

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

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| In the Matter of |) | |
| |) | |
| Applicability of NVNG MSS Frequency |) | IB Docket No. 21-____ |
| Assignments Outside the National Territory of |) | |
| the United States |) | |
| |) | |
| March 10, 2021, International Bureau Satellite |) | ORBCOMM Licensee Corp., IBFS File |
| Division Letter Declaratory Ruling |) | No. SAT-MOD-20070531-00076, FCC |
| |) | Call Sign S2103 |
| |) | |
| |) | Swarm Technologies, Inc., IBFS File No. |
| |) | SAT-LOA-20181221-00094, SAT- |
| |) | MOD-20200501-00040, SAT-AMD- |
| |) | 20200504-00041, FCC Call Sign S3041 |
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APPLICATION FOR REVIEW

Walter H. Sonnenfeldt, Esq.
Vice President, Regulatory Affairs
ORBCOMM Inc.
395 West Passaic Street
Suite 325
Rochelle Park, New Jersey 07662
Direct Tel: (585) 461-3018
E-Mail: sonnenfeldt.walter@orbcomm.com

Stephen L. Goodman
Stephen L. Goodman PLLC
532 North Pitt Street
Alexandria, Virginia 22314
(202) 607-6756
E-Mail: stephenlgoodman@aol.com

Counsel for ORBCOMM Inc.

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SUMMARY

ORBCOMM seeks Commission review of a March 10, 2021, letter sent by the Acting Chief of the Satellite Division of the International Bureau to Swarm and ORBCOMM (“*Satellite Division Letter*”). The *Satellite Division Letter* provides that it is resolving a controversy with regard to the global applicability of the band-sharing plan for the Non-Voice, Non-Geostationary Mobile Satellite Service (“NVNG MSS”), and states that the Commission’s original explicit statement in establishing the NVNG MSS rules -- that the band-sharing plan would not apply globally -- is no longer operative. The Commission should rescind the *Satellite Division Letter*, because it is both procedurally and substantively defective.

With regard to procedural deficiencies, the *Satellite Division Letter* indicates that it is issued pursuant to Section 1.2 of the Commission’s rules, which addresses declaratory rulings. However, Swarm never filed a petition for declaratory ruling, in its various informal letters to the Commission. Nor did the Commission or the International Bureau follow the procedures specified in Section 1.2. The *Satellite Division Letter* is also procedurally defective because the action exceeds the authority delegated to the International Bureau by the Commission in Sections 0.51 and 0.261 of the Commission’s rules.

The *Satellite Division Letter* is also substantively flawed. The letter fails to address ORBCOMM’s demonstration that, based on the lack of any Commission finding in the current record that co-frequency co-coverage mobile earth station uplink sharing between Swarm and ORBCOMM is not feasible, the Commission lacks statutory authority to regulate ORBCOMM or Swarm satellite receiver frequency assignments, particularly with regard to operations outside the United States. In addition, in the NVNG MSS rulemakings conducted to date, the Commission has explicitly declined to apply NVNG MSS band-sharing plans outside the United States. In adopting that policy, the Commission acknowledged the sovereignty of foreign Administrations to regulate transmitters operating in their national territory and otherwise determine how NVNG MSS would be provided within their country. The Commission has never modified or rescinded that determination. Absent grant of the relief requested in this Application for Review, the *Satellite Division Letter* would operate to exceed the Commission’s statutory authority by imposing an inefficient NVNG MSS spectrum segmentation on foreign Administrations without the requisite technical and legal foundation.

In light of these procedural and substantive defects, ORBCOMM requests that the Commission rescind the *Satellite Division Letter*. ORBCOMM also suggests procedures the Commission should implement to ensure that all the affected satellite system operators engage in good faith negotiations to reach a sharing agreement. In the alternative, the Commission could rescind the *Satellite Division Letter* and institute a formal notice and comment rulemaking proceeding to replace the current NVNG MSS Rules and policies, which explicitly preclude the imposition of NVNG MSS band-sharing plans outside of the United States. Such a process would allow the Commission to properly address these important policy issues on a full record.

