Denise Berger

From: Keil J. Ritterpusch [kritterpusch@comspacelaw.com]
Sent: Monday, October 31, 2005 4:55 PM
To: IBSecretary
Cc: Kathleen Campbell; Andrea Kelly; Cassandra Thomas; 'Bettina Eckerle'; 'Walter S. Scott'; 'Mark Fiekers'
Subject: DigitalGlobe Petition for Reconsideration of Order and Authorization (File No. SAT-MOD-20040728-00151)

To Whom It May Concern--

Please find attached hereto a Petition for Reconsideration of the Commission's Order and Authorization dated September 30, 2005 authorizing the modification of DigitalGlobe's NGSO remote sensing satellite system. The applicable FCC File Number is SAT-MOD-20040728-00151.

If there should be any problem with processing this pleading, please give me a call or e-mail me.

Cordially yours,
Pierson & Ritterpusch, LLP

Keil J. Ritterpusch

****
Keil J. Ritterpusch, Esq.
Pierson & Ritterpusch, LLP
2121 Cooperative Way, Suite 200
Herndon, VA 20171
(703) 563-3090, x. 205
Fax: (703) 563-3089
Cell: (703) 944-9263
kritterpusch@comspacelaw.com

Before The

Federal Communications Commission

Washington, D.C. 20554

In The Matter of	
DigitalGlobe, Inc.	
Modification of Authorization to Construct, Launch and Operate a Remote-Sensing Satellite System	File No. SAT-MOD-20040728-00151 Call Sign: S2129

To: Secretary, Federal Communications Commission, Washington, D.C. 20554

PETITION FOR RECONSIDERATION OF BOND REQUIREMENT AMONG OTHER MATTERS PROVIDED IN FCC ORDER AND AUTHORIZATION, DA 05-2640

DigitalGlobe, Inc. ("DigitalGlobe"), though counsel, pursuant to Section 1.106 of the Commission's rules, hereby requests that the Commission reconsider and waive the bond requirement set forth in Order and Authorization DA 05-2640 (hereinafter, "*Order*") issued on September 30, 2005.[1]

As an alternative to waiving the application of the bond requirement to DigitalGlobe, DigitalGlobe requests that Commission rule that: (1) NGSO remote sensing satellites are GSO-like for purposes of the bond requirement; (2) the appropriate bond for NGSO remote sensing satellite systems is $3,000,000; (3) there are only four milestones required for the construction of NGSO remote sensing satellite systems; and (4) an NGSO remote sensing system licensee will fulfill the milestone requirement by constructing, launching, and bringing into operation the first satellite in its NGSO remote sensing satellite system.

---

[1] In the Matter of DigitalGlobe, Inc., Modification of Authorization to Construct, Launch and Operate a Remote-Sensing Satellite System, *Order and Authorization*, DA 05-2640, FCC LEXIS 5427 (2005) (*Order*).

In the event that the Commission authorizes an NGSO remote sensing satellite operator in a license modification to operate new satellites using more bandwidth per satellite than previously authorized, we would accept a new $3,000,000 bond being imposed on the licensee. However, we request that the Commission rule that the bond would be fulfilled by the NGSO remote sensing system licensee launching and bringing into operation the first satellite using the additional bandwidth. Further, we request that the Commission rule that there would be no bond requirement for the construction, launch, and operation of additional NGSO remote sensing satellites authorized pursuant to satellite modification applications, as long as such satellites will operate only within already-authorized bandwidth.

In addition to this Petition, DigitalGlobe notes that it filed a Request for Determination of Compliance with Satellite Implementation Milestones ("*Request*") on October 24, 2005, which the Commission has yet to issue a ruling on at the time of filing this *Petition*.

I. Executive Summary

As part of the *Order*, the Commission has required that DigitalGlobe post a $5,000,000 bond to: (1) ensure that DigitalGlobe uses the entire spectrum that the Commission has authorized DigitalGlobe to use; and (2) prevent Digital Globe from warehousing the spectrum to use in the unlikely event that best case demand scenarios materialize or to delay competitors from using it.

DigitalGlobe believes that the bond requirement is unnecessary in this case for several reasons. First, DigitalGlobe is a licensed remote sensing operator by the National Oceanic and Atmospheric Administration ("NOAA") and the process of being licensed by NOAA inhibits speculative and financially unqualified entities from being authorized to operate remote sensing satellite systems. Second, DigitalGlobe is committed to the U.S. Government (specifically, the

National Geospatial-Intelligence Agency) to construct, launch, and operate the satellites that are authorized by the O*rder*. DigitalGlobe believes that this fact alone is conclusive evidence that DigitalGlobe is financially capable and committed to build and operate the authorized satellites. Third, the warehousing of spectrum and orbital resources by remote sensing operators in the United States is pragmatically impossible due to NOAA's licensing requirements, the ability of EESS bands to be used by multiple users, and the abundance of orbital locations in which prospective operators can operate their systems.

Alternatively, however, should the Commission not be persuaded to rescind the bond requirement, DigitalGlobe requests that the Commission make the determination that DigitalGlobe's NGSO Remote Sensing Satellites are GSO-like, and, thereby, DigitalGlobe should be subject to only 4 milestones and the bond reduced to $3,000,000. Moreover, DigitalGlobe requests that the Commission establish that NGSO Remote Sensing System Licensees will fulfill their milestone requirements by constructing, launching, and bringing into operation the first satellite in their NGSO Remote Sensing Satellite Systems.

For the good cause demonstrated below, we urge the Commission to grant the request to waive the bond requirement in the instant case.

