

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
Expanding Flexible Use in Mid-Band)	GN Docket No. 17-183
Spectrum Between 3.7 and 24 GHz)	
)	

REPLY COMMENTS OF DIGITALGLOBE, INC.

DigitalGlobe, the leader in the collection, dissemination and analysis of commercial Earth imagery, appreciates this opportunity to provide the Commission with insight into its mid-band operations as part of this proceeding.¹ Should the FCC expand flexible broadband use in mid-band spectrum, it must protect DigitalGlobe’s operations from harmful interference. For that reason, the agency should avoid disrupting DigitalGlobe’s transformative Earth Exploration Satellite Service (“EESS”) by declining to authorize flexible broadband use in the 8025-8400 MHz band (“X-band”) and adjacent bands.

DigitalGlobe provides groundbreaking enhanced Earth imagery and geospatial information using high-resolution satellites. As the first and only company to deliver true 30cm resolution imagery, DigitalGlobe offers state-of-the-art services from environmental monitoring and mapmaking, to capturing mission-critical images to support defense and public safety-related operations. Accordingly, the Commission has recognized the critical importance of EEES,

¹ DigitalGlobe, Inc. (“DigitalGlobe”) submits these reply comments in response to the above-referenced Notice of Inquiry (“NOI”) seeking comment on opportunities for expanding flexible use services in spectrum bands between 3.7 and 24 GHz (mid-band spectrum). *Expanding Flexible Use in Mid-Band Spectrum Between 3.7 and 24 GHz*, Notice of Inquiry, 32 FCC Rcd. 6373 (2017) (“Mid-Band NOI”).

which “allow[s] for the delivery of enhanced next-generation imaging services” and “enhance[s] national security, environmental monitoring and forecasting functions.”²

Among other users, DigitalGlobe serves customers in the commercial sector as well as the defense and intelligence sectors. For example, in response to the devastating California wildfires, DigitalGlobe supported emergency personnel and firefighter efforts to contain the fires and save lives by sharing imagery and critical data through its Open Data Program.³

Additionally, *60 Minutes* recently reported that archaeologists have begun to utilize DigitalGlobe infrared imagery to locate previously undetectable ancient sites, “transforming the field.”⁴

Currently, DigitalGlobe provides its EESS using five non-geostationary satellite orbit (“NGSO”) space stations communicating with earth stations in the X-band⁵ for downlink and telemetry, tracking, and control (“TT&C”).⁶ DigitalGlobe’s operations in the X-band involve frequency coordination and sharing mechanisms with other co-primary users, including government operations.⁷

² *Id.*, ¶ 1.

³ *Supporting response to California wildfires with open data*, Blog, Digitalglobe.com (Oct. 11, 2017), available at <http://bit.ly/2gEZshQ>.

⁴ Bill Whitaker, “*Space Archaeology*” *Transforms How Ancient Sites Are Discovered*, CBSNews.com (May 21, 2017), available at <http://cbsn.ws/2yU0vEP>.

⁵ Per Footnote US 258, the U.S. Table of Frequency Allocations allocates the 8025-8400 MHz frequency band on a primary basis to non-government EESS in the United States, subject to a case-by-case electromagnetic analysis of compatibility with United States government and other authorized operations in the band. *See* 47 C.F.R. § 2.106. This frequency band also is allocated on a co-primary basis to government Fixed, Fixed-Satellite (“FSS”), and EESS, and on a secondary basis to government Mobile-Satellite Service (“MSS”). In addition, the 8175-8215 MHz band is allocated on a co-primary basis to government Meteorological-Satellite (Earth-to-space) service (“MetSat”).

⁶ DigitalGlobe also utilizes 401.5 MHz, 402.7 MHz, and the 2042-2095 MHz band frequencies for TT&C. These frequencies are outside the scope of the Mid-Band NOI.

⁷ *DigitalGlobe, Inc.*, Order and Authorization, 20 FCC Rcd 15696, ¶¶ 21-25 (I.B. 2005).

DigitalGlobe acknowledges that the X-band is not the primary focus of the NOI. However, authorizing flexible use in the X-band and adjacent bands has the potential to degrade DigitalGlobe's EEES and cause harmful interference to DigitalGlobe's operations and its coordinated sharing environment. Therefore, DigitalGlobe encourages the Commission to avoid deployment of flexible use in the X-band or bands adjacent to the X-band. If the FCC decides to move forward with "other potential opportunities for expanded flexible broadband use, on a licensed or unlicensed basis," in mid-band spectrum, it must take appropriate measures to protect DigitalGlobe's incumbent EESS operations from harmful interference.

Respectfully submitted,

By:

A handwritten signature in black ink, appearing to read "Henry Gola", written over a light gray rectangular background.

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