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APPLICATION FOR REVIEW

ORBCOMM License Corp. (“ORBCOMM”), pursuant to Section 1.115 of the Commission’s rules, hereby submits this Application for Review, specifically with regard to the March 10, 2021, letter issued in the above-captioned matter by the Satellite Division of the International Bureau (the “*Satellite Division Letter*”).¹ The *Satellite Division Letter* asserts that it is resolving a controversy with regard to the global applicability of space segment license frequency assignments in the Non-Voice, Non-Geostationary Mobile Satellite Service (“NVNG

¹ *Letter from Karl A. Kensinger, Acting Chief of the Satellite Division, FCC International Bureau, to Mr. Scott Blake Harris, Mr. V. Shiva Goel and Mr. Walter H. Sonnenfeldt, IBFS File No. SAT-MOD-20070531-00076 (March 10, 2021).* Due to the procedural anomalies arising from the above-captioned matter and because the Commission’s Rules require this submission to be filed via the Commission’s electronic filing facilities, out of an abundance of caution, ORBCOMM is submitting this Application for Review in both ECFS as a non-docketed filing, as well as submitting it in MyIBFS under the captioned IBFS File Nos. as an “Other” pleading.

MSS”). As a preliminary matter, ORBCOMM respectfully observes that it did not create the ‘controversy’ at hand. To the contrary, ORBCOMM has taken all reasonable action to resolve the matters that led to the issuance of the *Satellite Division Letter*, and ORBCOMM believes it remains in full compliance with the Commission’s NVNG MSS Rules and the terms and conditions of its NVNG MSS space segment authorization. Furthermore, although there has been focus on ‘interpreting’ ORBCOMM’s above-captioned space segment authorization as a means to resolve the controversy at hand, the current NVNG MSS Rules and policies are the core source of the controversy, and consequently, the terms and conditions of *both* the ORBCOMM and the Swarm space segment licenses with regard to frequency assignments outside of the United States are in fact implicated.

As discussed more fully below the factors warranting Commission review and rescission of the *Satellite Division Letter* under Section 1.115(b)(2) are because the action “taken pursuant to delegated authority is in conflict with ... regulation, case precedent, or established Commission policy” (Section 1.115(b)(2)(i)); “involves a question of law or policy which has not previously been resolved by the Commission” (Section 1.115(b)(2)(ii)); and reflects “Prejudicial procedural error” (Section 1.115(b)(2)(v)). For the reasons set out in this Application for Review, the Commission should rescind the *Satellite Division Letter*, because it is both procedurally and substantively defective.

I. ***Procedural Defects that Warrant Commission Review***

The *Satellite Division Letter* indicates that the determinations set forth therein were issued “[p]ursuant to Section 1.2 of the Commission’s Rules.”² However, the *Satellite Division*

² *Satellite Division Letter*, at p. 1.

Letter was issued in contravention of the procedures required by that Rule.³ No party ever filed a petition for declaratory ruling or other form of requisite prior notice and comment proceeding regarding the subject matter addressed in the *Satellite Division Letter*.⁴ Swarm initiated the exchange of letters that culminated in the *Satellite Division Letter*.⁵ The October 16, 2020, Swarm Letter did not include a request for declaratory ruling nor any other requisite proceeding to address the matters raised by Swarm. ORBCOMM’s October 29, 2020, responsive submission explained that Swarm’s request would necessitate a notice and comment rulemaking, because the Commission’s explicit decision not to apply the NVNG MSS band-sharing plan globally was adopted in NVNG MSS rulemaking proceedings, implemented through NVNG licensing proceedings, and has never been modified by the Commission. Nevertheless, in its subsequent submissions regarding these matters, Swarm argued, *albeit incorrectly as*

³ 47 C.F.R. 1.2(b) specifies:

The bureau or office to which a petition for declaratory ruling has been submitted or assigned by the Commission should docket such a petition within an existing or current proceeding, depending on whether the issues raised within the petition substantially relate to an existing proceeding. The bureau or office then should seek comment on the petition via public notice. Unless otherwise specified by the bureau or office, the filing deadline for responsive pleadings to a docketed petition for declaratory ruling will be 30 days from the release date of the public notice, and the default filing deadline for any replies will be 15 days thereafter.

⁴ While Section 1.2 provides that the Commission can act on its own motion in instituting a declaratory ruling proceeding (with the required prior public notice and comment provisions), it does not provide a Bureau with that same power.

