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

In the Matter of the Application of

STARSYS Global Positioning, Inc.

For Authority to Construct,	File Nos. 33-DSS-P-90(24)
Launch and Operate a	42-DSS-AMEND-90
Satellite System	7-DSS-AMEND-94
in the Non-Voice,	31-DSS-AMEND-94
Non-Geostationary	32-DSS-LA-94
Mobile-Satellite Service	135-SAT-AMEND-95

ORDER AND AUTHORIZATION

Adopted: November 13, 1995; Released: November 20, 1995

By the Chief, International Bureau:

I. INTRODUCTION

1. By this *Order and Authorization,* we authorize Starsys Global Positioning to construct, launch, and operate a non-voice, non-geostationary ("NVNG") mobile satellite service ("MSS") system in specific frequency bands below 1 GHz. In doing so, we conclude that GE American Communications, Inc.'s assumption of an 80% ownership interest in Starsys, would serve the public interest, and that in light of these changes Starsys is fully qualified to become a Commission licensee. In reaching this conclusion, we address comments opposing the grant of Starsys's application filed by LEO One USA, Orbital Communications Corporation ("Orbcomm"), and Final Analysis, Inc.[1]

II. BACKGROUND

2. Starsys is one of the three applicants for a low-Earth orbiting ("LEO") MSS system in the first NVNG processing round. Starsys proposes a system of 24 low-Earth orbiting satellites, operating in six equally spaced planes of four satellites each, with 53 degrees of inclination. These satellites are designed to operate in the 148-150.05 MHz (uplink) and 137-138 MHz and 400.15-401 MHz (downlink) frequency bands, and will have a fifteen-year design life. The satellite system will use code division multiple access ("CDMA") modulation techniques. The satellite system will provide a variety of store-and-forward data services, including asset management and tracking.

3. The Commission first received an application for an NVNG MSS system license in 1990, and, in response, established a "cut-off" date for the filing of competing applications. This cut-off date established the first NVNG processing round. At the time of the cut-off date for the filing of applications in the first NVNG processing round, Starsys's application was mutually exclusive with that of Orbcomm. In an effort to resolve this mutual exclusivity, the three first-round applicants, Orbcomm, Starsys, and VITA, reached agreement on a sharing program that would permit all three to implement their systems. Subsequently, the Commission allocated spectrum to the service,[2] and adopted final rules for the NVNG service based on the first-round applicants' sharing program.[3]

4. Subsequently, the Commission opened a second processing round for NVNG MSS applications, and received five additional applications. The five additional requests are from CTA, Inc., Final Analysis, Inc., GE, LEO One USA Corporation, and E-Sat. VITA and Orbcomm have also asked for additional frequencies to add to their systems.[4]

5. Issues concerning Starsys's ownership structure have arisen on several occasions. In 1993, we approved a change in Starsys's ownership structure by which Hughes STX acquired a 5% interest and the right to appoint three of five directors.[5] The remaining 95% of Starsys is owned by North American CLS, Inc. ("NACLS"), a Delaware corporation. NACLS is wholly owned by Stargos S.A., which is in turn 49.3% owned by Collecte Localisation Satellites ("CLS"). Both Stargos S.A. and CLS are French companies. CLS is 70% owned by organizations that are directly supported by the French government.[6] The remaining 50.7% of Stargos S.A. is owned by a number of private companies with no affiliation to any foreign government or representatives thereof. NACLS may not be affiliated with more than one director on the Starsys Board.

6. Starsys sought a declaratory ruling that this ownership structure complied with Section 310(a) of the Communications Act, which prohibits the issuance of a license to a foreign government or its representative. Starsys was allowed to defer submitting a showing regarding its financial qualifications pending action on its request.[7] In an April

[1] Orbcomm and Volunteers in Technical Assistance ("VITA") filed a petition to deny and comments, respectively, concerning Starsys's amendment filed April 25, 1994 (File Nos. 31-DSS-AMEND-94 and 32-DSS-LA-94), and Starsys replied. SAVI Technology, Caribbean Satellite Services, Inc., Mapsys Computerized Mapping, Geotechnology Development, Inc., and Acer/DataStar, Inc. filed comments in support of the amended application. Caribbean Satellite Services, Inc., and Geotechnology Development Corp. also filed comments in support of Starsys's ownership and financial amendment (File No. 135-SAT-AMEND-95). Marcor, Inc. filed comments informing the Commission that there is civil litigation currently pending concerning ownership of Starsys stock, specifically a suit brought by Starsys for a declaratory ruling that certain claims asserted to ownership rights in Starsys stock are without merit. Our action here is without prejudice to the potential outcomes of that litigation.