TABLE OF CONTENTS

II. Background

The *Order* granted DigitalGlobe authority to modify DigitalGlobe's Non-Geostationary Satellite Orbit ("NGSO") satellite system.[2] Within the *Order*, the Commission required DigitalGlobe to fulfill certain milestones for constructing the authorized satellites and modifying its space segment (*Order*, para. 11). Also, the Commission required that DigitalGlobe post a bond by October 30, 2005 in the amount required by the Commission's rules for the construction and operation of an NGSO satellite system: five million dollars ($5,000,000) (*Order*, paras. 12-13). The bond requirement was imposed in order to ensure that DigitalGlobe uses the entire spectrum that the Commission has authorized DigitalGlobe to use. The Commission's stated purpose for the bond was to prevent DigitalGlobe from " 'warehousing' the spectrum to use in the unlikely event that 'best case' demand scenarios materialize or to delay competitors from using it" (*Order*, para. 13).

III. There is Good Cause to Waive the Bond Requirement in the *Order* in Light of the Totality of the Circumstances related to DigitalGlobe's Construction, Launch, and Operation of Its Next-Generation Earth Exploration Satellite System ("EESS")

A. The Commission's Intent Behind the Bond Requirement

The genesis of the bond requirement lies in the First Notice of Proposed Rulemaking and First Report and Order, otherwise known as the *Space Station Reform NPRM,*[3] whose principle aim was to streamline the licensing process.[4] In the *Space Station Reform NPRM*, the Commission noted that an important aspect of the licensing process was an assurance that

---

[2] *Order,* (para. 1).

[3] *See* In the Matter of Amendment of the Commission's Space Station Licensing Rules and Policies, *Notice of Proposed Rulemaking and First Report and Order*, IB Docket No. 02-34, 17 FCC Rcd 3847, at 3880-84 (paras. 98-108) (2002) (*Space Station Reform NPRM*).

[4] *Space Station Reform NPRM*, 17 FCC Rcd at 3852 (para. 11).

applicants for U.S. space station licenses have the technical *and* financial wherewithal to construct and operate a satellite.[5]

At the time of the promulgation of the *Space Station Reform NPRM*, the Commission's Rules required an analysis of the financial position of prospective licensees such that the Commission could be assured that the licensee could undertake to actually construct and launch the satellite covered by the license.[6] Noting that the then-current "financial qualification requirement" and the milestone policy serve essentially the same purpose, the *Space Station Reform NPRM,* at paragraph 108, requested comments on the necessity or effectiveness of the financial qualification requirement, as such requirement "provides only a preliminary and therefore possibly imprecise assessment of whether an applicant is able to proceed with construction, launch, and operation."[7]

In 2003, the Commission promulgated the *Space Station Licensing Reform Order*[8] in which the Commission, among other matters, eliminated the financial requirement then current in the Commission's Rules and addressed numerous comments made by stakeholders on the *Space Station Reform NPRM*.[9] In the *Space Station Licensing Reform Order,* the Commission adopted a proposal by Intelsat, based on a previous Order related to paging companies, that in lieu of a financial qualification requirement, the Commission would require the posting of a Bond.

In particular, the Commission noted that:

> By requiring satellite licensees to make a financial commitment to construct and launch their satellites,

[5] *Space Station Reform NPRM*, 17 FCC Rcd at 3880 (para. 100).
[6] *Id.*
[7] *Space Station Reform NPRM*, 17 FCC Rcd at 3881, (para. 102).
[8] *See* In the Matter of Amendment of the Commission's Space Station Licensing Rules and Policies; Mitigation of Orbital Debris, *First Report and Order*, IB Docket No. 02-34, 18 FCC Rcd 10760 (2003) (*Space Station Licensing Reform Order*).
[9] *Space Station Licensing Reform Order*, 18 FCC Rcd at 10824 (para. 166).

> we help deter speculative satellite applications, and help expedite provision of service to the public.[10]

In addition, the Commission declared that replacing the financial qualification requirement with a bond requirement would "result in the financial community determining whether the licensee is likely to construct and launch its satellite system", thereby ensuring that the process would be "market driven rather than a regulatory determination".

The Commission further opined in the *Space Station Licensing Reform Order* that the bond requirement would be applied to new satellite licensees only, not replacement satellites. The Commission specifically provided that "once a licensee has begun to provide service, we are confident that its replacement satellite application will be intended to continue service, and would not be filed for speculative purposes.[11]

In the *Space Station Licensing Reform Order*, the Commission envisioned a system where prospective licensees would execute performance bonds payable to the U.S. Treasury within thirty (30) days of the grant of their licenses.[12] The bond would be executed in the event of a licensee missing any of the milestones without adequate justification: "Thus, the bond requirement is in effect an additional milestone requirement. We intend this bond requirement to provide assurance that the licensee is fully committed at the time it's license is granted to construct its satellite facilities...."[13] In sum, the Commission states:

> By making the bond payable upon failure to meet any milestone based on circumstances within the licensee's control, we require licensees to commit to construct and launch its satellite system, and so we further strengthen our protections against speculation and warehousing.[14]

---

[10] *Space Station Licensing Reform Order*, 18 FCC Rcd at 10825 (para. 167).
[11] *Space Station Licensing Reform Order*, 18 FCC Rcd at 10825 (para. 167)..
[12] *Space Station Licensing Reform* Order, 18 FCC Rcd at 10826 (para. 170).
[13] *Id.*
[14] *Id.*

In the Commission's most recent ruling regarding milestones and the bond requirement, the *Fifth Report and Order*, [15] the Commission established the authority to require a bond and described the rationale behind the bond requirement.[16] In particular, the Commission clarified that the bond requirement was a new financial qualification requirement.[17] In addition, the Commission re-iterated that it imposes financial qualification requirements to help prevent warehousing of the orbit/spectrum resource, by ensuring that satellite licensees have the financial resources necessary to construct and launch a satellite.[18] Finally, the Commission stated that requiring satellite licensees to make a real financial commitment to construct and launch a satellite, and to demonstrate to a surety company that they will be financially able to proceed, limits the likelihood that the licensee will hold a license simply to preclude another party from going forward.[19]