⁵ *Letter from Scott Blake Harris and V. Shiva Goel, Counsel to Swarm Technologies, Inc. to Karl Kensinger, Acting Chief, Satellite Division, International Bureau, FCC* (Oct. 16, 2020); ORBCOMM License Corp., IBFS File Nos. SAT-MOD-20070302-00041, SAT-MOD-20070531-00076 and SAT-AMD-20071116-0016, Call Sign: S2103; Swarm Technologies, Inc., IBFS File No. SAT-LOA-20181221-00094, Call Sign S3041 (“October 16, 2020, Swarm Letter”).

demonstrated in ORBCOMM's responsive submissions,⁶ that the Satellite Division could merely send ORBCOMM a letter "reminding ORBCOMM to comply with licensing provisions that already are in effect—something the FCC does as a matter of course."⁷ The Commission never docketed a petition for declaratory ruling or petition for rulemaking relating to the above-captioned matter, nor assigned the proceeding that should have resulted therefrom to the International Bureau. And neither the Commission nor the International Bureau ever issued a public notice seeking comment on the matters raised.⁸ Accordingly, the *Satellite Division Letter*

⁶ *Letter from Walter H. Sonnenfeldt and Stephen L. Goodman, Counsel to ORBCOMM, to Karl Kensinger, Acting Chief, Satellite Division, International Bureau, FCC* (November 5, 2020); Swarm Technologies, Inc., Call Sign S3041, File Nos. SAT-LOA-20181221-00094, SAT-MOD-20200501-00040, and SAT-AMD-20200504-00041; ORBCOMM License Corp., Call Sign S2103, File Nos. SAT-MOD-20070302-00041, SAT-MOD-20070531-00076, and SAT-AMD-20071116-00161 ("November 5 ORBCOMM Letter") at pp. 3-4; *Letter from Walter H. Sonnenfeldt and Stephen L. Goodman, Counsel to ORBCOMM, to Marlene H. Dortch, Secretary, FCC* (January 12, 2021); Swarm Technologies, Inc., Call Sign S3041, File Nos. SAT-LOA-20181221-00094, SAT-MOD-20200501-00040, and SAT-AMD-20200504-00041; ORBCOMM License Corp., Call Sign S2103, File Nos. SAT-MOD-20070302-00041, SAT-MOD-20070531-00076, and SAT-AMD-20071116-00161 ("January 12 ORBCOMM Letter") at pp. 3 and 5.

⁷ *Letter from Scott Blake Harris and V. Shiva Goel, Counsel to Swarm Technologies, Inc. to Karl Kensinger, Acting Chief, Satellite Division, International Bureau, FCC* (Jan. 15, 2021); IBFS File Nos. SAT-MOD-20070302-00041, SAT-MOD-20070531-00076 and SAT-AMD-20071116-00161, Call Sign: S2103; Swarm Technologies, Inc., IBFS File No. SAT-LOA-20181221-00094, SAT-MOD-20200501-00040, and SAT-AMD-20200504-00041, Call Sign S3041, at p. 4.

⁸ In an e-mail sent on November 18, 2020, to Mr. Sonnenfeldt and Mr. Harris regarding the Swarm letters and ORBCOMM's responses regarding the above-captioned matter submitted as of that date, the Acting Satellite Division Chief indicated that the Satellite Division was studying the arguments, but that "[w]hile this work is continuing, we ask that both companies work with the utmost in cooperation and good faith to facilitate the commencement of global service by the Swarm system, and the continuation of global service by Orbcomm. We trust that if arrangements for co-frequency sharing cannot be concluded in the very near term, that other appropriate arrangements will be implemented." In Europe, the CEPT has also urged Swarm and ORBCOMM to resolve spectrum sharing through a mutually agreed operator-to-operator agreement. *See, e.g., CEPT FM44 Liaison Statement to WG SE and SE40 on S-PCS in the VHF*, Document CEPT FM44(20)081A3 (January 5, 2021), at Item 6., <https://www.cept.org/ecc/groups/ecc/wg-se/se-40/client/meeting-documents/?flid=28532>.

was issued absent the completion of the requisite prior notice and comment procedures set forth in Section 1.2 of the Commission's Rules, is prejudicial to ORBCOMM and otherwise contravenes the public interest, and thus should be rescinded by the Commission.⁹

The *Satellite Division Letter* is also procedurally defective insofar as it exceeds the authority delegated to the International Bureau by the Commission. Section 0.261 of the Commission's rules delegates to the Chief of the International Bureau authority "to perform the functions and activities described in § 0.51, including without limitation the following." But neither Section 0.51 nor the enumerated list of delegated authority in Section 0.261 include a delegation of authority for issuing declaratory rulings.¹⁰ The *Satellite Division Letter* thus exceeds the authority delegated to the Chief of the International Bureau.