[2] *Report and Order* in ET Docket No. 91-280, 8 F.C.C. Rcd. 1812 (1993) (*"Allocation Order").*

[3] *Report and Order* in CC Docket No. 92-76, 8 F.C.C. Rcd. 8450 (1993) (*"NVNG Order").*

[4] *See* Report No. DS-1484, *Non-Voice, Non-Geostationary Low Earth Orbit Satellites Applications Accepted for Filing,* DA 94-1323 (November 25, 1994).

[5] *Starsys Global Positioning,* 8 F.C.C. Rcd. 1662 (Comm. Car. Bur. 1993).

[6] Centre National d Etudes Spatiales ("CNES"), the French space agency, owns 55% of CLS, while IFREMER, a French government-supported institute devoted to sea research, owns 15%.

[7] Letter to Counsel for Starsys from the Chief, Domestic Facilities Division, Common Carrier Bureau, dated July 22, 1994.

20, 1995 letter, Starsys indicated that NACLS would reduce its 95% ownership interest to no more than 25%. We then issued a *Declaratory Ruling* in which we concluded that Section 310(a) did not prevent the restructured Starsys from holding a license because neither the French government nor NACLS would have *de jure* or *de facto* control of Starsys.[8]

7. Starsys then submitted an amendment to its pending system application to demonstrate its financial qualifications and to seek approval for ownership changes ancillary to its financing plan. Specifically, Starsys seeks approval to sell 80% of its equity to GE, along with the right to elect four of five directors. Hughes STX would relinquish its 5% share, and NACLS's share would be diluted to 20%.

III. DISCUSSION

A. *Ownership Changes.*

8. **Cut-off rule.** Under Section 25.116 of the Commission's Rules, an application is considered newly filed if, after a cut-off date for the filing of applications, it is amended by a major amendment.[9] Major amendments include those which specify a substantial change in beneficial ownership or control (*de jure* or *de facto)* of an applicant. However, the rules explicitly exempt from treatment as a newly filed application any amendment which "reflects only a change in ownership or control found by the Commission to be in the public interest and, for which a requested exemption from a "cut-off" date is granted."[10] Starsys seeks such an exemption.

9. Orbcomm argues that there is a substantial and material question whether Starsys's proposed restructuring constitutes the type of trafficking in applications that would be contrary to the public interest. It notes that Hughes apparently acquired its interest in Starsys for $1.00, but is relinquishing that interest for $1 million. It observes that Starsys has submitted no showing that this amount corresponds to expenses incurred in connection with Starsys's application. Starsys responds that Hughes acquired its interest in Starsys as part of, and incidental to, its acquisition of the assets of ST Systems Corporation ("STSC"), then valued in excess of $25 million, a transaction which the Commission approved.[11] Starsys argues that the circumstances in which Hughes relinquishes its interest in Starsys -- ownership restructuring to comply with the *Declaratory Ruling* -- also indicate that Hughes has no intent to traffic. Starsys observes that Hughes has provided significant technical and administrative support for Starsys on an ongoing basis since it acquired its interest.

10. In *Air Signal International, Inc.,* the Commission addressed a request for an exemption from a cut-off rule virtually identical to the satellite cut-off rule in Section 25.116. The exemption, which was granted, involved a major change in ownership occasioned by the acquisition of an applicant's shareholder as an incidental part of a larger corporate acquisition. The Commission concluded that such acquisitions are clearly for "an independent business purpose, and not primarily for acquiring pending applications."[12] The Commission has also found major ownership changes to be in the public interest under the satellite cut-off rule, even though not incidental to acquisition of an applicant's shareholder or shareholders and clearly directed at acquiring an interest in an application.[13] Although not directly at issue in that case, the Commission indicated in *Air Signal* that such changes may be permissible if they are the types of "ownership or control changes which tend to effect changes in business or financial factors overlaying the technical proposal."[14]

11. We conclude that the ownership changes proposed by Starsys serve the public interest, and that an exemption from the satellite cut-off rule is therefore warranted. The proposed ownership changes serve legitimate regulatory and business purposes, specifically facilitating compliance with Section 310(a) of the Communications Act and securing financial backing sufficient to facilitate prompt implementation of a competitive NVNG MSS system. These purposes are particularly relevant with respect to satellite systems, which typically have large capital requirements and substantial developmental costs. Furthermore, although trafficking is clearly a relevant concern, we conclude that no further inquiry is warranted in this case. Although the nominal price Hughes paid to acquire its interest in Starsys was $1.00, we think it reasonable to conclude that STSC had made expenditures in excess of that amount in pursuit of Starsys's proposal, and that the $1.00 figure was not meant to be dispositive of the value allocated by Hughes to STSC's interest in Starsys.[15] The relatively modest amount of the payment to Hughes, given the substantial developmental costs associated with these new systems and the fact that the transaction involves the commitment of in excess of $50 million to construct, launch, and operate the system, is not unreasonable. Nor does it provide the type of incentive that might lead to speculative filings in the satellite services.[16]