Thus, the *Space Station Licensing Reform Order* and the *Fifth Report and Order* did not exactly replace the financial qualifications requirement with the bond requirement. The purpose of the financial qualification requirements was to ensure that prospective licensees would not warehouse spectrum or delay prompt service to the public because of financial inability to complete the system authorized by their license. The Commission felt that these two policy goals could be better met, while simultaneously "streamlining" the licensing process, by strict enforcement of the milestone requirements.[20]

---

[15] In the Matter of Amendment of the Commission's Space Station Licensing Rules and Policies, *First Order on Reconsideration and Fifth Report and Order*, IB Docket No. 02-34, 19 FCC Rcd 12637 (2004) (*Fifth Report and Order*).
[16] *See generally, Fifth Report and Order*, 19 FCC Rcd 12637.
[17] *Fifth Report and Order*, 19 FCC Rcd at 12646 (para. 19).
[18] *Id.*
[19] *Fifth Report and Order*, 19 FCC Rcd at 12642-12643 (para. 12)
[20] *Space Station Licensing Reform Order*, 18 FCC Rcd at 10828 (para. 175).

The Commission argued that the financial weakness of a company would be uncovered and automatically acted upon were that company to miss a milestone. Warehousing would be avoided because at the moment a milestone is missed, barring pending motions to extend the time of the milestone for good cause, a licensee's license becomes null and void and the portion of the spectrum allocated to that licensee would become available once again to new applicants.[21] The Commission appears to have added the bond requirement as an additional measure to limit speculative license seekers and as a means for the financial community to assess the fiscal strength of a company *before* continuing down the construction, launch, and service-provision path punctuated by the milestones.

While the *Space Station Licensing Reform Order* claimed to be replacing the financial qualification requirement with the bond requirement,[22] it is clear that both the bond requirement and strict milestone enforcement operate to limit the probability that speculative license seekers will obtain licenses without having the prerequisite financial ability or commitment to constructing the systems that they are authorized to operate.

Within the *Order*, the Commission provided that the Commission had eliminated the financial requirements then in place in the Commission's Rules and replaced them with the bond requirement.[23] The Commission explained that DigitalGlobe must file a bond because: (1) "remote sensing satellite operators are not exempt from the bond requirement in circumstances where they propose to operate a next-generation satellite system using additional frequencies for which they are not currently authorized"[24] and (2) DigitalGlobe had received authorization from

---

[21] *Space Station Reform NPRM*, 17 FCC Rcd at 3882-3883 (para. 105); *see also*, 47 C.F.R. § 25.160.
[22] *Space Station Licensing Reform Order*, 18 FCC Rcd at 10825 (para. 167).
[23] *Order*, FCC LEXIS 5427 (para. 12).
[24] *Order*, FCC LEXIS 5427 (para. 13); see also, *Fifth Report and Order*, 19 FCC Rcd at 12658-12659 (para. 58).

the Commission to operate three new satellites in its NGSO remote sensing satellite system in frequencies not previously authorized by the Commission.[25]

Thus, the apparent rule that currently applies to NGSO remote sensing satellite systems is that they have to post a bond only when the Commission authorizes modifications of their satellite system whereby new satellites will operate in frequency bands that are not part of their prior authorization.

B. Standard for Considering Petitions for Reconsideration and Waivers of Commission Rules

In considering whether to grant the instant request, DigitalGlobe understands that the Commission must consider whether there is good cause[26] for waiving its rule in the particular case. In making this determination, DigitalGlobe further understands that the Commission must assess whether the grant would have an effect of undermining the policy in general and would otherwise serve the public interest.[27] Accordingly, DigitalGlobe herein provides an explanation regarding why: (1) there is good cause to grant the Motion; (2) the Commission's policy will not be undermined by granting DigitalGlobe's Motion; and (3) granting the instant Motion will serve the public interest.

DigitalGlobe understands that the Commission has not yet permitted the waiver of the bond requirement for any satellites licensed since the bond requirement was implemented. Therefore, the instant petition provides the Commission with a matter of first impression. Thus, there is no directly on point precedent in the instant case and the only on point standard that

---

[25] *Order*, FCC LEXIS 5427 (para. 13).
[26] 47 C.F.R. § 1.3; *see also, Fifth Report and Order,* 19 FCC Rcd at 12646 (para. 19).
[27] *See, e.g.*, Second Round Assignment of Geostationary Satellite Orbit Locations to Fixed Satellite Service Space Stations in the Ka-Band, 16 FCC Rcd 14389, at 14392-14393 (para. 12), *citing WAIT Radio v. FCC*, 418 F.2d 1153, at 1157 (D.C. Cir. 1969), *cert. denied*, 409 U.S. 1027 (1972).

applies is whether there is "good cause" for the suspension, revocation, amendment, or waiver of the pertinent rule in the instant case.[28]

C. Reasons Why the Commission Should Not Require DigitalGlobe to Post a Bond in the Instant Case

The Commission's stated purpose for the bond requirement, as delineated in detail above, is to ensure that only those licensees who are financially committed and able to construct, launch, and operate satellites are licensed by the Commission. In addition, the Commission has stated that it desired for the financial community to be involved in determining whether licensees were financially capable of building satellites they are authorized to operate.[29] Finally, although it is not *per se* addressed in any of the Commission's prior orders or other rulemakings, it is apparent that the Commission wanted to have a "milestone" that was earlier than the time of the first performance milestone (i.e., contract execution)—generally one year after license grant. The purpose of this earlier "milestone" was ostensibly to ensure more quickly that licensees made concrete decisions on whether to accept the responsibility of constructing, launching, and operating their licensed satellite systems than one year from the date of grant.

Therefore, the Commission established the 30-day timeframe by which licensees must file bonds to demonstrate their financial commitment and ability to construct, launch, and operate the satellites in their authorizations as a "preliminary" financial qualification mechanism.

