



File # SAT-STA-20200306-00024
 Call Sign S2348 Grant Date May 6, 2020
 (or other identifier) Term Dates
 From: March 30, 2020 To: 180 Days
 Approved: J. W. Smith
John W. Whaley
Acting Chief
Satellite Policy Branch

Approved by OMB
3060-0678

Date & Time Filed: Mar 6 2020 3:31:22:653PM
 File Number: SAT-STA-20200306-00024
 Callsign:

FEDERAL COMMUNICATIONS COMMISSION
 APPLICATION FOR SPACE STATION SPECIAL TEMPORARY AUTHORITY
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APPLICANT INFORMATION

Enter a description of this application to identify it on the main menu:
 Renewal of 180-STA to Operate WV-4 (S2348) at 425-525 km

I. Applicant

Name:	DG Consents Sub, Inc.	Phone Number:	303-682-1390
DBA Name:		Fax Number:	303-684-1390
Street:	1300 W. 120th Avenue	E-Mail:	libby.smith@digitalglobe.com
City:	Westminster	State:	CO
Country:	USA	Zipcode:	80234 -
Attention:	Ms Libby Smith		

**ATTACHMENT TO GRANT
 DG Consents Sub, Inc.
 IBFS File No. SAT-STA-20200306-00024**

IBFS File No(s):	SAT-STA-20200306-00024	<p>GRANTED – With Conditions</p>  <p>International Bureau Satellite Division</p>
Licensee/Grantee:	DG Consents Sub, Inc.	
Call Sign:	S2348	
Satellite Name:	WorldView-4	
Orbital Location: (required station-keeping tolerance)	Non-geostationary orbit (NGSO) (see Scope of Grant below)	
Administration:	United States of America	
Nature of Service:	Earth Exploration Satellite Service (EESS); Telemetry, Tracking, and Command (TT&C)	
Scope of Grant:	Special temporary authority for a period of 180 days to conduct TT&C and EESS operations with the WorldView-4 space station at an altitude between 425 kilometers and 525 kilometers.	
Service Area(s):	Global See IBFS File Nos. SAT-MOD-20160408-00033, Exhibit 43 at 4; SAT-MOD-20120427-00079, Technical Annex at TA-15.	
Frequencies:	8025-8400 MHz (data downlinks) Telemetry and Tracking: 120 kHz channel centered on 8386 MHz Receive command: 64 kHz channel centered on 2052 MHz.	

Operations under this grant must comport with the legal and technical specifications set forth by the applicant or petitioner and with Federal Communication Commission’s rules not waived herein. This grant is also subject to the following conditions:

1. The power flux-density from operation of the WorldView-4 space station in the 8025-8400 MHz band must not exceed the limits in No. 22.5 or Table 21-4 of the International Telecommunication Union’s Radio Regulations or the limits in ITU-R Recommendation SA-1157.
2. Upon receipt of a conjunction warning from the JSpOC or other source, DG Consents must review the warning and take all possible steps to assess and, if necessary, to mitigate collision risk, including, but not limited to: contacting the operator of any active spacecraft involved in such warning; sharing ephemeris data and other appropriate operational information with any such operator; modifying spacecraft attitude and/or operations.
3. Because DG Consents must comply with the technical requirements in Part 2 of the Commission’s rules and the above-referenced power flux-density limits, which should prevent harmful interference to other operators in the band, we grant its request for a waiver of the default service rules in 47 CFR § 25.217(b). See *DigitalGlobe, Inc.*, Order and Authorization, 20 FCC Rcd 15696,15701 (Int’l Bur. 2005).
4. Transmissions of remote-sensing and telemetry data in the 8025-8400 MHz frequency band may only be made to earth stations coordinated with the National Aeronautics and Space Administration (NASA). DG Consents shall provide the FCC the list of coordinated earth stations.
5. Operations pursuant to this authorization must not cause harmful interference to stations operating in the 2025-2110 MHz band in accordance with the U.S. Table of Frequency Allocations. See 47 CFR § 2.106, Footnote US347.
6. Nothing in this authorization extends the license term for WorldView-4 (Call Sign S2348), which expires on Sept. 5, 2023. See IBFS File No. SAT-MOD-20050511-00097.

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Licensee/grantee is afforded thirty (30) days from the date of release of this action to decline the grant as conditioned. Failure to respond within this period will constitute formal acceptance of the grant as conditioned.

This action is taken pursuant to Section 0.261 of the Commission's rules on delegated authority, 47 CFR § 0.261, and is effective upon release.

Station licenses are subject to the conditions specified in Section 309(h) of the Communications Act of 1934, as amended, 47 U.S.C. § 309(h).

