (NGSO) systems. DBS providers, which hold the primary allocation in this band, provide service to

tens of millions of subscribers in the US today, while NGSO systems, which use this band on a co-primary non-interference basis, are now providing service to rural broadband consumers in the U.S. and globally.

1 These comments are supported by all SIA members except for AT&T, which abstains from participation.