Applying the bond requirement to DigitalGlobe in the instant case is unnecessary because:

(1) DigitalGlobe is a licensed remote sensing operator by the National Oceanic and Atmospheric Administration ("NOAA") and the process of being licensed by NOAA inhibits speculative and financially unqualified entities from being authorized to operate remote sensing satellite systems;

---

[28] 47 C.F.R. § 1.3.

[29] *Space Station Licensing Reform Order*, 18 FCC Rcd at 10825 (para. 167).

(2) DigitalGlobe is committed to the U.S. Government to construct, launch, and operate the satellites that are authorized by the *Order*, which fact is conclusive that DigitalGlobe is financially capable and committed to build and operate the authorized satellites; and

(3) the warehousing of spectrum and orbital resources by remote sensing operators in the United States is pragmatically impossible due to NOAA's licensing requirements, the ability of EESS bands to be used by multiple users, and the abundance of orbital locations in which prospective operators can operate their systems.

1. DigitalGlobe is a Licensed Remote Sensing Operator by NOAA and the Process of Being Licensed by NOAA Inhibits Speculative and Financially Unqualified Entities From Being Authorized to Operate Remote Sensing Satellite Systems

DigitalGlobe operates its remote sensing satellite system under authority of the Secretary of Commerce in accordance with dictates of the Land Remote Sensing Policy Act of 1992 (the "Remote Sensing Act"),[30] the regulations promulgated by NOAA under delegated authority from the Secretary of Commerce ("NOAA's Regulations"),[31] and the terms of the license issued by the Secretary of Commerce to DigitalGlobe.[32]

In particular, the Remote Sensing Act provides that: "No person who is subject to the jurisdiction or control of the United States may, directly or through a subsidiary or affiliate, operate any private remote sensing space system without a license pursuant to Section 5621" of title 15 of the United States Code. NOAA's Regulations extend the entities that are captured by

[30] Land Remote Sensing Act of 1992 ("Remote Sensing Act"), 15 U.S.C. §§ 5621, et seq. (2005).
[31] 15 C.F.R. Part 960 (2005).
[32] DigitalGlobe's license from NOAA to operate its remote sensing satellite system has elements that are classified. As a result, DigitalGlobe is not at liberty to submit a copy of its license. If the Commission desires to understand any of the specific terms of DigitalGlobe's NOAA license, please contact Kay Weston, Chief of the Satellite Activities Branch of the NOAA Satellite and Information Service ("NESDIS") at (301) 713-2024, x. 220.

their regulations to include persons subject to the jurisdiction or control of the United States who *propose* to operate private remote sensing space systems.[33]

In terms of the licensing process applicable to remote sensing satellite systems, the Remote Sensing Act provides that:

> ...[n]o license shall be granted by the Secretary [of Commerce] unless the Secretary determines that the applicant will comply with the requirements of [the Remote Sensing Act], any regulations issued pursuant to [the Remote Sensing Act], and any applicable international obligations and national security concerns of the United States."[34]

NOAA's Regulations further provide that the Secretary's determination must be in writing[35] and that license applications received must be disseminated to, reviewed by, and approved by the Department of Defense, Department of State, Department of the Interior, and any other interested federal agency before NOAA may issue a license.[36]

A prospective remote sensing satellite operator must furnish the Secretary of Commerce in its application to operate a remote sensing space system detailed information regarding the ownership and affiliations of the prospective licensee, as well as detailed technical information regarding the operation of the launch, space, and ground segments of the remote sensing space system.[37] This information is used by NOAA to determine the applicant's "suitability to hold a private remote sensing space system license."[38]

Appendix 1 to NOAA's Regulations specifically provides that applicants must provide NOAA with the following information (among other information):

---

[33] *See*, 15 C.F.R. § 960.2(a).
[34] *See also*, 15 C.F.R. § 960.4, §960.6(f).
[35] 15 C.F.R. § 960.6(f).
[36] See, 15 C.F.R. § 960.6 (a)-(d) and Appendix 2 to Part 960.
[37] See, Remote Sensing Act, § 5622(b)(5); see also, 15 C.F.R. § 960.6, Appendix 1, to Part 960, and Appendix 2 to Part 960.
[38] 15 C.F.R. Appendix 1 to Part 960, at subsection (d).

(1) the proposed launch schedule; (2) the proposed launch vehicle source; (3) the proposed launch site; (4) the anticipated operational date; (5) the range of orbits and altitudes (nominal apogee and perigee); (6) the inclination angle(s); (7) the orbital period(s); (8) the number of satellites which will comprise the system; (9) technical space system information at the level of detail typical of a request for proposal specification; (10) the command (uplink and downlink) and mission data (downlink) transmission frequencies and system transmission (uplink and downlink) footprint; (11) the downlink data rate and any plans for communications crosslinks; (12) the applicant's plans for protection of uplink, downlink and any data links; and (13) other data pertinent to the imaging capabilities of the system.[39]

Applicants are required to provide data regarding their proposed remote sensing space system "in sufficient detail to enable the Secretary to determine whether the proposal meets the requirements of the [Remote Sensing Act]."[40] All of the information submitted to NOAA as part of the licensing process becomes a part of the licensee's license to operate a remote sensing satellite system, and the Remote Sensing Act and NOAA's Regulations make it unlawful for a licensee to violate any provision of its license.[41]

It is clear, both from the above-cited, substantive requirements imposed in NOAA's Regulations and from DigitalGlobe's practical experience in going through the extensive licensing process—including the licensing of modifications to DigitalGlobe's space system—with NOAA, the Department of Defense, the Department of State, and the U.S. Intelligence

[39] 15 C.F.R. Appendix 1 to Part 960, Section I-V.
[40] *Id.*
[41] 15 C.F.R. § 960.13.

Community, that the process of obtaining *and* maintaining a license to operate a remote sensing satellite system is extraordinarily difficult.

