

BEFORE THE
Federal Communications Commission
WASHINGTON, D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of)
)
Flexibility for Delivery of Communications by)
Mobile Satellite Service Providers in the 2 GHz)
Band, the L-Band, and the 1 6/2 4 GHz Bands)

IB Docket No 01-185

To The Commission

REPLY TO COMMENTS

The U.S. GPS Industry Council ("Industry Council"), by its attorneys and pursuant to Section 1.429(g), 47 C.F.R. § 73.1429(g), hereby replies to comments supporting the Industry Council's Petition for Reconsideration ("Petition") filed in the above-captioned proceeding.¹ In its Petition, the Industry Council urged the Commission to reconsider its decision to adopt, for the bands 1525-1559 MHz and 1626.5-1660.5 MHz, out-of-band emission ("OOBE") limits less protective of the Global Positioning System ("GPS") than those jointly proposed by Mobile Satellite Ventures L.P. ("MSV") and the Industry Council. The comments substantively addressing the Petition unanimously support the Industry Council's request for the adoption of the more protective jointly proposed OOBE limits (the "Proposed Limits")

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¹ See Consolidated Opposition to and Comments on Petitions for Reconsideration of Mobile Satellite Ventures Subsidiary LLC, IB Docket No. 01-185 (filed August 20, 2003) ("MSV Comments"), Comments on Petitions for Reconsideration of Aeronautical Radio, Inc. and the Air Transport Association of America, IB Docket No. 01-185 (filed August 20, 2003) ("ARINC/ATA Comments"), and Comments of Delta Air Lines, Inc., IB Docket No. 01-185 (filed August 20, 2003) ("Delta Comments"). In a footnote, Globalstar, L.P. ("Globalstar") makes a passing comment regarding the sufficiency of the Petition's "technical showing." Consolidated Opposition of Globalstar, L.P., IB Docket No. 01-185 at n.1 (filed August 20, 2003). This comment should be dismissed as non-germane to the limited scope of the Petition, which focuses exclusively on proposed out-of-band emission limits for bands in which Globalstar does not operate and for which uncontroverted technical support was submitted.

The comments favor adoption of the Proposed Limits for several compelling reasons.

1. MSS ATC Operations In 1525-1559 MHz And 1626.5-1660 MHz Present A Unique Interference Case.

All the comments cite the fact that the Proposed Limits are the product of careful industry negotiations that “considered all relevant issues” and resulted in “a reasonable compromise” on OOB limits that will best protect the GPS L1 signal from Mobile Satellite Service (“MSS”) ancillary terrestrial components (“ATCs”) operations.² Delta Air Lines, Inc (“Delta”) specifically supports the Proposed Limits because of the unique circumstances involving the risk of interference to the GPS L1 signal.³

The Industry Council agrees. The increased user density from potentially millions of MSS mobile terminals operating in ATC mode in the 1626.5-1660.5 MHz bands will transmit back to potentially tens of thousands of ATC wireless base stations in the 1525-1559 MHz bands, which will significantly increase the noise floor in the bracketed GPS L1 band from ATC transmissions into the GPS L1 signal *from both sides*. This heightened risk of interference due to bracketing of the GPS L1 band is unlike ATC operations in other bands. The Industry Council believes that, in this limited case involving the MSS ATC operations of MSV, OOB limits more protective of GPS than those adopted by the Commission are necessary to ensure that the GPS L1 “signal is maintained as clear as possible” so that air safety services and radio navigation that increasingly rely on GPS are “not placed at risk.”⁴

2. Adopt OOB Limits Based on Commercial Best Practices For Licensed Networked Communications.

The comments also universally agree that the Proposed Limits are technically and commercially feasible today.⁵ Equipment vendors who will produce MSS ATC mobile terminals are the same equipment vendors who currently produce mobile handsets to support

² Delta Comments at 2, ARINC/ATA Comments at 2, MSV Comments at 20

³ Delta Comments at 2

⁴ *Id.* at 1

⁵ Delta Comments at 2, ARINC/ATA Comments at 3, MSV Comments at 20

licensed networked wireless communications in the 1.9 GHz Personal Communications Services (“PCS”) bands today. In fact, Proposed Limits are the same as the global system for mobile (“GSM”) operating standards (-90/-95 dBW/MHz) for mobile handsets in the PCS bands now. These tighter operating standards address the co-channel interference generated from increased user density of wireless networked communications in the PCS bands. Adoption of these standards by MSV for its ATC services will greatly reduce its own co-channel interference from user density.

