## Exhibit 1 – Application Narrative and Showing of Compliance With Sections 25.221 and 25.222

Airbus DS SatCom Government, Inc.

Application to Modify WB36 License to

Convert License From Common Carrier Authorization to
Non-Common Carrier Authorization;
And
Add up to 500 Intellian Model v240M 2.4 Meter Multi Band (C-band and Ku-band)
Remote Earth Station On Vessel (ESV) Antennas
to
Call Sign WB36 License ESV Authorization

SES-MFS-20150130-00047

Call Sign WB36

By this application Airbus DS SatCom Government, Inc. (ASGI) respectfully seeks modification of the WB36 license to convert the license from a Common Carrier Authorization to a Non-Carrier Authorization. In making this request ASGI notes that in January 2015 modifications of ASGI licenses were approved which moved earth station authorizations for all Hub Antennas which were formerly on the WB36 license to other ASGI licenses, see SES-MFS-20140808-00644 and SES-MFS-20140804-00632. As a result, the only authorizations now on the WB36 license are for land VSAT and ESV remote antennas.

ASGI also seeks to add 500 Intellian Model v240M 2.4 Meter Multi Band (C-band and Ku-band) remote ESV antennas to the WB36 authorization to provide ESV service. The antennas will be located on vessels traveling in U.S. and international waters. They will operate with hub antennas that are separately licensed. They will be utilized to provide ESV service in the same manner as previously authorized by the Commission and will be operated in full compliance with the requirements of the Commission's ESV regulations as set forth in part 25 of the Rules.

ASGI's Showing of Compliance with Part 25 of the Commission's Rules follows herewith and the exhibits required by Sections 25.221 and 25.222 are included as attachments to the Modification Application.

Showing of Compliance for the C-band Operation of the v240M Antenna with Part 25 of the Commission's Rules

Section 25.221

# Exhibit 1 – Application Narrative and Showing of Compliance With Sections 25.221 and 25.222

(a) (1) Comply.

See the Intellian declaration and Exhibit 2 – "C band EIRP Spectral Density."

The antennas use transmitters that have off-axis EIRP spectral densities less than or equal to the levels in paragraph 25.221(a)(1)(i) and meet the requirements of 25.221 (a)(1)(i)(A-C) with an N value of 1. Exhibit 2 provides the detailed demonstration described in paragraph 25.221 (b)(1). The declaration contains the certification that the antenna complies with the pointing requirement in paragraph 25.221 (a)(1)(ii)(A) and the cessation of emission requirement in paragraph 25.221 (a)(1)(iii)(A).

- (a) (2) Not Applicable
- (a) (3) Not Applicable
- (a) (4) Comply. The U.S. based ESV Compliance Officer has authority and ability to cease all emissions from ESVs through teleports located in the U.S. and elsewhere used to uplink the ESVs. The ESV Compliance Officer is able to direct the Marlink Network Operations Center (MNOC) located in Eik, Norway to send commands via the uplink teleports which cause the remote ESVs to cease transmitting. The business address for the ESV Compliance Officer is 2600 Tower Oaks Boulevard, Suite 210, Rockville, MD 20852 and this point of contact is available 24 hours a day, seven days a week via 203-346-0461 which is the U.S. number for the MNOC
- (a) (5) Comply. These records are being collected and maintained as specified. Requests to make this data available may be directed to the ESV Compliance Officer via 203-346-0461.
- (a) (6) Comply.
- (a) (7) Comply. The ESVs are controlled through teleports located in the United States and elsewhere used to uplink the ESVs. As noted in the (a) (4) response, the ESV Compliance Officer that is located within the United States has the capability and authority to cause any of the ESVs to stop transmitting if necessary.
- (a) (8) Comply.
- (a) (9) Comply.
- (a) (10) Comply. No protection is sought for docked ESVs at this time. In the event it is necessary to seek protection at some point in the future, it will be accomplished in accordance with the terms of this §25.221 (a) (9).

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- (a) (11) Agree.
- (a) (12) Comply. The C-band ESVs which are the subject of this application will not operate within 200 Km of the U.S. coastline or fixed service offshore facilities unless prior coordination has been completed. It is noted that numerous C-band ESV interference studies and frequency coordinations have been completed for applicant by Comsearch and Skjei Telecom and Notifications Concerning Completion of the Coordinations were filed with the Commission (under the WB36 and KA249 licenses) as specified in the Commission's Public Notice DA 05-1671, Released: June 15, 2005 and the Notifications placed on Public Notice. Other coordinations may be completed as-needed and if so, Notifications for same will be filed with the Commission for Public Notice as they are completed.
- (a) (13) Comply. Hardware and software have been developed and deployed which continuously monitors the location of each ESV and its operating frequency; compares this information with data containing mapping coordinates for areas in which ESV operation is (and is not) permitted and coordination information and terms for same; and which will automatically cease the transmissions of the ESV if it is in an area for which coordination is required and operation would be in violation of the terms of coordination.
- (b) (1) Comply. The tables described in 25.221(b)(1)(i) are attached in Exhibit 2 "C band EIRP Spectral Density."