The process is so exacting and the license requirements so detailed that DigitalGlobe believes NOAA's licensing policy alone provides a sufficient mechanism to preclude prospective remote sensing satellite operators from filing speculative license applications. There have been only thirteen (13) entities licensed by NOAA to operate private remote sensing space systems in the thirteen (13) year existence of the legal regime to permit the operation of such systems. Of the 13 NOAA licensees, only approximately half have filed license applications with the FCC to operate their remote sensing satellites in the spectrum allocated for use by the Earth Exploration Satellite Service ("EESS"). Further, of the 13 entities licensed by NOAA, only 4 have current remote sensing satellite operations.

In the exercise of its role as the primary agency responsible for implementing U.S. remote sensing policy, NOAA is charged with ensuring that the systems it authorizes operate without causing unavoidable interference on the operations of the other licensed systems. NOAA will not authorize any prospective applicant to operate a remote sensing system, if the technical parameters provided by such prospective applicant will result in interfering with the operations of existing licensees, nor will NOAA authorize existing licensees to modify their systems in such a way as would cause interference on other existing licensees or prospective licensees who have applications before the agency.

DigitalGlobe believes that the procedures associated with obtaining a license to operate a remote sensing space system from NOAA are so rigorous that there is no need for the Commission to impose bonds on remote satellite systems authorized by NOAA.[42] The

[42] On a side matter, DigitalGlobe notes that the Commission's Rules do not currently explicitly prohibit entities that are not already authorized to operate remote sensing space systems by NOAA from obtaining licensees to operate

Commission's stated purpose for the bond is: (1) to provide an early mechanism for licensees to show the Commission that they are financially capable of constructing and operating the authorized satellites; (2) to provide the Commission with an independent assessment regarding the financial wherewithal of the licensee to construct and operate the satellites; and (3) to prevent entities from "warehousing" scarce spectrum and orbital resources by not constructing, launching, and operating in a timely fashion.

In light of the rigorous licensing requirements imposed by NOAA and the detailed review of the qualifications of prospective licensees to operate their remote sensing satellite systems in accordance with the national security interests of the United States by NOAA, the Department of Defense, the Department of State, and the U.S. Intelligence Community (among other interested agencies), DigitalGlobe contends that the bond requirement is unwarranted. It is hard to imagine that NOAA, the Department of Defense, the Department of State, and the U.S. Intelligence Community (not to mention the other interested agencies) would permit prospective applicants to obtain licensees when such licensees do not have a commitment to building their satellite systems.

Even assuming the relevant agencies were to permit applicants to obtain "speculative licenses", it is clear from the Remote Sensing Act and NOAA's Regulations that NOAA could only authorize such applicant to obtain a license if such grant was in the national security interest of the United States. It is inconceivable that NOAA or any of the other relevant, interested agencies would permit any licensees to "warehouse" spectrum or other "valuable" remote sensing satellite resources (e.g., orbital slots, etc.) at the expense of either existing, licensed

---

remote sensing satellites in EESS bands, DigitalGlobe strongly encourages the Commission to amend its rules to so provide. NOAA is the "lead agency" with regard to the regulation of remote sensing satellite systems in the United States, being directly involved in coordinating the joint use of EESS spectrum by its licensees. Thus, it would be proper for the Commission to require prospective EESS licensees to obtain NOAA licenses prior to filing licenses with the Commission to use EESS-allocated spectrum.

remote sensing operators or future, viable remote sensing applicants. "Warehousing" spectrum or wasting other "valuable" remote sensing satellite resources is directly contrary to the national security interests of the United States.

It must follow, therefore, that NOAA, and the other interested agencies involved in reviewing remote sensing satellite applications, have *already* implemented a licensing system that precludes the warehousing of spectrum and ensures that only "qualified" applicants receive remote sensing satellite system authorizations. By requiring remote sensing satellite operators who are licensed by NOAA to post bonds to show that they are financially capable of constructing, launching, and operating remote sensing satellite systems, the Commission is implementing a regulatory regime that imposes a duplicative burden on remote sensing satellite operators.

2. DigitalGlobe is Committed to the U.S. Government to Construct, Launch, and Operate the Satellites that are Authorized by the *Order*, which Fact is Conclusive that DigitalGlobe is Financially Capable and Committed to Building and Operating the Authorized Satellites

As DigitalGlobe described in its Request for Determination of Compliance with Satellite Implementation Milestones ("*Request*") on October 24, 2005, DigitalGlobe has already commenced construction of the first satellite authorized by the Order, having completed, *prior* to the time of the Commission's grant of the *Order*, three (3) of the five (5) milestones set forth in the *Order*.

As we instructed the Commission in our original application (SAT-MOD-20040728-00151) and in the "Request for Determination of Compliance with Satellite Implementation Milestones", the funding of the construction of the newly authorized satellite is coming from both DigitalGlobe and the National Geospatial-Intelligence Agency ("NGA"), in accordance with the terms of an agreement between DigitalGlobe and NGA called the NextView Agreement.

Under the NextView Agreement, NGA has agreed to fund fifty percent (50%) of the actual cost of DigitalGlobe's development and construction of the next-generation remote sensing satellite system, not to exceed a specified maximum amount, in exchange for DigitalGlobe's agreement to operate that system once launched and to provide data from it to NGA at favorable prices.

Specifically, the following are some details related to the NextView Agreement from the NIMA (now NGA) press release announcing the awarding of the contract:

> The NextView award to DigitalGlobe is a contract with a potential to award more than $500 million over the period of performance of the contract. The contract allows NIMA early participation in the development cycle for the next generation of U.S. commercial satellite imaging capabilities. NextView moves beyond the commodity-based approach of commercial imagery acquisition and seeks to assure access, priority tasking rights, volume (area coverage) and broad licensing terms for sharing imagery with all potential mission partners. This contract will transform how NIMA provides geospatial intelligence by assuring availability of 0.5-meter commercial imagery.[43]

Under the NextView Agreement with NGA, DigitalGlobe is obligated to meet certain detailed satellite construction, launch, and operation milestones imposed by NGA.[44] DigitalGlobe's obligations to the U.S. Government under the NextView Agreement are generally more extensive than the obligations stipulated in the *Order* in terms of the timeframes for constructing, launching and bringing the satellites into operation. The only requirement in the *Order* that is not contained in the NextView Agreement is the bond requirement.

