

BEFORE THE

# Federal Communications Commission

WASHINGTON, D.C. 20554

MAY 23 1996

In re: Application of )  
 )  
 FINAL ANALYSIS COMMUNICATION )  
 SERVICES, INC. )  
 )  
 For A Non-Voice, Non-Geostationary )  
 Low Earth Orbit Satellite System Below 1 GHz )

File Nos. 79-SAT-AMEND-96  
 25-SAT-P/LA-95

Received

MAY 26 1996

To: Chief, International Bureau

## REPLY TO OPPOSITION TO PETITION TO DENY

STARSYS Global Positioning, Inc. ("STARSYS"), by counsel and pursuant to Section 25.154 of the Commission's Rules, replies to the "Opposition to Petition to Deny and Consolidated Response to Comments" filed by Final Analysis Communications Services, Inc. ("Final Analysis") with respect to its above-captioned application for a non-voice, non-geostationary mobile-satellite service ("NVNG MSS") system, as amended on February 23, 1996. Final Analysis has failed to refute STARSYS's showing that its amendment is "major," and therefore subject to treatment as a newly filed application. In addition, Final Analysis still has not provided any substantive explanation of its ability to avoid interference to STARSYS's already-authorized system. On the other hand, STARSYS is encouraged by Final Analysis's offer to work with STARSYS to address interference issues and, in particular, to consider tests using the FAISAT-2v

experimental satellite to determine whether there is a possibility of accommodating the Final Analysis system in the 137-138 MHz band.

### Discussion

Final Analysis cannot escape the fact that its amendment is “major” as that term is defined by the Commission’s Rules.<sup>1/</sup> Final Analysis’ contention that the addition of new frequencies does not constitute a change in frequencies is untenable.<sup>2/</sup> It is self-evident that any increased demand for spectrum is a “change” in frequencies. Where other entities seek or are authorized to access those frequencies, such an amendment necessarily creates “new or increased frequency conflicts” that preclude the applicant from claiming to fall within any exception to the applicability of the Commission’s rules for processing applications modified by major amendments.<sup>3/</sup>

Similarly, Final Analysis’ assertion that its addition of these frequencies “is demonstrably necessitated by events which the applicant could not have reasonably foreseen at the time of filing” is unpersuasive.<sup>4/</sup> Final Analysis cannot distinguish its own

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<sup>1/</sup> Section 25.116(b)(1) provides that any amendment to a pending application will be considered a “major” amendment if the changes proposed would increase the potential for interference, or change the proposed frequencies to be used. See 47 C.F.R. § 25.116(b)(1) (1995).

<sup>2/</sup> See Final Analysis Opposition at 2.

<sup>3/</sup> See 47 C.F.R. § 25.116(c) (1995).

<sup>4/</sup> See Final Analysis Opposition at 2-3, citing Final Analysis Amendment at 2-3.

amendment seeking to add new frequencies to its proposal from the circumstances in STARSYS Global Positioning, Inc., 2 Comm. Reg. (P&F) 159, 163-64 (Int'l Bur. 1995) ("STARSYS"), where the Commission concluded that a post-cut-off request to add newly available frequencies was not a change "necessitated" by unforeseen circumstances. Indeed, Final Analysis has not even attempted to address the STARSYS precedent. Accordingly, consistent with STARSYS, at least that portion of the Final Analysis application that seeks access to the additional frequencies at 455-56 MHz and 459-60 MHz must be considered newly filed, and therefore ineligible for simultaneous consideration with the applicants on file as of the cut-off date for the second round NVNG MSS applicants.<sup>5/</sup>

Final Analysis is correct, however, that its amended proposal would not result in any increased interference in the bands previously requested for its system.<sup>6/</sup> Nonetheless, there remain significant interference issues extant concerning Final Analysis' initial proposal for these bands, principally because Final Analysis has never attempted to develop a frequency plan that could share spectrum with the STARSYS system.

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<sup>5/</sup> See 47 C.F.R. § 25.116(c) (1995). It is not clear what consequences will result from such treatment, as several other members of the November 16, 1994 processing group have also filed major amendments.

<sup>6/</sup> See Final Analysis Opposition at 3.

STARSYS is encouraged by Final Analysis' offer in its Opposition to conduct experiments in the 137-138 MHz band using its FAISAT-2v experimental satellite to determine the necessary power levels for its subscriber links in this band.<sup>7</sup> Such studies could certainly be helpful in providing operational data to verify whether Final Analysis will be able to achieve compliance with the Commission's rules.<sup>8</sup>

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<sup>7</sup> See Final Analysis Opposition at 3 n.4 and 4.

<sup>8</sup> See 47 C.F.R. § 25.142(a) (1995). Currently, analysis based on recommendations formulated under the auspices of the ITU (see ITU-R Draft Recommendation SG8/TEMP/9) indicates that a reduction of 5 to 7 dB in Final Analysis' satellite power will be necessary to prevent loss of capacity to STARSYS when only one Final Analysis channel is active in the STARSYS antenna main beam. Given that Final Analysis anticipates simultaneous use of three downlink channels per satellite, and factoring in the substantial probability of a Final Analysis satellite being present in the STARSYS main beam (with two more satellites also present within the antenna sidelobes), a power reduction on the order of 10 dB will be required in each transmitting channel to avoid interference to the STARSYS signal. These figures include the benefit of cross-polarized operation, so it is clear that cross-polarization is not sufficient by itself to achieve successful sharing; the principal sharing issue raised by the Final Analysis frequency plan is the location and the power of the channels proposed. Compare Final Analysis Opposition at 3 n.4. If 10 dB power reductions are theoretically feasible for the Final Analysis system, STARSYS would concur that testing in the 137-138 MHz band as part of the FAISAT-2v experimental program could be productive. STARSYS is willing to work with Final Analysis on such tests.

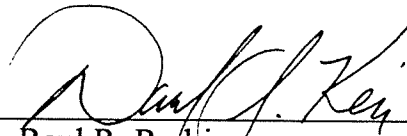
Conclusion

For the foregoing reasons, STARSYS renews its request that the Commission deny the Final Analysis application, as initially filed and as amended, unless the applicant can affirmatively demonstrate that it complies with Section 25.142(a) of the Commission's Rules. In addition, because the recent Final Analysis amendment is major, the application is no longer eligible for consideration as part of the November 16, 1994 processing group.

Respectfully submitted,

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May 23, 1996

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## TECHNICAL CERTIFICATE

I, Kenneth E. Newcomer, hereby certify, under penalty of perjury, that I am the technically qualified person responsible for the preparation of the technical information contained in the foregoing "Reply to Opposition to Petition to Deny", and that this information is true and correct to the best of my knowledge and belief.

By: Kenneth E. Newcomer  
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STARSYS Global Positioning, Inc.

Dated: May 23, 1996

**CERTIFICATE OF SERVICE**

I, Vera L. Pulley, hereby certify that a true and correct copy of the foregoing "Reply to Opposition to Petition to Deny" was mailed, first-class postage prepaid, this 23rd day of May, 1996 to each of the following:

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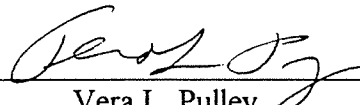
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