

17 April 2023

U.S. Department of Commerce  
National Telecommunications and Information Administration  
Herbert C. Hoover Building  
1401 Constitution Avenue, N.W.  
Washington, D.C. 20230

Submitted via <https://www.regulations.gov>

Dear Sirs / Mesdames,

TerreStar Solutions Inc. (“**TerreStar**” or “**TSI**”) appreciates the opportunity to provide feedback on the National Telecommunication and Information Administration’s (“**NTIA**”) request for comments (“**RFC**”) on the development and implementation of a National Spectrum Strategy for the United States (docket number 230308–0068). TerreStar thanks NTIA for initiating this proceeding and welcomes the opportunity to provide these comments and recommendations.

TerreStar is a Canadian mobile-satellite service (“**MSS**”) operator licensed by Industry, Science, and Economic Development Canada (“**ISED**”) that actively markets and delivers wireless connectivity services throughout Canada under the “Strigo” brand name. These connectivity services are provided using a portion of the EchoStar T1 satellite located in geostationary orbit at 111.1°W which communicates with Strigo/Hughes 4201 mobile satellite devices on the ground. TSI maintains an extensive Canadian ground network infrastructure to support the service, including multiple calibration earth stations across the country and a gateway at the Allan Park Earth Station in Ontario, Canada. TerreStar is also a Canadian licensee of AWS-4 Ancillary Terrestrial Component (“**ATC**”) spectrum at a national Tier 1 level.

TerreStar is actively engaged in developing a suite of innovative next-generation (5G) communications technologies which are focused on facilitating the seamless integration of satellite and terrestrial networks. These innovative technologies, which will support a direct connection between a satellite and a consumer’s everyday device (“**D2D**”), will help to address the still-persistent mobile digital connectivity gap.

TerreStar appreciates and supports NTIA’s efforts to develop and implement a National Spectrum Strategy (“**NSS**”) for the United States space for the benefit of the American people. In this submission, TerreStar focusses primarily on those aspects of the RFC which relate to standardization and harmonization.

**Pillar #1; Question 1:** “... How much, if at all, should our strategy be informed by work being performed within recognized standards-setting bodies (e.g., 3GPP, IEEE), international agencies (e.g., ITU), and non-U.S. regulators or policymakers (e.g., the European Union)?”

1. As NTIA is aware, Canada and the United States share the longest international border in the world, totaling over 5500 miles. This border is among the most active in the world, with significant trade, tourism, and communication between the two countries, and it is therefore very important that the NSS be developed with a view to harmonizing spectrum usage as much as possible with neighbouring North American jurisdictions such as Canada and Mexico. Moreover, the inherently international nature of satellite operations, whether in the low Earth orbit (“LEO”), mid Earth orbit (“MEO”), or geostationary orbit (“GEO”), means that a harmonized and standardized approach to spectrum allocation and release can lead to significant benefits in terms of system interoperability, efficiency, and safety.
2. As a general observation, alignment of the NSS with internationally recognized standards and regulations has the potential to facilitate cross-border communications within North America, reduce regulatory uncertainty for all parties, and promote the development of a global equipment ecosystem for innovative telecommunications services. Therefore, TerreStar believes that it is extremely important to ensure that the NSS is informed by the on-going work of recognized standards-setting bodies, international agencies, as well as non-U.S. regulators and policymakers.
3. For example, the work currently underway at 3GPP to develop 5G standards and to begin the process of building a 6G standard, provides a direct and invaluable window into the current and future spectrum requirements of innovative new services. On 16 March 2023, the Federal Communications Commission (“FCC”) proposed a new regulatory framework to facilitate innovative collaborations between satellite operators and wireless companies (the “NPRM”).<sup>1</sup> The FCC specifically makes note in the NPRM of the work of 3GPP and seeks comment on other domestic and international efforts, including efforts at the ITU, to establish standards or conduct related work regarding satellite service to handsets.<sup>2</sup> TerreStar encourages NTIA to adopt a similarly inclusive and broad-based approach to the development and implementation of the NSS.

**Pillar #1; Question 9:** “...How should the U.S. think about international harmonization and allocation disparities in developing the National Spectrum Strategy?”

4. International harmonization of spectrum allocations can help to reduce costs and increase efficiency for telecommunications companies. If allocations and regulations differ significantly between various countries, companies may have to spend significant

<sup>1</sup> Federal Communications Commission, *Single Network Future: Supplemental Coverage from Space* (GN Docket No. 23-65); *Space Innovation* (IB Docket No. 22-271), Notice of Proposed Rulemaking (16 March 2023).

<sup>2</sup> *Ibid.*, at ¶130.

time and resources navigating different rules and requirements, which can be a barrier to entry for smaller companies. Harmonized allocations will ensure that consumers have access to similar telecommunications services on both sides of the U.S. – Canadian border. This will benefit both individuals and businesses that operate in both countries, as they can avoid the additional costs and inconvenience associated with different telecommunications ecosystems. International harmonization is also critical to ensuring that satellite operations remain effective, efficient, and safe in the global context.

5. In this regard, TerreStar encourages NTIA to work closely with ISED and regulatory agencies in other jurisdictions as it develops and implements the NSS with a view to harmonizing spectrum allocation and release as much as possible.

**Pillar #2; Question 2: “...What type of timeline would be defined as a “long-term” process? ...”**

6. Long-term spectrum planning by ISED in Canada has typically occurred on a five-year cycle, the most recent of which was initiated in September 2022.<sup>3</sup> The resulting long-term roadmaps can, of course, be supplemented and amended by consultation as may become necessary throughout the cycle, but as a general observation, TerreStar has found the five-year horizon adopted by ISED to be a practical timeline.

TerreStar thanks NTIA for the opportunity to provide the foregoing comments concerning the RFC.

Yours truly,

Scott Gibson  
General Counsel & Corporate Secretary  
TerreStar Solutions Inc.

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<sup>3</sup> Industry, Science, and Economic Development Canada, *SPB-005-22 Consultation on the Spectrum Outlook 2022 to 2026* (September 2022).