# Before the Federal Communications Commission Washington, D.C. 20554

In the matter of	)	
FINAL ANALYSIS COMMUNICATIONS SERVICES, INC. For Authorization to Construct, Launch and Operate a Non-Voice, Non Constantionary Mobile Setallite	) File Nos. ) ) )	25-SAT-P/LA-95 76-SAT-AMEND-95 79-SAT-AMEND-96 151-SAT-AMEND-96 7-SAT-AMEND-98
Non-Geostationary Mobile Satellite System in the 137-138 MHz, 148-150.05 MHz, and 400.15-401 MHz Bands	) Call Sign	S 2150
<b>LEO ONE USA CORPORATION</b> For Authorization to Construct, Launch and Operate a Non-Voice, Non-Geostationary Mobile Satellite	) File Nos. ) ) )	57-DSS-P/LA-94 27-SAT-AMEND-95 10-SAT-AMEND-98 64-SAT-AMEND-98
System in the 137-138 MHz, 148-150.05 MHz and 400.15-401 MHz Bands	) Call Sign )	S 2145
ORBITAL COMMUNICATIONS CORPORATION For Modification of Its Authorization to Construct Launch and Operato a	) File Nos. ) )	28-SAT-MP/ML-95 5-SAT-ML-96 194-SAT-ML-97 8-SAT-AMEND-98
to Construct, Launch and Operate a Non-Voice, Non-Geostationary Mobile-Satellite System in the 137-138 MHz, 148-150.05 MHz, and 400.15-401 MHz Bands	) Call Sign ) )	S 2103

# MEMORANDUM OPINION AND ORDER

# Adopted: November 7, 2001

Released: November 29, 2001

By the Commission:

# I. INTRODUCTION

1. With this Order, we deny two Applications for Review filed by Orbital Communications Corporation ("Orbcomm") that seek Commission review of the International Bureau orders licensing Final Analysis Communication Services, Inc. ("Final Analysis") and Leo One USA Corporation ("Leo One") in the second processing round for non-voice, non-geostationary mobile satellite systems ("NVNG MSS" or "Little LEO" systems).<sup>1</sup> We uphold the Bureau's finding that Orbcomm's Little LEO system,

<sup>&</sup>lt;sup>1</sup> Orbital Communications Corporation, Application For Review, In the Matter of Final Analysis Communication Services, Inc. Application for Authority to Construct, Launch and Operate Non-Voice, Non-Geostationary Mobile-Satellite System in the 137-138 MHz, 148-150.05 MHz and 400.15-401 MHz Bands, DA 98-616 (Application filed May 1, 1998); Orbital Communications Corporation, Application For Review, In the Matter of Leo One USA Corporation Application for Authority to Construct, Launch and Operate Non-Voice, Non-Geostationary Mobile-Satellite System in the 137-138 MHz, 148-150.05 MHz and 400.15-401 MHz, 455-456 MHz, (continued....)

which was authorized in the first Little LEO processing round ("First Round") and modified in the second processing round ("Second Round"), was not entitled to interference protection from the operations of other systems licensed in the second processing round. Because we deny Orbcomm's Applications for Review, we also dismiss as most the Application for Review filed by Leo One against Orbcomm, which is contingent upon a favorable decision on Orbcomm's Applications for Review.

### II. BACKGROUND

2. In 1990, the Commission proposed allocating frequencies to the Little LEO service in response to petitions for rulemaking filed the prior year by Orbcomm, STARSYS Global Positioning, Inc., and Volunteers in Technical Assistance ("VITA").<sup>2</sup> The Commission proposed and then adopted rules to govern the new service in 1993.<sup>3</sup> The following year, the International Bureau granted a system license to Orbcomm in the First Round, for a constellation consisting of 36 low-Earth orbiting satellites operating in four inclined orbital planes with eight satellites each, and two near-polar orbital planes with two satellites each.<sup>4</sup>