Moreover, Section 0.261(b)(1) specifies that the Chief of the International Bureau shall not have delegated authority to act on any request that, *inter alia*: "(i) Presents new or novel arguments not previously considered by the Commission" or "(ii) Presents facts or arguments which appear to justify a change in Commission policy." As discussed in greater detail below, the Commission explicitly adopted a policy for the NVNG MSS not to apply the band-sharing

Although ORBCOMM has consistently indicated for several years a willingness to engage in good faith discussions, until very recently Swarm had refused to do so, relying instead on its position that it was unnecessary because it would not be operating co-frequency with ORBCOMM. And unfortunately, in the few discussions that have transpired between ORBCOMM and Swarm in recent months, Swarm has exhibited little or no willingness to actually work towards a solution for sharing spectrum with ORBCOMM. Instead, Swarm has continued to assert in various regulatory fora that it has no reason to do so.

⁹ Swarm apparently engaged in a series of *ex parte* meetings with respect to these issues. But to the extent they relate to the ORBCOMM licensing proceeding in the *Satellite Division Letter* caption, that proceeding was not made subject to the "permit-but-disclose" rules.

¹⁰ Section 1.2 indicates that the Commission can assign a petition for declaratory ruling to a Bureau to docket the petition and seek comment, but that did not occur here.

plan globally.¹¹ And the Commission never changed that policy for the NVNG MSS.¹² The *Satellite Division Letter* thus exceeds delegated authority to the extent it would reverse that Commission decision not to apply the band plan globally.

II. *Substantive and Policy Defects that Warrant Commission Review*

A. *The Satellite Division Letter Fails to Refute ORBCOMM's Arguments Regarding the Commission's Limited Statutory Authority to Regulate FCC Satellite Licensee Uplink Operations Outside the National Territory of the United States*

In response to the October 16, 2020, Swarm Letter demanding that ORBCOMM comply with Swarm's interpretation of [non-existent] Commission Rules and license requirements regarding ORBCOMM's operations in foreign countries, ORBCOMM explained that the Commission's existing NVNG MSS Rules and licensing decisions specifically do not extend NVNG MSS satellite frequency assignments beyond the national territory of the United States. ORBCOMM also explained that, based on the current NVNG MSS Rules, and the record before the Commission regarding the ORBCOMM and Swarm licensing decisions, the Commission lacks statutory authority to regulate ORBCOMM or Swarm satellite uplink frequencies at this time. ORBCOMM noted that the Commission has only limited authority under the Telecommunications Act to regulate receivers. The Commission issued a Notice of Inquiry in

¹¹ *In the Matter of Application of Orbital Communications Corporation*, 9 FCC Rcd. 6476 (1994), at ¶ 15. *See* pp. 10-13, *infra*.

¹² The Commission did change a similar policy specifically for the Big LEO service, but only after conducting a rulemaking and license modification that took into account the particular circumstances for that service.

2003 to potentially adopt receiver performance standards.¹³ In that Notice of Inquiry, the Commission asked whether it had authority to regulate receivers, citing Sections 4(i), 301, 302(a), 303(e), (f), and (r) of the Communications Act of 1934.¹⁴ In response, several commenters demonstrated that the Commission lacks such authority.¹⁵ The Commission subsequently terminated the Notice of Inquiry proceeding without adopting a Notice of Proposed Rulemaking, and so did not there address the limitations on its authority to regulate receivers.¹⁶ Nor did the *Satellite Division Letter* address the Commission's limited authority over receivers.

The *Satellite Division Letter* cites as authority for the findings set forth therein regarding ORBCOMM and Swarm uplink operations outside of the United States Sections 151, 152, 301, 303(r) of the Communications Act, and International Telecommunication Union, Radio

¹³ *Interference Immunity Performance Specifications for Radio Receivers*, Notice of Inquiry, 18 FCC Rcd 6039 (2003).

¹⁴ *Ibid*, at ¶ 22.

¹⁵ *See, e.g.*, Comments of AT&T Wireless Services filed July 21, 2003, at p. 15:

None of the provisions cited in the *NOI* expressly authorizes the Commission to regulate receivers; instead the provisions focus on the regulation of transmission or emission of radiofrequency energy. This is not a mere oversight, as the Act's legislative history confirms Congress' intent, dating back to the Radio Act of 1927 and carried forward into the Communications Act, that such authority is not implicit in the statute.

See also, Consumer Electronics Association Comments, filed July 21, 2013, at pp. 11-13. In addition, as the Court noted in *American Library Association v FCC*, 406 F.3d 689 (D.C. Cir. 2005), Congressional amendment of the Telecommunications Act to provide the Commission with "limited and explicit grant of authority to the Commission over receiver equipment [in the All Channels Receiver Act] clearly indicates that neither Congress nor the Commission assumed that the agency could find this authority in its ancillary jurisdiction."

¹⁶ *Interference Immunity Performance Specifications for Radio Receivers*, 22 FCC Rcd 8941 (2007).