12. **Effect on GE's Second-Round Application.** GE, Leo One USA, and Final Analysis are applicants in the Commission's "second round" NVNG MSS processing group. The applications in this group will be processed once initial processing of the "first-round" NVNG MSS applications is completed. GE indicates that it will continue to

[8] 10 F.C.C. Rcd. 9392 (Int'l. Bur. 1995). Orbcomm filed application for review of this decsision, which is pending. This *Order and Authorization* is without prejudice to Commission action on the issues raised in Orbcomm's application for review. In the event Orbcomm concludes that this *Order and Authorization* does not adequately address its objections based on the current record, it may seek review.

[9] 47 C.F.R. § 25.116.

[10] 47 C.F. R. § 25.116(c)(2).

[11] *Starsys Global Positioning,* 8 F.C.C. Rcd. 1662 (Comm. Car. Bur. 1993).

[12] *Air Signal International, Inc.,* 81 F.C.C.2d 472, 475 (1980) (waiving the cut-off rule in Part 22 of the Commission's Rules where Xerox had acquired Air Signal's parent, WUI, Inc.).

[13] *See Satellite CD Radio, Inc.,* 9 F.C.C. Rcd. 2569 (Comm. Carr. Bur. 1994).

[14] *Air Signal,* 81 F.C.C.2d at 474 (citations omitted).

[15] *See Starsys Global Positioning,* 8 F.C.C. Rcd. 1662, n.13 (Comm. Car. Bur. 1993) (observing that the nominal price for acquisition of Starsys indicated the acquisition was clearly part of a larger transaction).

[16] In this regard, we note that the strict application in satellite services of financial qualification requirements, construction milestones, and other due diligence requirements lessens our concern that the satellite licensing process may attract applicants filing for purely speculative purposes.

pursue its second round application regardless of whether its acquisition of Starsys, a first-round applicant, is approved. Leo One USA and Final Analysis argue that allowing GE to acquire a first-round applicant, while still pursuing its second-round application, does not serve the public interest. They request that any license granted to Starsys be conditioned on GE relinquishing its second round application.

13. We agree with Starsys that these requests are premature, and are more appropriately addressed in connection with the second processing round. The Commission has not addressed how selections will be made among applicants in the second processing round, if such selections become necessary. It would be imprudent at this time, therefore, to adopt a limit on the number of systems that could potentially be licensed in the second round. In the event selections among the competing second-round applicants are necessary, however, Leo One USA, Final Analysis, and other second-round applicants will have a full opportunity to address what criteria the Commission should apply, including whether licensees from the first round should be disqualified from or given a lower priority in second-round licensing.

14. **Compliance with Section 310(a).** Orbcomm, in its application for review of the *Declaratory Ruling*[17] and in its comments on Starsys's amendment, argues that Starsys's ownership structure does not adequately address concerns that the French government will unduly influence Starsys, or take governmental actions to favor Starsys to Orbcomm's detriment. In particular, Orbcomm observes that the French government has taken a number of actions detrimental to Orbcomm in connection with the International Telecommunication Union's satellite system coordination and registration process, and suggests that even the reduced interest held by companies supported by the French government provides an incentive to disadvantage Orbcomm improperly. It also observes that NACLS's ownership interest remains substantial, and that Starsys's system design and engineering could well continue to be performed by CNES. It suggests that the French government may be subsidizing Starsys's system. Orbcomm asks that we impose insulation and nondiscrimination safeguards on Starsys to address these concerns.

15. Starsys's ownership structure, as proposed to be modified, fully complies with Section 310(a) of the Communications Act. GE's 80% stock interest, and concomitant Board representation, are extremely strong indicia of control by an unquestionably and fundamentally American company. In the absence of evidence, of which there is none, of other agreements or arrangements that call into question the reliability of these indicia of control, we will not engage in speculation as to how foreign control might come about. Furthermore, with respect to Orbcomm's speculation that NACLS's 20% ownership interest provides an incentive for improperly disadvantaging Orbcomm, there is no indication from our experience in the international coordination process that Starsys or any of its shareholders has sought to improperly influence the position of the French government in the ITU coordination process, nor is there any indication that the French government has raised concerns regarding Orbcomm's system solely in order to disadvantage Starsys's commercial rivals. If there were such indications, the full range of Commission authority would be available to address these concerns. However, such concerns are entirely speculative at this juncture.[18]

B. ***Technical Qualifications.***

16. **Efficiency.** Orbcomm and CTA argue that Starsys is not technically qualified. They assert that Starsys's system is technically flawed because the CDMA technology it uses is inefficient. The Commission concluded in the *NVNG Order* that it would not impose an efficiency standard on NVNG systems.[19] Furthermore, in the *Allocation Order* the Commission declined to require use of CDMA or any other access technology in bands allocated to NVNG systems.[20] Accordingly, no further discussion on this point is warranted.

