







June 26, 2023

Chairwoman Maria Cantwell Senate Committee on Commerce, Science, and Transportation 254 Russell Senate Building Washington, DC 20510

Chairwoman Cathy McMorris Rodgers House Energy and Commerce Committee 2125 Rayburn House Office Building Washington, DC 20515 Ranking Member Ted Cruz Senate Committee on Commerce, Science, and Transportation 254 Russell Senate Building Washington, DC 20510

Ranking Member Frank Pallone House Energy and Commerce Committee 2322 Rayburn House Office Building Washington, DC 20515

Dear Chair Cantwell, Ranking Member Cruz, Chair McMorris Rodgers, and Ranking Member Pallone:

Our combined organizations represent hundreds of U.S. space companies employing hundreds of thousands of Americans across the space sector. Our members include leading commercial remote sensing providers that rely on the 8025 - 8400 MHz band (X-band) to serve the U.S. government in protecting our national security, advancing scientific understanding, and supporting the diverse needs of many federal agencies in carrying out their missions. We write regarding legislative provisions relating to the study of the X-band for future auction which could have a harmful impact on the U.S. remote sensing industry and which Congress is considering as part of legislation extending the Federal Communications Commission's (FCC) auction authority.

Commercial satellite remote sensing supports U.S. military and intelligence operations by providing imagery, analytics, and other data that enable enhanced global awareness and transparency, including most recently in Ukraine. Maintaining U.S. leadership in commercial remote sensing is critical for national defense. Commercial remote sensing operators also offer other important, innovative scientific, civil, and commercial applications such as:

- Providing U.S. civil government agencies with scientific data for vital research;
- Enabling climate monitoring and environmental responsibility reporting;
- Enabling governments and industry to pinpoint the location of underwater oil and gas leaks;
- Allowing farmers, scientists, and governments to access deeper agricultural data to gain insights on global issues such as food security; and
- Keeping companies abreast of issues affecting their business, from monitoring shipping lanes, tracking cargo, and other supply chain activity to retail signals and risk assessment.

Commercial satellite remote sensing is a growing space industry that experienced an 8x increase in the number of satellites between 2012 and 2021<sup>1</sup> and is projected to reach \$16.35 billion in value by 2023, growing at 11.5% CAGR.<sup>2</sup> North America is the largest market for remote sensing technologies globally, driven in part by the innovative remote sensing companies based in the United States.<sup>3</sup>

The X-band is widely used for both federal government and commercial remote sensing satellite operations on a co-primary basis.<sup>4</sup> U.S. commercial Earth imaging and remote sensing satellite operators, including electro-optical, radar, and radio frequency sensing, rely upon the X-band to downlink imagery and other data from satellites to ground stations on Earth. These vital use cases above would be threatened if the wireless radio frequency spectrum they rely upon were allocated for terrestrial mobile use.

Section 701 of H.R. 3565, the Spectrum Auction Reauthorization Act of 2023, which recently passed the House Energy & Commerce Committee, included direction for the National Telecommunications and Information Administration (NTIA) to conduct a feasibility assessment of two frequency ranges, including 8025-8400 MHz, to consider whether these frequencies could be made available for non-federal use, shared federal and non-federal use, or a combination thereof.<sup>5</sup> The text of this section does not acknowledge the existing primary non-federal allocation for the Earth Exploration Satellite Service in the band, nor the robust existing use of the band by commercial remote sensing operators. We are concerned about the inclusion of this important commercial satellite spectrum band among the frequencies under consideration for eventual auction, and that the proposed feasibility assessment of this spectrum would be incomplete and could put at risk the national security, civil, and commercial applications of the remote sensing industry.

We urge the Committees to preserve the current 375 MHz of X-band downlink spectrum for important and growing remote sensing satellite operations. The band is already robustly used and shared among government and commercial missions, and because ground stations are sensitive to noise produced by other nearby operations, introducing new terrestrial mobile applications would significantly reduce the utility of the band for satellite operations.

<sup>&</sup>lt;sup>1</sup> Bryce Tech, Satellite Industry Association: State of the Satellite Industry Report 2022, at 25-26 (2022).

<sup>&</sup>lt;sup>2</sup> Globe Newswire, Remote Sensing Technology Market Projected to Garner USD 16.35 Billion by 2030, Growing at 11.5% CAGR - Report by Market Research Future (MRFR), Press Release, Market Research Future (July 4, 2022), https://www.globenewswire.com/en/news-release/2022/07/04/2473394/0/en/Remote-Sensing-Technology-Market-Projected-to-Garner-USD-16-35-Billion-by-2030-Growing-at-11-5-CAGR-Report-by-Market-Research-Future-MRFR.html.

<sup>&</sup>lt;sup>3</sup> See id.

<sup>&</sup>lt;sup>4</sup> 47 C.F.R. § 2.106 (see footnote US258 to the entry for 8025-8400 MHz in the U.S. non-federal table, which states "In the bands 8025–8400 MHz and 25.5–27 GHz, the Earth exploration-satellite service (space-to-Earth) is allocated on a primary basis for non-Federal use. Authorizations are subject to a case-by-case electromagnetic compatibility analysis").

<sup>&</sup>lt;sup>5</sup> https://docs.house.gov/meetings/IF/IF00/20230524/116022/BILLS-118-NA-P000034-Amdt-7.pdf

Thank you for your consideration of this important issue. We welcome the opportunity to discuss further with you and your staff at your convenience.

Sincerely,

Michel French

Michael French Vice President, Space Systems AIA

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Karina Drees President CSF

Laura Cummings President CSSMA

Tom Stroup President SIA