Regulation 18-1.¹⁷ Those provisions cited by the *Satellite Division Letter* to claim regulatory authority over the ORBCOMM satellite receivers operating outside the United States do not provide the Commission with the requisite authority to do so. Section 301 indicates that “It is the purpose of this chapter, among other things, to maintain the control of the United States over all the channels of *radio transmission*,” (emphasis added), and further disclaims authority to regulate any such transmissions occurring outside its borders.¹⁸ Section 303(r) provides the Commission with authority to adopt necessary restrictions and conditions to carry out “any international radio or wire communications treaty or convention,” but the cited ITU Radio Regulation 18-1 only deals with a licensing Administration’s regulation of “transmitting stations,” and thus provides no authority for Commission regulation of the satellite receivers.

¹⁷ *Satellite Division Letter* at n. 12.

¹⁸ Section 301 additionally provides:

No person shall use or operate any apparatus for the transmission of energy or communications or signals by radio (a) from one place in any State, Territory, or possession of the United States or in the District of Columbia to another place in the same State, Territory, possession, or District; or (b) from any State, Territory, or possession of the United States, or from the District of Columbia to any other State, Territory, or possession of the United States; or (c) from any place in any State, Territory, or possession of the United States, or in the District of Columbia, to any place in any foreign country or to any vessel; or (d) within any State when the effects of such use extend beyond the borders of said State, or when interference is caused by such use or operation with the transmission of such energy, communications, or signals from within said State to any place beyond its borders, or from any place beyond its borders to any place within said State, or with the transmission or reception of such energy, communications, or signals from and/or to places beyond the borders of said State; or (e) upon any vessel or aircraft of the United States (except as provided in section 303(t) of this title); or (f) upon any other mobile stations within the jurisdiction of the United States, except under and in accordance with this chapter and with a license in that behalf granted under the provisions of this chapter. (emphasis added).

Finally, Section 152 also reflects the limited jurisdictional reach of the Commission’s regulatory authority.¹⁹

The *Satellite Division Letter* also cites “Big LEO” decisions regarding Iridium and Globalstar as supporting precedent for its findings relating to ORBCOMM and Swarm.²⁰ *Ibid.* However, the Commission decision finding statutory authority under the Communications Act to regulate satellite receivers in the case of Iridium and Globalstar is clearly inapposite to the current situation between Swarm and ORBCOMM. In the Iridium/Globalstar proceedings there was an extensive record affirmed by the parties and the Commission finding that it is not technically feasible for Iridium and Globalstar to share spectrum on a co-frequency co-coverage basis without harmful interference.²¹ In contrast, for the NVNG MSS, the Second Processing Round Joint Sharing Agreement, incorporated into the Commission’s decision setting forth the Second Processing Round rules, demonstrated that co-frequency coverage sharing among mobile earth station operations of several FDMA NVNG MSS systems was indeed possible. Moreover,

¹⁹ In relevant part, Section 152(a) provides:

The provisions of this chapter shall apply to all interstate and foreign communication by wire or radio and all interstate and foreign ***transmission of energy by radio, which originates and/or is received within the United States***, and to all persons engaged within the United States in such communication or such ***transmission of energy by radio***, and to the licensing and regulating of all radio stations as hereinafter provided; but it shall not apply to persons engaged in wire or radio communication or transmission in the Canal Zone, or to wire or radio communication or transmission wholly within the Canal Zone.

²⁰ *Satellite Division Letter* at n. 12.

²¹ *Globalstar Licensee LLC, GUSA Licensee LLC, Iridium Constellation LLC, Iridium Satellite LLC And Iridium Carrier Services*, 23 FCC Rcd 15207 (2008) at ¶ 33: (“The Above 1 GHz MSS applicants recognized over 15 years ago that the CDMA and TDMA protocols presented significant risks of harmful interference to each other. This means that a CDMA and a TDMA system cannot provide co-frequency, co-coverage service, particularly at maximum system loading, without causing each other mutually harmful interference. For this reason, the Commission adopted a band plan in 1994 that assigned CDMA and TDMA systems to discrete portions of the Above 1 GHz MSS spectrum.”).

unlike the Iridium/Globalstar proceeding, the Commission has rendered no finding whatsoever in the record of the Swarm licensing proceeding that co-frequency co-coverage sharing among Swarm and ORBCOMM mobile earth stations is not feasible.