DigitalGlobe believes that the existence of the Agreement with NGA according to which DigitalGlobe has demonstrated its commitment to construct, launch and operate the satellites

[43] *See* NIMA (now NGA) Media Release 3-12, September 30, 2003.

[44] Unfortunately, DigitalGlobe is not at liberty to submit a copy of the NextView Contract, as there are significant portions of the NextView Contract that are classified. In the event that the Commission desires to understand the full nature of DigitalGlobe's contractual commitments to NGA under the NextView Contract, we direct you to discuss salient matters with Ms. Cyndi Wright, the NextView Program Manager at NGA, at (301) 227-6645, or wrightc@nga.mil.

authorized by the *Order* in the frequencies allocated in the *Order* alone obviates the need for imposing a bond in the instant case. The Commission's stated purpose for the bond is: (1) to provide an early mechanism for licensees to show the Commission that they are financially capable of constructing and operating the authorized satellites; (2) to provide the Commission with an independent assessment regarding the financial wherewithal of the licensee to construct and operate the satellites; and (3) to prevent entities from "warehousing" scarce spectrum and orbital resources by not constructing, launching, and operating in a timely fashion.

Here, by entering into the NextView Agreement with NGA, DigitalGlobe committed itself to the U.S. Government, in the interest of national security, to construct, launch, and operate the satellites that are authorized by the *Order*. NGA went through an extensive, competitive bid process in awarding the NextView Agreement to DigitalGlobe, according to which NGA has agreed to fund up to fifty percent (50%) of the construction cost of the next-generation remote sensing satellite system, not to exceed a specified maximum amount. In awarding the substantial NextView Agreement award to DigitalGlobe, after going through an extensive, competitive bid process, NGA determined that DigitalGlobe was financial capable of constructing the next-generation remote sensing system contemplated by the NextView Contract and embodied in the *Order*.

As NGA has agreed to provide a significant cost share to DigitalGlobe under the NextView Agreement and NGA, an independent agency from the FCC, has already determined that DigitalGlobe has the financial wherewithal to construct the remote sensing satellite system authorized by the *Order*, there is no need for the Commission to use the bond to prove DigitalGlobe's financial qualifications. Likewise, as DigitalGlobe has already completed three of the five milestones set forth in the *Order* in fulfillment of its contractual obligations to NGA,

there is no need for the Commission to use the bond as an "early" milestone. Finally, as DigitalGlobe is committed to the U.S. Government under the NextView Agreement to build the satellite system, using all of the spectrum allocated in the *Order*, there is no risk that DigitalGlobe has filed a speculative license application or that DigitalGlobe will "warehouse" the authorized bandwidth.

Accordingly, DigitalGlobe contends that the bond is unnecessary. As the facts of the present case are exceptionally unique and the Commission's grant of the instant Petition would rely on and be specifically tailored to the facts presented, the Commission's grant of this petition will not undermine the policy objectives of the underlying bond requirement. Finally, the waiver of the bond requirement in the instant case will facilitate the timeliness by which DigitalGlobe brings its remote sensing system into operation, as the waiver of the bond requirement will enable DigitalGlobe to use all of its resources in constructing, launching, and operating the authorized satellites.

3. The Warehousing of Spectrum and Orbital Resources by Remote Sensing Operators in the United States is Pragmatically Impossible Due to NOAA's Licensing Requirements, the Ability of the Band to Be Used by Multiple Users, and the Abundance of Orbital Locations in Which Prospective Operators can Operate their Systems

As discussed in Section II, C., 1., above, DigitalGlobe believes that the regulatory regime implemented by NOAA in regulating the activities of remote sensing satellite licensees has made it practically impossible for entities to "warehouse" spectrum to the detriment of either existing or prospective, future remote sensing satellite operators. For, NOAA has developed a rigorous system to ensure that licensed operators use the applicable remote sensing frequencies (the EESS frequencies) without causing interference on other licensed operators (whether presently authorized or to be authorized in the future).

In addition to the limitations on speculation and harmful warehousing provided for by NOAA's regulatory regime, DigitalGlobe notes that, from an astro-physics perspective, it is virtually inconceivable, considering the current demand for remote sensing satellite imagery, that a well-coordinated spectral band could ever encounter a situation where either spectrum or orbital positions could be "warehoused" or otherwise wasted by licensees authorized to operate NGSO satellites to the detriment of prospective, future NGSO remote sensing operators or currently authorized NGSO operators. The very astro-physical characteristics associated with the "use" of orbital parameters by NGSO remote sensing satellites results in such orbital parameters being anything but "scarce."

NGSO remote sensing satellite systems operate very differently from every other NGSO satellite system regulated by the FCC. Although multiple remote sensing satellites are routinely authorized by the Commission under single NGSO authorizations, remote sensing satellites do not operate as constellations under any circumstances. That is, there is no interoperation between NGSO remote sensing satellites authorized under single NGSO licenses, unlike the majority of other NGSO satellites.

The Commission conceded in the *Order,* as well as in the *Fifth Report and Order,* that NGSO remote sensing satellites are GSO-like with regard to the applicable procedures for reviewing and approving NGSO remote sensing satellite applications.[45,46] However, the Commission decided to treat NGSO remote sensing satellites as NGSO constellations with regard to the bond requirement in the *Order*, without providing any explicit reasons therefor.