In this regard, the Commission should in particular heed the comments of MSV, the only U.S. operator applying to operate ATC services in the 1525-1559 MHz and 1626.5-1660.5 MHz bands and to whom OOB limits will apply, who describes the Proposed Limits as “achievable.”⁶ However, unlike MSS ATC operations in other bands, MSV’s ATC operations and user density *do* pose a unique, and particularly harmful, interference case for GPS, which makes the Commission’s adoption of improved OOB limits critical for safety services that depend on GPS. Adopting the Proposed Limits to protect GPS, which MSV agrees is achievable (this is a sound business decision which fortunately possesses a good spectrum neighbor aspect), in a unique interference case now, shows that the Commission is serious in increasing its reliance on OOB limits to reduce interference using today’s technically feasible and commercially available technology.

3. The Commission Is Increasing Its Reliance On The Use Of OOB To Limit Interference.

In its recent Notice of Proposed Rule Making launching a reexamination of the rules governing the provision of air-ground telecommunications services on commercial airplanes, the FCC stated: “At the time the Commission adopted the Part 22 rules, it generally used the emission mask approach to regulate in-band energy distribution. Recently, however, the

⁶ MSV Comments at 20. See also ARINC/ATA Comments at 3 (noting that the Proposed Limits are “technically practicable” and that “MSV is willing to meet these new limits.”)

Commission has been decreasing its reliance on the use of emission masks as a means to limit interference and, instead, increased its reliance on the use of out-of-band emission (OOBE) limits. OOBE limits are intended to limit emissions outside of the authorized bandwidth”⁷ In view of the Commission’s increasing reliance on OOBE limits to reduce interference, the Commission should adopt the Proposed Limits that both protect the GPS bands from unique MSV ATC interference OOBE from both sides and that represent what MSV’s ATC vendors confirm they can technically and commercially achieve, using available technology to reduce its own co-channel interference and sustain the long-term commercially utility of its own bands. For the Commission to adopt the Proposed Limits to protect GPS represents a “win-win” for MSV’s ATC, for the Commission’s increased reliance on OOBE to limit interference, and for GPS safety of life and public safety use

4. The Proposed Limits Are Supported By The Record And The Public And Private Sectors.

Finally, the comments fault the Commission for adopting its OOBE limits developed a decade ago when the Commission “generally used the emission mask to regulate in-band interference” and despite the dearth of opposition to the Proposed Limits and lack of any basis in the record supporting the adoption of less stringent limits,⁸ and notwithstanding the endorsement of the Proposed Limits by the National Telecommunications and Information Administration.⁹ The Industry Council agrees that the Commission clearly erred in adopting earlier OOBE limits that ignored the only record before it and which disregarded broad public and private sector support for the Proposed Limits

⁷ *Amendment of Part 22 of the Commission’s Rules to Benefit the Consumers of Air-Ground Telecommunications Services*, Notice of Proposed Rule Making, FCC 03-95 at ¶ 38 (released April 28, 2003) (emphasis added)

⁸ Delta Comments at 3, ARINC/ATA Comments at 3

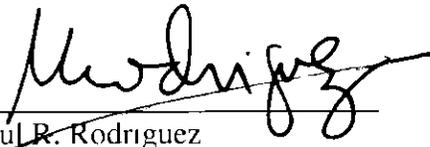
⁹ Delta Comments at 3

Conclusion

The Industry Council's Petition, and the comments in support thereof, reflect the considered judgment of the parties most affected by the Commission's decisions regarding MSS ATC operations of MSV in the 1525-1559 MHz and 1626.5-1660.5 MHz bands. In light of the comments' unanimous support of the Proposed Limits, the Industry Council urges the Commission to adopt the OOBE Limits jointly proposed by MSV and the Industry Council

Respectfully submitted,

U.S. GPS INDUSTRY COUNCIL

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September 4, 2003

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CERTIFICATE OF SERVICE

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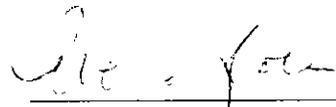
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