Swarm, while claiming on the one hand that band segmentation is necessary, has also taken the position on record at the Commission and before the European Conference of Postal and Telecommunications Administrations (“CEPT”) that co-frequency co-coverage MES uplink sharing between the Swarm and ORBCOMM systems is feasible.²² Thus, the Commission’s reliance on its Communications Act authority to address interference as part of its more general public interest powers that allowed it to exercise jurisdiction over receivers in the Iridium/Globalstar case is materially inapposite to the Commission’s current record regarding ORBCOMM and Swarm.

B. The Commission Explicitly Declined to Apply Global Band Plans to the NVNG MSS, and has Never Modified that Determination

In addition to statutory limits on the Commission’s ability to impose a global band plan with regard to transceiver uplinks in foreign countries for low-Earth orbit satellite systems, the Commission explicitly declined to prescribe a global band plan for the NVNG MSS when the Commission established the rules for NVNG MSS. The Commission stated:

²² See, e.g., *Consolidated Response and Opposition of Swarm Technologies, Inc.*, File No. SAT-AMD-20200504-00041 and File No. SAT-MOD-20200501-00040, filed September 1, 2020, at pp. 7-9 and 11. See, also, *Intra-service study Swarm-Orbcomm for the ECC Report 322 (Single-Entry and Aggregate Interference Co-Frequency Swarm and ORBCOMM Mobile Earth Station Uplink Compatibility Study)*, Swarm CEPT SE40 submission, Document SE40(21)012 (March 22, 2021). <https://www.cept.org/ecc/groups/ecc/wg-se/se-40/client/meeting-documents/?flid=28532>.

Further, we will not impose a global band-sharing plan on U.S. licensees at this time. As we discussed in our Report and Order in the MSS Above 1 GHz proceeding, we do not believe it is appropriate for the United States to impose global bandsharing restrictions, which will directly impact the ability of other countries to access these LEO systems, absent indications from these countries regarding their planned use of these frequency bands.²³

The Commission has never rescinded or modified that decision. Indeed, consistent with its decision in the first processing round not to adopt a global band-sharing plan, in adopting the rules for the Second NVNG MSS Processing Round the Commission acknowledged the right of foreign Administrations to determine which NVNG MSS systems would be able to operate uplinks within their country, and on what frequencies.²⁴

²³ *In the Matter of Application of Orbital Communications Corporation*, 9 FCC Rcd. 6476 (1994), at ¶ 15. *See also, In the Matter of Amendment of the Commission's Rules to Establish Rules and Policies Pertaining to a Non-Voice, Non-Geostationary Mobile-Satellite Service*, 8 FCC Rcd 8450 (1993) at ¶ 28 (“Because we will require our licensees to comply with international procedures, including the national requirements of any other licensing administrations, the efforts of these other jurisdictions to implement NVNG service within their own territories will remain within their control.”); and *ibid.* at n. 3 (“In order to provide global service, a Little LEO service provider will need to receive authorization or approval from each country in which it intends to offer Little LEO service.”).

²⁴ *In the Matter of Amendment of Part 25 of the Commission's Rules to Establish Rules and Policies Pertaining to the Second Processing Round of the Non-Voice, Non-Geostationary Mobile Satellite Service*, 13 FCC Rcd. 9111 (1997), at ¶ 128:

In opposition, CTA argues that Little LEO licensees should not be penalized for the limited availability of spectrum by foregoing commercial opportunities in countries where spectrum may be extremely limited. Our intent is not to penalize licensees and we do not believe that our policy will have such a result. We recognize that spectrum coordination and availability as well as market size and commercial opportunities in a particular country may limit the number of systems that can serve that country. We will not penalize the sole service provider in a particular market if spectrum and market limitations prohibit another system from entering and serving the particular market. We do not expect a United States licensed system to forego opportunities to serve markets based on the possibility that it may be the only service provider in the market. (citation omitted)

See also, Orbital Communications Corporation, 13 FCC Rcd. 10828 (1998) at ¶ 28:

None of the subsequent ORBCOMM modification applications conflict with the Commission's decision not to apply the NVNG MSS band plan globally. ORBCOMM's 2007 Modification application sought to add spectrum to its license (the "System 1" downlink frequencies) that included spectrum in addition to the original ORBCOMM authorization to launch and operate a satellite system throughout the 137-138 MHz and 148-149.9 MHz bands.²⁵ Such a modification request was necessary to authorize U.S. operations.²⁶ The 2008 Modification order thus added onto the Commission's previous ORBCOMM licensing decisions, it did not supplant or overturn the previous ORBCOMM authorizations.

