

BEFORE THE

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Federal Communications Commission

APR 19 1996

WASHINGTON, D.C. 20554

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

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

To: Chief, International Bureau

APR 23 1996

PETITION TO DENY AMENDED APPLICATION

Satellite Policy Branch
International Bureau

STARSYS Global Positioning, Inc. ("STARSYS"), by counsel and pursuant to Section 25.154 of the Commission's Rules, hereby petitions to deny the above-captioned amended application of Final Analysis Communication Services, Inc. ("Final Analysis"). STARSYS petitioned the Commission to deny Final Analysis's original application to construct, launch and operate a non-voice, non-geostationary mobile-satellite service ("NVNG MSS") system. The current amendment to that application only exacerbates the flaws to which STARSYS objected in the first instance which, among other consequences, renders it a major amendment under the Commission's Rules. Accordingly, neither incarnation of the Final Analysis NVNG MSS system proposal is acceptable, and the Commission should deny the amended version for failure to protect existing authorized systems from unacceptable interference. At a minimum, the amended

application should be dismissed from the current processing round pursuant to the Commission Rule requiring applications modified by a major amendment to be treated as newly filed.

DISCUSSION

A. Final Analysis's Amendment Is A "Major" Amendment.

The Final Analysis amendment is "major" as that term is defined by the Commission's Rules and, at a minimum, requires the underlying application to be dismissed from the second round NVNG MSS processing group. 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.^{1/} Final Analysis's proffered amendment both adds additional frequencies to its proposal^{2/} and increases potential interference to authorized users — STARSYS, in particular.

The Commission's Rules provide that the normal consequence of filing a major amendment is the treatment of the affected application as "newly filed." In Final Analysis's case, where the application was initially filed in response to a "cut-off" notice,

^{1/} See 47 C.F.R. § 25.116(b)(1) (1995).

^{2/} Final Analysis requests use of the 455 - 456 MHz and 459 - 460 MHz bands earmarked for MSS use at WRC-95, which have not yet been reallocated domestically.

the result would be that Final Analysis would no longer be eligible for consideration in the same group as other applicants that filed on or prior to the cut-off date.³

Recognizing that its amendment would ordinarily be treated in this manner, Final Analysis attempts to avoid this problem simply by characterizing the amendment as minor.⁴ There is no substance to this characterization, however. The section of the Commission's Rules that Final Analysis cites provides an exception from normal "cut-off" procedures in those instances where a modification *both* "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."⁵ Final Analysis's amendment satisfies neither of these requirements.

First, as described fully in the following section, Final Analysis's amendment makes alterations to its overall frequency proposal that increase the potential to interfere with STARSYS's already authorized system. In addition to violating the threshold application requirements for NVNG MSS systems,⁶ these proposed changes

³ See 47 C.F.R. § 25.116(c) (1995).

⁴ See Final Analysis Amendment at 2.

⁵ 47 C.F.R. § 25.116(c)(4) (1995); Final Analysis Amendment at 2-3.

⁶ See 47 C.F.R. § 25.142(a) (1995) ("Applicants must . . . 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.")

unquestionably create significant new frequency conflicts, and thus the amendment cannot satisfy the first factor set out under Section 25.116(c)(4) of the Commission's Rules.

With respect to the second factor, Final Analysis has not attempted to distinguish its own amendment seeking to add new frequencies to its proposal from the circumstances found to give rise to a major amendment in STARSYS Global Positioning, Inc., 2 Comm. Reg. (P&F) 159, 163-64 (Int'l Bur. 1995) ("STARSYS"). Under the analysis employed in the STARSYS decision, the Final Analysis amendment is unquestionably "major" because Final Analysis cannot demonstrate that its amendment is "necessitated by events." Instead, the amendment can fairly be characterized as an attempt by Final Analysis to take advantage of an unforeseen opportunity. Final Analysis has failed to identify any exigencies similar to those identified in STARSYS, which led the Bureau to refrain from treating the entire STARSYS application as newly-filed in that instance.²

B. Final Analysis's Amended Application Would Increase Interference To STARSYS's Authorized NVNG MSS System.

As observed above, in addition to adding new frequencies, Final Analysis proposes to modify the channels it would use in the 137-138 MHz band, narrowing the

² Indeed, evidently recognizing the inherent defect in its amendment, Final Analysis expressly declares that its amendment should be considered a nullity in the event that the Commission concludes that it is a major amendment. See Final Analysis Amendment at 3.

channel width from 25 kHz to 15 kHz. Despite the smaller size of each channel, however, the new proposal would cause more interference to STARSYS than Final Analysis's original — and already unacceptable — frequency plan. This is so because the new channels selected by Final Analysis are closer to the STARSYS center frequency than those in its initial application.

In the amended application, seven of Final Analysis's nine channels in the 137-138 MHz band would be within 100 kHz of the STARSYS centerline frequency, and the remaining two channels would be within 200 kHz. Final Analysis's selected channel locations, coupled with both the very high power output in these channels and the proposed simultaneous operation of three channels per satellite, will cause additional harmful interference to STARSYS. Thus, Final Analysis's representation that its amended proposal will not result in such interference is wholly inaccurate.^{8/} Accordingly, Final Analysis has again failed to meet the threshold obligation of new applicants, under Section 25.142(a) of the Commission's Rules, to demonstrate that their proposals will not interfere with existing authorized systems.^{9/} This fundamental deficiency alone requires the Commission to reject the Final Analysis application.