The unique parameters associated with the operation of NGSO remote sensing satellite systems essentially results in a situation whereby neither bandwidth nor operational parameters

---

[45] *See*, *Order*, FCC LEXIS 5427 (paras. 6-8).
[46] *See*, *Fifth Report and Order* 19 FCC Rcd at 12664 (para. 74).

are scarce commodities, contrary to published conclusions of the Commission. In particular, the Commission ruled in the *Fifth Report and Order* against excluding NGSO remote sensing satellite systems from the bond requirement because the Commission concluded that "granting an EESS license precludes other EESS licensees from using the same frequencies, orbits, and transmission times."[47] In making this statement, we believe that the Commission did not fully appreciate the vast number of combinations of orbital parameters and time-delimited transmission combinations that can be used by prospective remote sensing operators to interoperate in EESS bands.

The evidence is clear that there are ample, open orbital positions which NGSO remote sensing satellite operators can use to park their satellites. In fact, the determining factor for choosing appropriate locations for NGSO remote sensing satellites is *not* the inclination angle of such satellites, but their altitudes. The desired altitudes for the satellites drive the determinations regarding the best inclination angles for NGSO remote sensing satellites. Moreover, it should be noted that as many as four (4)—and possibly more—NGSO remote sensing satellites can be placed in the same altitudes and inclination angles (down to tenth of degrees) and operate without undue interference, providing that the 4 satellites are each phased 90 degrees apart from one another.

In DigitalGlobe's application to modify its NGSO remote sensing satellite system, in fact, DigitalGlobe requested the authorization to operate two NGSO remote sensing satellites at 97.2 degree inclination angles, with approximately 450-475 km altitudes, with the satellites phased at 0 degrees and 180 degrees in the orbit. The other two authorized satellites meanwhile were authorized to operate at a 98.5 degree inclination angles, with approximately 770-795 km altitudes, with such satellites phased at 0 degrees and 180 degrees in the orbit, as well. The same

[47] *See*, *Fifth Report and Order*, at paragraph 74.

inclination angles can handle a significant number of orbiting satellites, merely by varying the altitude of the given NGSO remote sensing satellites slightly.

As a result of the vast number of possible combinations of orbital parameters and time-delimited transmission combinations that can be used by prospective remote sensing operators to interoperate in EESS bands, it is clear that there is virtually no chance that a prospective remote sensing satellite operator will be able to harm other existing or prospective EESS licensees by failing to bring satellite systems into operation in a "timely" fashion or otherwise "warehousing" orbital resources. Furthermore, it is now a widely understood fact that EESS bands can be jointly used by all prospective remote sensing operators. Therefore, there is not a good public policy reason to impose a bond requirement on remote sensing satellite licensees.

* * * * *

Accordingly, for the good cause demonstrated above, DigitalGlobe requests that the Commission reconsider its decision to impose a bond on DigitalGlobe in the *Order*. DigitalGlobe believes that in the instant case waiving the bond requirement as it applies to DigitalGlobe in the *Order* will not undermine the Commission's policy for requiring bonds for other licensed satellite systems. Nevertheless, DigitalGlobe also believes that the Commission should reconsider its decision to require remote sensing satellite licensees to post bonds in general, in light of the stringent licensing review placed on prospective remote sensing satellite operations by NOAA (and other interested agencies), including the review of modifications to existing authorized operations. The fact that there are a vast number of possible combinations of orbital parameters and time-delimited transmission combinations that can be used by prospective remote sensing operators to interoperate in EESS bands further mitigated against the imposition of bond requirements on remote sensing satellite licensees. Finally, it is in the public interest not

to impose a bond requirement on NOAA-licensed remote sensing satellite operators, as the bond requirement results in duplicative regulatory requirements being imposed, which slow the timeliness by which remote sensing services are provided by licensees and used for the public's benefit.

IV. In the Event the Commission Decides Not to Waive the Bond Requirement, the Commission Should Rule that: (a) NGSO Remote Sensing Satellites are GSO-like; (b) the Appropriate Bond Amount is $3,000,000; (c) There are only 4 Milestones for NGSO Remote Sensing Satellite Systems; and (d) an NGSO Remote Sensing System Licensee Will Fulfill The Milestone Requirement By Constructing, Launching, And Bringing Into Operation The First Satellite In Its NGSO Remote Sensing Satellite System

As provided for in significant detail above, DigitalGlobe strongly believes that there is good cause to waive the bond requirement imposed in the *Order* due to the totality of circumstances surrounding DigitalGlobe's construction, launch, and operation of its next-generation EESS satellite system. Nevertheless, in the event that the Commission refuses to grant DigitalGlobe's request a waiver of the bond requirement in the instant case, DigitalGlobe requests that the Commission rule that:

(1) NGSO remote sensing satellites are GSO-like for purposes of the bond requirement;

(2) the appropriate bond for NGSO remote sensing satellite systems is $3,000,000;

(3) there are only four milestones required for the construction of NGSO remote sensing satellite systems; and

(4) an NGSO remote sensing system licensee will fulfill the milestone requirement by constructing, launching, and bringing into operation the first satellite in its NGSO remote sensing satellite system.

In the event that the Commission authorizes an NGSO remote sensing satellite operator in a license modification to operate new satellites using more bandwidth per satellite than

previously authorized, DigitalGlobe would accept a new $3,000,000 bond being imposed on the licensee—assuming that the Commission keeps the bond requirement for EESS satellite licensees. However, DigitalGlobe requests that the Commission rule that the bond would be fulfilled by the NGSO remote sensing system licensee launching and bringing into operation the first satellite using the additional bandwidth. Further, we request that the Commission rule that there would be no bond requirement for the construction, launch, and operation of additional NGSO remote sensing satellites authorized pursuant to satellite modification applications, as long as such satellites will operate only within already-authorized bandwidth.