The 2008 Bureau Order granting the ORBCOMM modification request said nothing about the Commission's decision not to apply the band-sharing plan globally, and finding after-the-fact that the 2008 Modification order was a *sub silentio* overturning of the Commission's original decision is not credible, particularly in light of the fact that the Commission was already examining potential changes to the global applicability of the Big LEO band in a rulemaking

While we recognize that spectrum coordination and availability as well as market size and commercial opportunities in a particular country may limit the number of systems that can serve a foreign country, our rules are clear that Little LEO licensees may not acquire or enjoy any exclusive rights created by contracts or working arrangement.

²⁵ The Commission also undertook ITU coordination of the ORBCOMM system under the United States satellite network name 'LEOTELCOM-1' – for operations across the 137-138 MHz band and the 148-149.9 MHz band (subsequently expanded to 150.05 MHz).

²⁶ Likewise, the *Satellite Division Letter* reference in n. 23 to ORBCOMM's request to add additional downlink spectrum in the previously unauthorized 435 MHz band did not negate the Commission's original decision not to apply the band-sharing plan globally. It is the fact that it involved an FCC authorized spacecraft *transmitting* on a non-conforming basis in a frequency band not allocated for MSS that is significant. This authorization request by ORBCOMM, and the Commission's resulting authorization is not in any way inconsistent with the statutory limitations on the Commission's authority to regulate satellite *receiver* operations that is now at issue.

commenced in 2004.²⁷ The Commission demonstrated in the Big LEO context that if intends to change a decision with regard to not applying a band plan globally, it does so explicitly and after following proper procedures. Moreover, as an order on delegated authority by the Chief of the International Bureau and the Chief of the Office of Engineering and Technology, the 2008 ORBCOMM modification decision could not have overturned the Commission's explicit decision not to apply the NVNG MSS band-sharing plan globally, *sub silentio* or otherwise.²⁸

C. The Satellite Division Letter Would Exceed the Commission's Statutory Authority by Imposing an Inefficient Band Segmentation Plan on Foreign Administrations Without the Requisite Technical and Legal Foundation

In establishing the NVNG MSS, the Commission decided not to impose a global band-sharing plan in recognition of the sovereignty of foreign Administrations to determine how and by who these services should be offered within their countries.²⁹ That same policy consideration continues to apply today. Indeed, the Commission relies on its own sovereignty over satellite services offered in this country to impose requirements on foreign-licensed systems seeking access here, such as orbital debris mitigation obligations. Foreign Administrations are actively determining how best to allow Swarm to gain access to uplink spectrum in their countries, taking into account the particular terrestrial uses and sharing/coordination requirements to ensure compatible operations between the satellite uplinks and the terrestrial services.

²⁷ *Review of the Spectrum Sharing Plan Among Non-Geostationary Satellite Orbit Mobile Satellite Service Systems in the 1.6/2.4 GHz Bands; Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Service to Support the Introduction of New Advanced Wireless Services, Including Third Generation Wireless Systems*, 19 FCC Rcd 13386 (2004) at ¶ 99.

²⁸ 47 C.F.R. § 0.261(b)(1).

²⁹ *See*, n. 23, *supra*.

In addition, those foreign Administrations are considering how the NVNG MSS uplinks can be used most efficiently.³⁰ In general, where co-frequency co-coverage sharing is feasible among one or more satellite systems, spectrum is used most efficiently when shared without band segmentation. Unfortunately, the Satellite Division, in granting Swarm its initial authorization,³¹ effectively segmented the 148 – 150.05 MHz NVNG MSS uplink band operations of the ORBCOMM and Swarm systems in the United States. That licensing decision relied on the NVNG MSS Second Processing Round frequency assignments, but not the Second Processing Round “band-sharing plan”, or most importantly, the underlying record in those proceedings that established the regulatory basis for the segmentation – it was the only possible means to avoid harmful interference to the sole Second Round licensee that chose to operate its system using spread spectrum CDMA modulation. The Second Processing Round band-sharing plan involved more than just the frequency assignments, and the un-shared portion of the band that Swarm was awarded was originally reserved for a CDMA system, because co-frequency co-coverage sharing between the FDMA systems and the CDMA system was not possible. In stark contrast, however, Swarm does not use CDMA, and has made submissions to the Commission and CEPT in Europe that conclude that Swarm and ORBCOMM can readily share uplink spectrum on a co-frequency co-coverage basis.³² The Satellite Division adopted an inefficient scheme for NVNG MSS operations in the United States when it awarded Swarm its license – but

³⁰ See, e.g., *CEPT FM44 Liaison Statement to WG SE and SE40 on S-PCS in the VHF*, Document CEPT FM44(20)081A3 (January 5, 2021), at Item 6. <https://www.cept.org/ecc/groups/ecc/wg-se/se-40/client/meeting-documents/?flid=28532>.