17. **Major Amendment.** Starsys's amendment, filed April 25, 1994, after the cut-off date for filing applications in the first NVNG processing round, proposed for the first time to use the 149.9-150.05 MHz frequency band. Section 25.116 of the Commission's Rules states that an amendment will be considered a "major" amendment if it "increases the potential for interference, or changes the proposed frequencies . . . to be used." Starsys's amendment changes the frequencies it proposes to use, and, therefore, is a major amendment. Under Section 25.116(c) of the Commission's Rules, an application amended by a major amendment is to be treated as newly filed, unless it "resolves frequency conflicts with authorized stations or other pending applications but does not create new or increased frequency conflicts" or "does not create new or increased frequency conflicts, and is demonstrably necessitated by events which the applicant could not have reasonably foreseen at the time of filing." We also indicated in the *NVNG Order* that major amendments "necessary" because of "obligations that we have imposed upon applicants after the cut-off date" would be permitted without treating the application as newly filed, even if the amendment does not otherwise comply with Section 25.116(c) of the rules. *NVNG Order* at 8457.

18. Starsys argues both that its amendment is necessary to conform with the new rules, and that it falls within the established exceptions to the requirement that its application be treated as newly filed. Orbcomm objects. Orbcomm states that it did not apply for use of this band in the first processing round because of a concern that the Commission would treat the specification of entirely new frequencies as a major amendment. Instead, Orbcomm and other applicants filed in the second processing round requesting use of the 149.9-150.05 MHz band.

19. Starsys has not shown that any Commission-imposed obligation required the filing of its request to use the 149.9-150.05 MHz band. In the *Allocation Order*, the Commission stated that "[u]ntil the TRANSIT-SAT radionavigation system is discontinued, we also will permit the 149.9-150.05 MHz band to be used for MSS gateways'

---

[17] 10 F.C.C. Rcd. 9392 (1995).

[18] The Commission is engaged in ongoing discussions with the French government concerning coordination of Orbcomm's system.

[19] *NVNG Order* at ¶ ¶ 22-23.

[20] *Allocation Order* at ¶ 32.

(connections with other communications systems such as the Public Switched Telephone Network) on a secondary basis." *Id.* at 1816. However, the *Allocation Order* did not impose an obligation on applicants after the cut-off date to use the 149.9-150.05 MHz band. Nor can we conclude that either the Joint Sharing Agreement, which did not mention the 149.9-150.05 MHz band, or the rules adopted in the *NVNG Order,* in any way require Starsys, or any other party, to use that band. Therefore, we deem the amendment major and address it under Section 25.116(c).

20. With regard to subsection 25.116(c)(1), Starsys's amendment does not resolve frequency conflicts with Orbcomm or VITA. The existing licensees (and Starsys) have agreed to a Joint Sharing Agreement that by its own terms demonstrates that there are no remaining domestic frequency conflicts between them. Further, the 149.9-150.05 MHz band has been applied for by second-round applicants and may be needed to permit additional competitors to provide services, and therefore the amendment may increase frequency conflicts. As to subsection 25.116(c)(4), while Starsys may not have foreseen the availability of the 149.9-150.05 MHz band at the time it filed its original application, the Joint Sharing Agreement shows that Starsys is able to operate its system within the existing bands, *i.e.,* without using the 149.9-150.05 MHz band. Under these circumstances, we cannot find that the *NVNG Order* presents "demonstrably necessary events" that require Starsys's use of the 149.9-150.05 MHz band.