3. The Commission initiated the Second Round after Leo One filed an application for its proposed Little LEO system.<sup>5</sup> Five applicants participated in the Second Round – three proposing new systems (E-SAT, Inc., Leo One, and Final Analysis) and two proposing expansion of licensed First Round systems (Orbcomm and VITA). The Commission proposed rules for the Second Round Little LEO applicants in October 1996, including a proposal designed to promote competition in the service by limiting Second Round participation to new entrants.<sup>6</sup>

4. Subsequently, the Second Round applicants reached a spectrum sharing plan that could accommodate all five proposed systems.<sup>7</sup> The "Joint Proposal" submitted by the Second Round applicants provided that they would share portions of the Little LEO spectrum among themselves, including the 148-149.9 MHz uplink band. Specifically, Orbcomm agreed to share the 148.0-148.905 MHz sub-band with E-SAT, Leo One USA and Final Analysis, to share the 148.905-149.810 MHz sub-band with Final Analysis

<sup>2</sup> Amendment of Section 2.106 of the Commission's Rules to Allocate Spectrum to the Fixed-Satellite Service and the Mobile-Satellite Service for Low-Earth Orbit Satellites, Notice of Proposed Rulemaking, 6 FCC Rcd. 5932 (1991).

<sup>3</sup> Amendment of the Commission's Rules to Establish Rules and Policies Pertaining to a Non-Voice, Non-Geostationary Mobile-Satellite Service, Notice of Proposed Rulemaking, 8 FCC Rcd. 6330; Report and Order, 8 FCC Rcd. 8450 (1993).

<sup>4</sup> Orbital Communications Corp., 9 FCC Rcd. 6476 (1994); recon. denied, 10 FCC Rcd. 7801 (1995).

<sup>5</sup> Satellite Application Acceptable for Filing; Cut-Off Established For Additional Applications, Public Notice Report No. DS-1459, 9 FCC Rcd 5261 (1994).

<sup>6</sup> 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, Notice of Proposed Rulemaking, 11 FCC Rcd. 19841, 19846 ¶ 11-38 (1996) ("Second Round NPRM").

<sup>(...</sup>continued from previous page)

<sup>459-460</sup> MHz and 36-51.4 GHz Bands, DA 98-238 (Application filed March 16, 1998) ("Applications for Review"). See also Final Analysis Communication Services, Inc., Order and Authorization, 13 FCC Rcd. 6618 (Int'l Bur. 1998) ("Final Analysis License"); Leo One USA Corporation, Order and Authorization, 13 FCC Rcd. 2801 (Int'l Bur. 1998) ("Leo One License").

<sup>&</sup>lt;sup>7</sup> Joint Proposal among E-SAT, Inc., Final Analysis Communications Services, Inc., Leo One USA Corporation, Orbital Communications Corporation, Orbital Sciences Corporation and Volunteers in Technical Assistance, Inc., IB Docket No. 96-220 (filed Sept. 22, 1997) ("Joint Proposal").

and Leo One, and to share the 149.810-149.9 MHz sub-band with VITA.<sup>8</sup> The parties asked the Commission to adopt their Joint Proposal and to award each applicant a license. The applicants also agreed to amend their pending Second Round applications in a manner consistent with the Joint Proposal.

5. The Commission's *Report and Order* adopted the applicants' Joint Proposal, and found that the spectrum sharing plan resolved mutual exclusivity among the Second Round applicants.<sup>9</sup> The Commission further found that because it could accommodate all five applicants, including the new entrants, it was not necessary to adopt a proposed rule precluding First Round licensees from participating in the Second Round.<sup>10</sup>

6. The Bureau's five licensing orders were based upon the Joint Proposal adopted in the *Report and Order*. Orbcomm's Second Round license authorized it to modify its system by launching and operating twelve additional satellites, nearly doubling its uplink frequency band, changing its downlink frequency band, increasing the altitude of the four inclined orbital planes, and shifting the inclination of one of the near-polar orbital planes.<sup>11</sup> The modified constellation's orbital planes include eight satellites each.