³¹ *Swarm Technologies, Inc. Application for Authority to Deploy and Operate a Non-Voice, Non-Geostationary Lower Earth Orbit Satellite System in the Mobile-Satellite Services*, 34 FCC Rcd 9469 (2019).

³² See, n. 22, *supra*.

it would be an even worse policy choice for the Commission to try to impose such inefficiencies on the rest of the world by upholding the *Satellite Division Letter*.³³

III. Requested Relief

As required by Section 115(b)(4) of the Commission's rules, ORBCOMM asks the Commission to grant the following relief. The Commission should rescind the *Satellite Division Letter* because it was issued improvidently and contrary to required procedures. In addition, the Commission should direct ORBCOMM, Swarm and the other current NVNG MSS processing round applicants to engage in good faith negotiations to reach a joint sharing agreement (that could, by agreement amongst the participants, be applicable globally).³⁴ In order to ensure that the participants negotiate in good faith, the Commission could set a six (6) month deadline for

³³ ORBCOMM observes that the Commission has an opportunity to correct this mistake, given Swarm's modification application to access additional spectrum in the current processing round. Swarm Technologies, Inc., SAT-AMD-20200504-00041. Under prior Commission satellite licensing decision precedent, Commission disposition of the Swarm Modification Application to expand the Swarm frequency assignments could also modify the current spectrum assignments for the Swarm system to eliminate band the current U.S. domestic band segmentation to maximize the efficiency of sharing among Swarm, ORBCOMM and Myriota (the other current NVNG MSS VHF-band processing round applicant). *Final Analysis Communications Services, Inc., LEO ONE USA Corporation, and Orbital Communications Corporation*, 16 FCC Rcd 21453 (2001).

³⁴ See, e.g., *Update to Parts 2 and 25 Concerning Non-Geostationary, Fixed-Satellite Service Systems and Related Matters*, 32 FCC Rcd 7809 (2017) at ¶ 48 ("We believe that coordination among NGSO FSS operators in the first instance offers the best opportunity for efficient spectrum sharing."); *Globalstar-Iridium Order*, at n. 89 ("The Commission has consistently stated that if the parties cannot resolve their coordination differences among themselves, the Commission will dictate a solution.").

reaching an agreement, and if the parties fail to do so, then the International Bureau could join the discussions as a mediator, and establish additional deadlines.³⁵

In the alternative, the Commission could rescind the *Satellite Division Letter* and institute a formal notice and comment rulemaking proceeding to determine whether it should revise its original decision not to apply the NVNG MSS band-sharing plan globally. Such a proceeding would allow all affected parties, including the applicants in the current NVNG MSS processing round, to address the issues raised by Swarm before the Satellite Division that clearly affect more than just Swarm.

Respectfully submitted,



Walter H. Sonnenfeldt, Esq.
Vice President, Regulatory Affairs
ORBCOMM Inc.
395 West Passaic Street
Suite 325
Rochelle Park, New Jersey 07662
Direct Tel: (585) 461-3018
E-Mail: sonnenfeldt.walter@orbcomm.com

Stephen L. Goodman
Stephen L. Goodman PLLC
532 North Pitt Street
Alexandria, Virginia 22314
(202) 607-6756
E-Mail: stephenlgoodman@aol.com

Counsel for ORBCOMM Inc.

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³⁵ The Bureau played such a role as a mediator in the Negotiated Rulemaking that led to the First NVNG MSS Processing Round decision. If that additional process still fails to produce an agreement, then the Commission could address the current processing round applications, but with the benefit of a more fully developed record on sharing capabilities.

CERTIFICATE OF SERVICE

I hereby certify that on this 9th day of April, 2021, I caused a true and correct copy of the foregoing “APPLICATION FOR REVIEW” of ORBCOMM License Corp. to be sent by first class mail, postage prepaid, and E-Mail to the following:

Scott Blake Harris
Shiva Goel
HARRIS, WILTSHIRE & GRANNIS, LLP
1919 M Street, N.W.
Suite 800
Washington, D.C. 20036
Tel: 202-730-1300
Fax: 202-730-1301
sgoel@hwglaw.com
Attorneys for Swarm Technologies Inc.

Eric B. Graham
LMI Advisors
2550 M Street, NW Suite 300
Washington, D.C. 20037
egramham@lmiadvisors.com
Counsel for Myriota Pty. Ltd.



Walter H. Sonnenfeldt, Esq.