In making the present alternative request of the Commission, DigitalGlobe is essentially requesting that the Commission clarify what DigitalGlobe believes to be the Commission's position with regard to the application of bond requirements on NGSO EESS licensees. Specifically, in the *Order*, the Commission provided that the Commission had eliminated the financial requirements then in place in the Commission's Rules and replaced them with the bond requirement.[48] The Commission explained that DigitalGlobe must file a bond because: (1) "remote sensing satellite operators are not exempt from the bond requirement in circumstances where they propose to operate a next-generation satellite system using additional frequencies for which they are not currently authorized"[49] and (2) DigitalGlobe had received authorization from the Commission to operate three new satellites in its NGSO remote sensing satellite system in frequencies not previously authorized by the Commission.[50]

Thus it appears that the Commission has provided that the bond will be imposed *only* in instances where the Commission approves an NGSO EESS licensee to add satellites to its system *and* any of the newly authorized satellites is authorized to use more spectrum than any of the

[48] *Order*, FCC LEXIS 5427 (para. 12).
[49] *Order*, FCC LEXIS 5427 (para. 13); *see also*, *Fifth Report and Order*, 19 FCC Rcd at 12659-12660 (para. 58).
[50] *Order*, FCC LEXIS 5427 (para. 13).

licensee's existing authorized satellites. However, the Commission's decision in the *Order* is not entirely clear in the opinion of DigitalGlobe.

Therefore, should the Commission refuse to waive the bond requirement in this instance, DigitalGlobe first requests that the Commission clarify its intent with regard to the imposition of the bond requirement on DigitalGlobe. Moreover, as DigitalGlobe contends that its satellite system is GSO-like, DigitalGlobe requests that the Commission clarify whether DigitalGlobe will be required to post a $3,000,000 bond as a GSO-like system. In addition, DigitalGlobe requests that the Commission further clarify whether a bond will be required in cases where a licensee requests the authority from the Commission to construct, launch, and operate new satellites in its NGSO satellite authorization, yet none of the satellites will operate in frequency bands broader than the licensee is already authorized to operate in.

Along these lines, DigitalGlobe contends that only in the instance where a remote sensing operator requests the authority to expand the amount of bandwidth used by any of the satellites in its remote sensing system should a bond be imposed. Otherwise, the new satellites to be constructed, launched, and operated should be considered "replacement-like" satellites and no bond requirement imposed.

As provided above, NGSO remote sensing satellite operate very differently than the vast majority of satellites licensed by the Commission, regardless of whether such satellites are GSO-like or NGSO-like in accordance with Commission rules. As a result of the unique manner in which NGSO remote sensing satellites operate, there should be a different standard for licensing such satellites. The Commission already conceded in the *Order* that NGSO remote sensing satellites are GSO-like for the purpose of the applicable licensing mechanism that is used to approve new NGSO remote sensing satellite licenses.

The Commission should extend the concession that NGSO remote sensing satellites are GSO-like for processing round purposes to the bond requirement. While DigitalGlobe desires for NGSO remote sensing satellites to be deemed "GSO-like" for purposes of the bond requirement, DigitalGlobe notes that NGSO remote sensing satellite systems are very distinct from GSO-like satellites. Accordingly, DigitalGlobe contends that the Commission should create a special rule to accommodate NGSO remote sensing satellites.

As individual NGSO remote sensing satellites operate independently of the other NGSO remote sensing satellites that comprise the NGSO remote sensing satellite system, *each* satellite is truly GSO-like, as opposed to other NGSO systems which have been determined to be GSO-like for processing round purposes. In such cases, the entire NGSO constellation operates like a GSO satellite; therefore, the entire NGSO constellation is GSO-like. With regard to NGSO remote sensing satellites, however, each satellite will provide services independently of the other authorized satellites. As a result, there might be an inclination to require licensees to post a bond for each newly authorized satellite that will comprise its NGSO remote sensing system.

For, if the Commission establishes that a bond is required only to construct, launch, and operate the first satellite authorized to operate in an NGSO remote sensing satellite system, satellite, the bond will not function to force or otherwise encourage the remote sensing satellite licensee to build, launch, or bring into operation the subsequent satellites authorized to operate in the same bandwidth. DigitalGlobe believes that NOAA already has sufficient measures in place to ensure that speculative licensing does not result in harm to existing or prospective future, remote sensing licensees. Therefore, DigitalGlobe believes that there is good cause to limit the extension of the bond requirement to remote sensing satellite licensees requesting the authority

to operate any single satellite in more bandwidth than its then-currently authorized satellites are authorized to operate in.

V. Erratum

DigitalGlobe hereby requests that the Commission issue a modified *Order*, or in lieu of a modified *Order*, an Erratum to address the following typographical error set forth in the *Order*. The error is as follows:

> Paragraph 5 of the *Order* lists the Telemetry Downlink as being at 8030 MHz. This appears to be a typographical error, as Paragraphs 18 and 29 of the *Order* correctly refer to the downlink to be used by DigitalGlobe as being at 8380 MHz. Consequently, please strike " 8030 MHz" in Paragraph 5 and replace it with "8380 MHz".

VI. Conclusions

For the good cause demonstrated herein, we urge the Commission to grant the request to waive the bond requirement in the instant case.

* * * * *

Should there be any questions regarding the foregoing information, please contact the undersigned at (703) 563-3090, x. 205 or DigitalGlobe's General Counsel, Ms. Bettina Eckerle, at (303) 684-4312.

Respectfully submitted,

DIGITALGLOBE, INC.

By: /s/

Keil J. Ritterpusch
Mark J. Fiekers

PIERSON & RITTERPUSCH, LLP
2121 Cooperative Way, Suite 200
Herndon, Virginia 20171
(703) 563-3090, x. 205

COUNSEL TO DIGITALGLOBE, INC.

Bettina Eckerle
General Counsel
DIGITALGLOBE, INC.
1601 Dry Creek Drive
Longmont, Colorado 80503

October 31, 2005