21. We will not, however, treat the entire Starsys application as newly filed. At this time in the NVNG MSS licensing process, and in view of the advanced state of international negotiations that include Starsys, VITA, and Orbcomm, we do not believe the public interest would be served by deferring Starsys's entire application to the second processing round. We will instead grant Starsys a license consistent with the terms of the Joint Sharing Agreement and its amendment, except insofar as that amendment requests use of the 149.9-150.05 MHz band. We will defer that request for treatment as a modification of its system in the second NVNG processing round. We view the portion of the amendment requesting those frequencies as protecting Starsys's right to request expansion frequencies in the second processing round, and conclude that this request is intended to enhance but not alter Starsys's first-round system proposal.[21]

22. **License Condition.** LEO One USA argues that any grant of Starsys's application should be conditioned so as to prevent technical changes that may undermine the negotiations embodied in the joint sharing arrangement, or prejudice the ability of other NVNG MSS applicants to obtain an authorization. To the extent this request is not addressed by our other actions in this *Order and Authorization,* LEO One USA requests action that is more appropriate in connection with second- round processing, and is therefore premature.

C. *Financial Qualifications.*

23. Section 25.142(a)(4) of the Commission's Rules sets forth the financial qualifications that NVNG MSS applicants must satisfy prior to grant of a license.[22] Specifically, an applicant must demonstrate that it has current assets or non-contingent financing sufficient to meet construction, launch, and first-year operating costs for the first two space stations of its proposed system. Starsys estimates that these expenses will total $52.5 million. It submits a letter from the Chairman and Chief Executive Officer of GE American Communications, Inc., describing GE's commitment to expend the necessary funds. It also submits GE's 1994 Annual Report, which includes a balance sheet showing cash and equivalents in excess of $2.5 billion. Based on this information, we find Starsys financially qualified.

IV. CONCLUSION

24. Grant of Starsys's application, as amended, will serve the public interest. Implementation of this system will provide competitive NVNG communication services to U.S. consumers, and the world. Starsys is legally, financially, and technically qualified to be a Commission licensee.

V. ORDERING CLAUSES

25. Accordingly, IT IS ORDERED that Application File Nos. 33-DSS-P-90(24), 31-DSS-AMEND-94, AND 32-DSS-LA-94 ARE GRANTED to the extent indicated in this *Order and Authorization,* and Starsys Global Positioning, Inc. IS AUTHORIZED to construct a NVNG mobile-satellite service system capable of operating in the 148-149.9 MHz, 400.15-401MHz and 137-138 MHz frequency bands, in accordance with the terms, conditions and technical specifications set forth in its application, as amended.

26. IT IS FURTHER ORDERED that Starsys Global Positioning IS AUTHORIZED to launch and operate 24 low-Earth orbiting space stations, and to launch technically identical replacement satellites during the license term, in the non-voice, non-geostationary, mobile satellite service in accordance with its application, and the relevant terms of any previous orders concerning the operation of space stations in this service.

27. IT IS FURTHER ORDERED that Starsys Global Positioning IS AUTHORIZED to offer space segment capacity on its satellite system on a private carriage basis.

28. IT IS FURTHER ORDERED that, unless extended by the Commission for good cause shown, this authorization shall become null and void in the event that the space station is not constructed, launched, and successfully placed into operation in accordance with the technical parameters and terms and conditions of the authorization by the following dates:

[21] *See Volunteers in Technical Assistance,* DA 95-1630, ¶ 7 (released July 21, 1995).

[22] 47 C.F.R. § 25.142(a)(4). Section 25.142(a)(4) also reference sections 25.140(c),(d) and (e), which specify the financial information that must be submitted.

	Construction Commenced	*Construction Completed*	*Launch*
First two system satellites	November 1996	April 1999	November 1999
Remaining system satellites	November 1999	April 2001	November 2001

29. IT IS FURTHER ORDERED that this authorization is subject to the completion of consultations under Article XIV of the INTELSAT Agreement and Article 8 of the Inmarsat Convention. Upon completion of these consultations, and notification by the Department of State that the United States has fulfilled its international obligations with respect to INTELSAT and Inmarsat, no further action by this Commission will be required.

30. IT IS FURTHER ORDERED that the temporary assignment of any orbital planes, or of any particular frequencies, to Starsys Global Positioning, Inc. is subject to change by summary order of the Commission on 30 days notice and does not confer any permanent right to use the orbit and spectrum. Neither this authorization nor any right granted by this authorization, shall be transferred, assigned, or disposed of in any manner, voluntarily or involuntarily, or by transfer of control of any corporation holding this authorization, to any person except upon application to the Commission and upon a finding by the Commission that the public interest, convenience and necessity will be served thereby.

31. IT IS FURTHER ORDERED that the "Petition to Deny" filed by Leo One USA Corporation IS DENIED.

32. IT IS FURTHER ORDERED that this *Order and Authorization* IS EFFECTIVE UPON ADOPTION this 13th day of November, 1995.

FEDERAL COMMUNICATIONS COMMISSION

Scott Blake Harris
Chief, International Bureau