



WASHINGTON, DC

September 25, 2017

BY ELECTRONIC POSTING

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: Planet Labs Inc., FCC File No. SAT-MOD-20170713-00103, Call Sign S2912

Dear Ms. Dortch:

DigitalGlobe Inc. (“DigitalGlobe”), by counsel and pursuant to Section 25.154 of the Commission's Rules (47 C.F.R. § 25.154), hereby submits these comments concerning the above-referenced modification application filed by Planet Labs Inc. (“Planet Labs”). The modification application (“Planet Labs Application”) appeared on Public Notice as Accepted for Filing on August 25, 2017. *See* FCC International Bureau Report No. SAT-01262. Accordingly, these comments are timely under Section 25.154(a) of the Rules.

DigitalGlobe does not oppose the application, but is submitting this letter to emphasize the need for the applicant to coordinate its planned spectrum use prior to filing applications to authorize new earth station antennas at the new sites enumerated in the application. *See, e.g.*, 47 C.F.R. § 25.203(h) (“Prior to filing an earth station application, in bands with co-primary allocations to NGSO and GSO earth stations, the applicant shall coordinate the proposed site and frequency usage with existing earth station licensees and with current earth station authorization applicants”); *see also* 47 C.F.R. § 2.106, footnote US258.

DigitalGlobe is an interested party with respect to the Planet Labs application because it, or its predecessor entities, has operated since 2001 an Earth Exploration Satellite System (“EESS”) network with downlink operations at 8025-8400 MHz (*see* FCC Call Signs S2129 and S2130), the same band used by Planet Labs. Digital Globe is currently operating Earth station facilities near four of the six locations at which Planet Labs proposes in its application to construct additional X/S-band earth station facilities (Fairbanks, Alaska; Prudhoe Bay, Alaska; Svalbard, Norway; and Punta Arenas, Chile). DigitalGlobe is therefore concerned that virtual co-location of the additional Planet Labs facilities with DigitalGlobe’s existing earth stations could pose issues for successful coordination of the two licensees’ substantial data downlink operations.

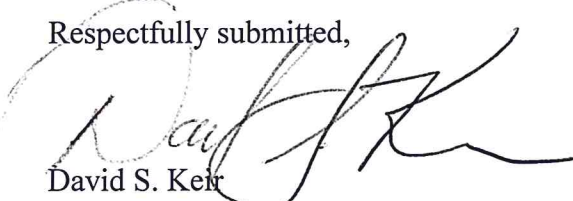


Planet Labs acknowledges its obligation to coordinate in the narrative statement supporting its application, but it states that interference is likely to be “very infrequent” due to the fact that EESS systems in the X-band “normally transmit only in short periods of time while visible from the dedicated receiving Earth stations.” Planet Labs Application, Exhibit 43 at 11. It indicates that interference would be limited to circumstances where satellites from two different networks traveled through the receive antenna beam of one network’s receiving station while both were transmitting data. *Id.* Planet Labs expresses confidence that “interference can be avoided by coordinating the satellite transmissions so that they do not occur simultaneously.” *Id.* DigitalGlobe is currently conducting its own analysis to determine the likelihood of interference and effectiveness of the proposed mitigation method, so DigitalGlobe is not yet in a position to agree with or refute the statements made by Planet Labs in its application.

DigitalGlobe appreciates Planet Labs’ explicit acknowledgement of its coordination obligation as an applicant proposing new operations, and notes that Planet Labs has already initiated coordination related to the subject facilities. DigitalGlobe is hopeful that that these discussions will result in a mutually acceptable coordination arrangement in the near term. Nonetheless, DigitalGlobe observes that Planet Labs is proposing to deploy a very large number of low-Earth orbiting cubesats, with the result that the frequency of satellite passes over each ground station will be dramatically increased in relation to the frequency of flyovers from a network with a smaller number of higher-orbit non-geostationary satellites (such as the DigitalGlobe network). *See* Planet Labs Application, Exhibit 43 at 2 (stating that it is authorized for “operation of up to 600 satellites in the Flock constellation, not to exceed 200 operational satellites at any one time”). In addition, the Planet Labs space stations transmit at a lower data rate (70 Mbps), and thus are likely to remain in transmit mode a higher percentage of the time that each satellite is in view over a ground station. These are among the issues that the parties must work through in reaching an appropriate coordination agreement.

Accordingly, because a coordination agreement has not yet been reached, DigitalGlobe urges the Commission to include as a condition of any modified space network license granted to Planet Labs a requirement that the licensee complete coordination at the proposed Earth station sites that overlap with DigitalGlobe’s existing facilities prior to submitting to the FCC any application to operate ground segment facilities at these locations. The Commission has previously imposed similar conditions reinforcing this obligation. *See, e.g., Hughes Network Systems, LLC*, File No. SAT-LOA-20160624-00061, Call Sign S2834 (grant stamp dated March 15, 2016), *citing, inter alia*, 47 C.F.R. § 25.203.

Respectfully submitted,



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Ms. Marlene H. Dortch
September 25, 2017
Page 3

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