7. In the Second Round licenses issued to Final Analysis and Leo One, the Bureau rejected Orbcomm's argument that the Commission's Little LEO rules require Second Round licensees to protect Orbcomm's operations.<sup>12</sup> Orbcomm's applications for review of the Leo One and Final Analysis licenses essentially repeat this argument.<sup>13</sup>

#### III. DISCUSSION

8. The Commission's rules require a party seeking Commission review of an action taken pursuant to delegated authority to specify with particularity which among a list of factor warrants Commission consideration of the questions presented.<sup>14</sup> The factors include (i) a conflict with statute, regulation, case precedent or established policy; (ii) an undecided question of law or policy; (iii) a precedent that should be overturned or revised; (iv) an erroneous finding on an material question of fact; or (v) prejudicial procedural error.<sup>15</sup> Orbcomm has not presented sufficient reason on any of these grounds to overturn the Bureau's decisions.

<sup>&</sup>lt;sup>8</sup> The Joint Proposal also noted the Second Round applicants' requirements for sharing their spectrum with foreign-licensed operations, including a proposed French satellite system (S80-1). That sharing is the subject of international coordination, but is not questioned in Orbcomm's Applications for Review.

<sup>&</sup>lt;sup>9</sup> See 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, Report and Order, FCC 97-370, 13 FCC Rcd 9111, 9157 ¶ 122 (rel. October 15, 1997) ("Report and Order").

<sup>&</sup>lt;sup>10</sup> *Id.* at 9118 ¶ 14.

<sup>&</sup>lt;sup>11</sup> Orbital Communications Corp., 13 FCC Rcd. 10828 (Int'l Bur. 1998) ("Orbcomm License").

<sup>&</sup>lt;sup>12</sup> See 47 C.F.R. § 25.142(a)(1).

<sup>&</sup>lt;sup>13</sup> Applications for Review, *supra* n.1.

<sup>&</sup>lt;sup>14</sup> 47 C.F.R. § 1.115(b)(2).

<sup>&</sup>lt;sup>15</sup> *Id.* 

# A. Orbcomm Applications for Review

9. Orbcomm claims it is entitled to protection against interference from other Second Round systems by virtue of Section 25.142(a)(1) of the Commissions rules. Section 25.142(a)(1) provides that NVNG MSS applicants shall:

file information demonstrating compliance with all requirements of this section, and showing, based on existing system information publicly available at the Commission at the time of filing, that they will not cause unacceptable interference to any non-voice, non-geostationary mobile-satellite service system authorized to construct or operate.<sup>16</sup>

10. Because Orbcomm received a First Round license, it asserts that its system, although modified in the Second Round, should have been afforded interference protection from subsequently licensed systems. Final Analysis and Leo One each filed an opposition to the Orbcomm Application for Review directed against it.<sup>17</sup> Final Analysis and Leo One both argue that Orbcomm's Applications for Review untimely seek reconsideration of uplink sharing in the 148-149.9 MHz uplink band, which, they argue, was conclusively decided in the *Report and Order*.<sup>18</sup> Final Analysis also asserts that existing post-licensing coordination will adequately protect Orbcomm's uplinks.<sup>19</sup>

11. We affirm the Bureau's finding that Orbcomm relinquished any superior status its First Round system may have had by making wholesale changes to that system in the Second Round, including nearly doubling its First Round uplink spectrum. The Bureau order licensing Final Analysis correctly finds that:

As part of the Joint Proposal, ORBCOMM expressly agreed to permit other second processing round applicants to operate in the channels comprising the 148-149.9 MHz uplink band, including those frequencies licensed to ORBCOMM in the first processing round, in exchange for gaining the right to add twelve satellites to its constellation and to operate in the lower part of the 148-149.9 MHz band (148-148.855 MHz band) and in new downlink frequencies. The Joint Proposal, as adopted in the [*Report and Order*], reflected all of the material terms and conditions of the spectrum sharing plan mutually agreed to by the second processing round applicants.<sup>20</sup>