The value N described in 25.221(a)(1)(i)(A) is 1. The detailed demonstration described in paragraph 25.221(b)(1)(i)(A) may be found at pages 3-4 and 7-12 of Exhibit 2 – "C band EIRP Spectral Density." The detailed demonstration described in paragraph 25.221(b)(1)(i)(B) may be found at pages 6 and 15-17. The detailed demonstration described in paragraph 25.221(b)(1)(i)(C) may be found at pages 5 and 13-14. The certification stating that the tracking system meets the pointing and cessation of emission requirements of 25.221(b)(1)(iii) are contained in the Intellian declaration.

- (b) (2) Not Applicable.
- (b) (3) Not Applicable.
- (b) (4) Comply. See SES-4 and NSS-9 maps in the Operations Areas Exhibit.
- (b) (5) Comply. The U.S. based ESV Compliance Officer has authority and ability to cease all emissions from ESVs through teleports located in the U.S. and elsewhere used to uplink the ESVs. The ESV Compliance Officer is able to direct the Marlink Network Operations Center (MNOC) located in Eik, Norway to send commands via the uplink teleports which cause the remote ESVs to cease transmitting. The business address for the ESV Compliance Officer is 2600 Tower Oaks Boulevard, Suite 210, Rockville, MD 20852 and this point of contact

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is available 24 hours a day, seven days a week via 203-346-0461 which is the U.S. number for the MNOC

(b) (6) Comply. See the Radiation Hazard Report Exhibits.

Showing of Compliance for the Ku-band Operation of the v240M Antenna with Part 25 of the Commission's Rules

Section 25.222

(a) (1) Comply.

See the Intellian declaration and Exhibit 3 – "Ku band EIRP Spectral Density."

The antennas use transmitters that have off-axis EIRP spectral densities less than or equal to the levels in paragraph 25.221(a)(1)(i) and meet the requirements of 25.222 (a)(1)(i)(A-C) with an N value of 1. Exhibit 3 provides the detailed demonstration described in paragraph 25.222 (b)(1). The declaration contains the certification that the antenna complies with the pointing requirement in paragraph 25.222 (a)(1)(ii)(A) and the cessation of emission requirement in paragraph 25.222 (a)(1)(iii)(A).

- (a) (2) Not Applicable
- (a) (3) Not Applicable
- (a) (4) Comply. The U.S. based ESV Compliance Officer has authority and ability to cease all emissions from ESVs through teleports located in the U.S. and elsewhere used to uplink the ESVs. The ESV Compliance Officer is able to direct the Marlink Network Operations Center (MNOC) located in Eik, Norway to send commands via the uplink teleports which cause the remote ESVs to cease transmitting. The business address for the ESV Compliance Officer is 2600 Tower Oaks Boulevard, Suite 210, Rockville, MD 20852 and this point of contact is available 24 hours a day, seven days a week via 203-346-0461 which is the U.S. number for the MNOC.
- (a) (5) Comply. These records are being collected and maintained as specified. Requests to make this data available may be directed to the ESV Compliance Officer via 203-346-0461.
- (a) (6) Comply.
- (a) (7) Comply. The ESVs are controlled through teleports located in the United States and elsewhere used to uplink the ESVs. As noted in the (a) (4) response,

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the ESV Compliance Officer that is located within the United States has the capability and authority to cause any of the ESVs to stop transmitting if necessary.

- (a) (8) Comply.
- (b) (1) Comply. The tables described in 25.222(b)(1)(i) are attached in Exhibit 3 "Ku band EIRP Spectral Density."

The value N described in 25.222(a)(1)(i)(A) is 1. The detailed demonstration described in paragraph 25.222(b)(1)(i)(A) may be found at pages 3-4 and 7-12 of Exhibit 3 – "Ku band EIRP Spectral Density." The detailed demonstration described in paragraph 25.222(b)(1)(i)(B) may be found at pages 6 and 15-17. The detailed demonstration described in paragraph 25.222(b)(1)(i)(C) may be found at pages 5 and 13-14. The certification stating that the tracking system meets the pointing and cessation of emission requirements of 25.222(b)(1)(iii) are contained in the Intellian declaration.

- (b) (2) Not Applicable.
- (b) (3) Not Applicable.
- (b) (4) Comply. See Operations Areas Exhibit.
- (b) (5) Comply. The U.S. based ESV Compliance Officer has authority and ability to cease all emissions from ESVs through teleports located in the U.S. and elsewhere used to uplink the ESVs. The ESV Compliance Officer is able to direct the Marlink Network Operations Center (MNOC) located in Eik, Norway to send commands via the uplink teleports which cause the remote ESVs to cease transmitting. The business address for the ESV Compliance Officer is 2600 Tower Oaks Boulevard, Suite 210, Rockville, MD 20852 and this point of contact is available 24 hours a day, seven days a week via 203-346-0461 which is the U.S. number for the MNOC.
- (b) (6) Comply. See the Radiation Hazard Report Exhibits.
- (c) Comply. Coordination has been completed with NASA for ESV operations in the 14.0 14.2 GHz frequency band within 125 km of NASA TDRSS facilities protected per 24.222 (c). The coordination has been filed with the Commission for completion of the coordination process. Until the coordination process is completed applicant will continue to comply with 25.222 (c) by not operating Ku-band ESVs at all in the 14.47 14.5 GHz frequency band within the specified distances of the protected facilities.
- (d) Comply. No ESVs are operated in the 14.47 14.5 GHz frequency band.