Action Date:	May 6, 2020	
Term Dates	From: March 30, 2020	To: period of 180 days

Approved:


John W. Whaley
Acting Chief, Satellite Policy Branch

2. Contact	
Name: Henry Gola	Phone Number: 202-719-7561
Company: Wiley Rein LLP	Fax Number:
Street: 1776 K St. NW	E-Mail: hgola@wiley.law
City: Washington	State:
Country: USA	Zipcode: 20006 -
Attention:	Relationship: Legal Counsel
(If your application is related to an application filed with the Commission, enter either the file number or the IB Submission ID of the related application. Please enter only one.)	
3. Reference File Number SATSTA2019081600077 or Submission ID	
4a. Is a fee submitted with this application?	
<input checked="" type="radio"/> If Yes, complete and attach FCC Form 159. If No, indicate reason for fee exemption (see 47 C.F.R. Section 1.1114).	
<input type="radio"/> Governmental Entity <input type="radio"/> Noncommercial educational licensee	
<input type="radio"/> Other (please explain):	
4b. Fee Classification CXW - Space Station (Non-Geostationary)	
5. Type Request	
<input type="radio"/> Change Station Location	<input type="radio"/> Extend Expiration Date
	<input checked="" type="radio"/> Other
6. Temporary Orbit Location	
	7. Requested Extended Expiration Date

<p>8. Description (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)</p> <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> <p>Per Commission rule 1.62, DG Consents Sub, Inc. requests a renewal of special temporary authority for 180 days to operate WorldView#8722;4 (S2348) at orbital altitudes between 425 and 525 km. See SAT-STA-20190816-00077.</p> </div>					
<p>9. By checking Yes, the undersigned certifies that neither applicant nor any other party to the application is subject to a denial of Federal benefits that includes FCC benefits pursuant to Section 5301 of the Anti-Drug Act of 1988, 21 U.S.C. Section 862, because of a conviction for possession or distribution of a controlled substance. See 47 CFR 1.2002(b) for the meaning of "party to the application"; for these purposes.</p> <p style="text-align: right;"> <input checked="" type="radio"/> Yes <input type="radio"/> No </p>					
<p>10. Name of Person Signing Libby Smith</p>	<p>11. Title of Person Signing Senior Manager and Technology Control Officer</p>				
<p>12. Please supply any need attachments.</p> <table border="1" style="width: 100%;"> <tr> <td style="width: 50%;">Attachment 1: Narrative</td> <td style="width: 50%;">Attachment 2:</td> </tr> <tr> <td></td> <td>Attachment 3:</td> </tr> </table>		Attachment 1: Narrative	Attachment 2:		Attachment 3:
Attachment 1: Narrative	Attachment 2:				
	Attachment 3:				
<p>WILLFUL FALSE STATEMENTS MADE ON THIS FORM ARE PUNISHABLE BY FINE AND / OR IMPRISONMENT (U.S. Code, Title 18, Section 1001), AND/OR REVOCATION OF ANY STATION AUTHORIZATION (U.S. Code, Title 47, Section 312(a)(1)), AND/OR FORFEITURE (U.S. Code, Title 47, Section 503).</p>					

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Narrative Attachment

On October 2, 2019, the Commission granted DG Consents Sub, Inc. (“DigitalGlobe”) special temporary authority (“STA”) for 180 days to relocate and operate WorldView-4 (S2348) at orbital altitudes between 425 and 525 km.¹ DigitalGlobe had previously received STA to lower WorldView-4 to 450-550 km.² Per Commission Rule 1.62, DigitalGlobe herein requests renewal of the 180-day STA to continue operating WorldView-4 at 425-525 km.³

The Commission originally licensed WorldView-4, a non-geostationary-satellite orbit satellite providing Earth Expiration Satellite Service (“EESS”), to operate at altitudes between 496 km and 770 km.⁴ On January 7, 2019, WorldView-4 experienced a failure in its control moment gyros, preventing the satellite from collecting usable imagery due to the loss of an axis of stability. However, WorldView-4’s authorized communication paths remain operational, and DigitalGlobe maintains control of the satellite.

As explained in its earlier applications, grant of this STA request will allow DigitalGlobe to maximize the utility of WorldView-4, while ensuring complete de-orbit of the impaired satellite. DigitalGlobe will use the space station for training purposes at 425-525 km – enhancing the skills and experience of DigitalGlobe’s network operators. Currently, the telemetry, tracking, and command (“TT&C”) functions on WorldView-4 are fully functional. DigitalGlobe will continue to conduct TT&C communications at 8386 MHz (120 KHz) for downlink and 2052 MHz (64 KHz) for uplink. DigitalGlobe will also continue to conduct X-band data downlink at 8025-8400 MHz.

Additionally:

- the spacecraft has sufficient fuel reserves to support testing at 425-525 km and the subsequent de-orbit maneuvers within 1-2 weeks of end-of-mission;
- DigitalGlobe previously notified the National Oceanic and Atmospheric Administration of its intent to relocate and operate WorldView-4 at 425-525 km, as required;

¹ See *DG Consents Sub, Inc.*, Stamp Grant, IBFS File No. SAT-STA-20190816-00077, Call Sign S2348 (granted Oct. 2, 2019).

² See *DG Consents Sub, Inc.*, Stamp Grant, IBFS File No. SAT-STA-20190503-00035, Call Sign S2348 (granted May 22, 2019); *DG Consents Sub, Inc.*, Stamp Grant, IBFS File No. SAT-STA-20190612-00046, Call Sign S2348 (granted July 10, 2019); Application of DG Consents Sub, Inc. for 30-day STA Extension, IBFS File No. SAT-STA-20190717-00062, Call Sign S2348 (filed July 17, 2019).

³ See 47 C.F.R. § 1.62.

⁴ See *DG Consents Sub, Inc.*, Stamp Grant, IBFS File No. SAT-MOD-20160408-00033, Call Sign S2348 (granted Aug. 5, 2016).

- DigitalGlobe will continue to coordinate with the Consolidated Space Operations Center at the Vandenberg Air Force Base, as well as with all potentially affected satellite operators authorized at orbital altitudes between 425-525 km.

For these reasons, grant of this 180-day STA extension serves the public interest.