12. Thus, we agree with the Bureau that Orbcomm's participation in the Second Round put it on equal footing with all other Second Round applicants.<sup>21</sup> Nowhere in the Joint Proposal does it indicate that other Second Round applicants agreed to or were aware that their proposed systems were relegated to non-interference status with respect to Orbcomm's modified system. Rather, as with all settlements, it

- <sup>19</sup> Final Analysis Opposition at 4.
- <sup>20</sup> Final Analysis License, 13 FCC Rcd at 6627; see also Orbcomm License, 13 FCC Rcd. at 10835-36.
- <sup>21</sup> Final Analysis License, 13 FCC Rcd. at 6628.

<sup>&</sup>lt;sup>16</sup> 47 C.F.R. § 25.142(a)(1).

<sup>&</sup>lt;sup>17</sup> Final Analysis Communication Services, Inc., Opposition, In the Matter of Final Analysis Communication Services, Inc. Application for Authority to Construct, Launch and Operate Non-Voice, Non-Geostationary Mobile-Satellite System in the 137-138 MHz, 148-150.05 MHz and 400.15-401 MHz Bands, (filed May 18, 1998) ("Final Analysis Opposition"); Opposition of Leo One USA Corporation, In the Matter of Leo One USA Corporation Application for Authority to Construct, Launch and Operate Non-Voice, Non-Geostationary Mobile-Satellite System in the 137-138 MHz, 148-150.05 MHz and 400.15-401 MHz Bands, DA 98-238 (filed March 31, 1998) ("Leo One Opposition").

<sup>&</sup>lt;sup>18</sup> Final Analysis Opposition at 7; Leo One Opposition at 6.

was reasonable to assume that all parties made compromises to enable all proposed systems to be accommodated. Indeed, had the parties not reached a sharing agreement, the Commission was poised to adopt licensing rules that, among other things, would have prohibited Orbcomm from participating in the Second Round. We therefore uphold the Bureau's finding that Orbcomm cannot accept the benefits flowing from its participation in the Second Round, yet reject the burdens that it assumed in order to receive those benefits.

13. Further, in denying Orbcomm's request for interference protection, the Bureau did not change or ignore Section 25.142(a)(1), as Orbcomm suggests. Rather, the Bureau did not dispute that Orbcomm's First Round system was entitled to protection against interference from Second Round systems, but, instead, found that the First Round system essentially no longer existed.<sup>22</sup> The Bureau correctly noted that it is not technically feasible to separate for protection whatever aspects of Orbcomm's system were not modified by its Second Round application, in light of the extensive modifications made.

14. Finally, to the extent the Bureau Orders indicated in *dicta* that, even if Section 25.142(a)(1) did apply, it would be in the public interest to waive the rule, we clarify that the rule does not require coordination to be completed prior to licensing. Consequently, it would not, in any event, have been necessary to invoke the waiver process.

### **B.** The Leo One Application for Review

15. Leo One filed a contingent Application for Review, which argues that if the Commission grants Orbcomm's Application for Review against the Leo One license, the Joint proposal will be undermined, and the Commission should revoke Orbcomm's Second Round license. Since we do not grant Orbcomm's Application for Review, we dismiss as most the Leo One Application for Review.

#### IV. ORDERING CLAUSES

16. Accordingly, IT IS ORDERED, that the Applications for Review filed by Orbital Communications Corporation against the licenses of Leo One USA Corporation and Final Analysis Communication Services, Inc. are DENIED;

17. IT IS FURTHER ORDERED that the Application for Review filed by Leo One USA Corporation is DISMISSED.

#### FEDERAL COMMUNICATIONS COMMISSION

Magalie Roman Salas Secretary

<sup>&</sup>lt;sup>22</sup> See Application of Geostar Positioning Corporation For Modification of Space Station Authorizations in the Radiodetermination Satellite Service, 6 FCC Rcd. 2276 (Common Carrier Bureau 1991) (concluding that Geostar's proposed modification was so significantly different from its authorized system that it must be considered as a new system in a new application processing round).