^{8/} See Final Analysis Amendment at II-15.

^{9/} See 47 C.F.R. § 25.142(a) (1995).

Rather than going to the trouble of complying with the requirement to protect authorized systems, Final Analysis simply asserts that its system design is consistent with the 1992 joint frequency sharing plan and will result in "the sharing of these bands effectively and efficiently with the other existing and proposed users without causing harmful interference."^{10/} Unfortunately, Final Analysis has not performed even a rudimentary initial analysis of the interference attributable to the operation of its proposed system. If it had performed this examination, it would have been compelled to conclude that its system would cause from three to five times as much interference to STARSYS as the originally-proposed Orbcomm system that was contemplated at the time of the 1992 agreement. In the intervening years, Orbcomm has made several adjustments to its usage of spectrum in the 137-138 MHz band which have significantly reduced the opportunity for similar multiple-channel FDMA use in this band.^{11/} The system proposed by Final Analysis far exceeds the remaining capacity in the 137-138 MHz band.

In short, a reasonable sharing situation, if one is even possible at all, cannot be achieved without a fundamental overhaul of the Final Analysis system concept through rechannelization and the abandonment of the proposal for simultaneous operation of three

^{10/} See Final Analysis Amendment at II-15.

^{11/} See (e.g., Comments and Provisional Petition to Deny of STARSYS Global Positioning, Inc., File No. 5-SAT-ML-96, at 4 n.4 (filed December 8, 1996).

channels per satellite. Despite having over a year to address the fundamental problems with its proposal, Final Analysis has only made its application weaker with the current amendment. It continues to rely on empty assertions that it can co-exist with STARSYS in the 137-138 MHz band, rather than offering a system design that can actually achieve this goal.

An additional example of the gross deficiency of the Final Analysis proposal is its continued reliance on the notion that it will be able to operate on a cross-polarized basis vis-à-vis STARSYS in the 137-138 MHz band, and use channels that are “similar to Orbcomm’s.”^{12/} This approach is wholly insufficient to demonstrate that successful sharing is possible. As STARSYS has now pointed out on numerous occasions, the use of cross polarization to effect successful sharing between STARSYS and Orbital Communications Corporation (“Orbcomm”) came as a result of painstaking negotiation and coordination efforts between these parties.^{13/} Both STARSYS and Orbcomm made substantial accommodations and agreed to significant reductions in capacity to achieve a workable compromise allowing both CDMA and FDMA/TDMA use of the 137-138 MHz frequency band.

^{12/} See Final Analysis Amendment at III-3.

^{13/} See, e.g., STARSYS’s Consolidated Petition to Deny, File No. 25-SAT-P/LA-95, *et al.*, at 13-14 (filed February 24, 1995).

In contrast to that situation, and as STARSYS has repeatedly emphasized, Final Analysis is not on co-equal footing with STARSYS, or any of the other systems authorized in the first round. The agreements reached to permit grant of first round licenses are not open-ended to accommodate all future comers. Instead, second- and future-round NVNG MSS applicants are required by the Commission's Rules to demonstrate that they will not cause harmful interference to the already-licensed systems. Not only has Final Analysis failed to meet this burden, it has not even made a commitment to coordinate its use with STARSYS.

C. Final Analysis Has Not Demonstrated That Its Proposed System Could Successfully Share The 149.9-150.05 MHz Frequency Band With Other Users.

Finally, with respect to proposed operation in the 149.9-150.05 MHz frequency band, Final Analysis has failed to acknowledge the restriction in this band to Land Mobile-Satellite use,^{14/} or provide any demonstration of how its system would comply with this limitation. It also has recently become known that the Russian TYSKADA radionavigation satellite system is operating in this spectrum, so that any

^{14/} See Radio Regulation 609B (ITU 1994)

planned new MSS use will need to demonstrate the capability to share with this existing system.^{15/}

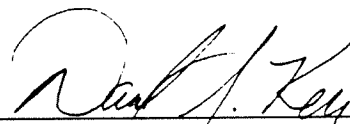
CONCLUSION

For the foregoing reasons, as well as those set forth in its initial Consolidated Petition to Deny, STARSYS urges the Commission to reject the Final Analysis application, both as originally filed and as amended, as inconsistent with the Commission's Rules.

Respectfully submitted,

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April 19, 1996

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^{15/} Although Russia states that this system has been operational for several years, it was registered with the ITU only recently.

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 "Petition to Deny Amended Application", and that this information is true and correct to the best of my knowledge and belief.

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

Dated: April 19, 1996

CERTIFICATE OF SERVICE

I, Kaigh K. Johnson, hereby certify that a true and correct copy of the foregoing "Petition to Deny Amended Application" was mailed, first-class postage prepaid, this 19th day of April, 1996 to each of the following:

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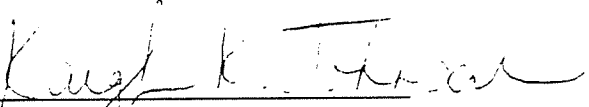
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