

**Before The
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)
)
2006 Biennial Regulatory Review --) IB Docket No. 06-154
Revision of Part 25)

COMMENTS OF GLOBALSTAR

Globalstar Licensee LLC, GUSA Licensee LLC, and GCL Licensee LLC (collectively, “Globalstar”) by their attorneys and pursuant to § 1.415 of the Commission’s rules, 47 C.F.R. § 1.415, submit these comments in response to the Commission’s Notice of Proposed Rulemaking in this proceeding.^{1/} Globalstar Licensee LLC is the licensee of a “Big LEO” 1.6/2.4 GHz mobile satellite service (“MSS”) system. GUSA Licensee LLC and GCL Licensee LLC are licensees of fixed satellite earth stations in Texas, Florida and Puerto Rico, and GUSA holds a blanket mobile earth station (“MES”) license. Globalstar supports the objectives and proposals of the NPRM and, based on its experience in complying with Commission rules as a licensee, recommends that the Commission make the following modifications and additions.

47 C.F.R. § 25.113(h) and 47 C.F.R. § 25.143(d). These rule sections are duplicative and conflicting. They provide that licensees of Non-Geostationary Satellite

^{1/} Notice of Proposed Rulemaking, IB Docket No. 06-154, FCC 10-21 (rel. Jan. 26, 2010) (“NPRM”). A summary of the NPRM was published in the Federal Register on March 29, 2010. See 75 Fed. Reg. 15392 (Mar. 29, 2010).

Orbit (“NGSO”) satellite systems^{2/} need not file separate applications to operate technically identical in-orbit spares authorized as part of a blanket license provided that they notify the Commission within 30 days in the case of Section 25.113(h) and 10 days in the case of Section 25.143(d). Section 25.113(h) requires filing electronically on Form 312, while Section 25.143(d) does not .

The notification requirement in these rule sections imposes an unnecessary burden on the NGSO licensee with no obvious regulatory purpose or public benefit. Replacing a malfunctioning spacecraft with an in-orbit spare does not entail any change to the constellation operating parameters or create any possibility of increased interference. The prohibition against increasing the total number of authorized operational satellites without prior approval is already embedded in other rule sections. Globalstar recommends that the Commission modify these two sections to reflect that any NGSO operator may replace operational satellites with in-orbit spares at its discretion and without notification except where the replacement will increase the number of operational satellites above the number authorized in the blanket license.

47 C.F.R. § 25.117, Modification of Station License.

Subsection (f) of this section requires an MSS licensee to file an application for modification of its space station license to add an ancillary terrestrial component (“ATC”). Because the FCC does not license the space stations of foreign-licensed MSS systems, foreign-licensed operators desiring to provide ATC services in the U.S. cannot file applications to modify their space station licenses and must instead file applications

^{2/} The applicability of the two sections differs slightly. Section 25.113(h) applies to all NGSO systems, while Section 25.143(d) applies only to 1.6/2.4 GHz and 2 GHz systems.

for modification of their MES licenses. The rules do not even state what a foreign-licensed operator must file to gain ATC authority; however, the Commission's staff has determined that a foreign-licensed operator need only file an amendment to its MES license. This is the more logical approach, given that the addition of ATC authority allows the terrestrial use of satellite frequencies but does not require the operator to make any change whatsoever to its previously-approved satellite operating parameters.

This asymmetrical regulatory regime favors foreign-licensed systems over U.S. - licensed systems. For one thing, the respective application processing filing fees are vastly different - currently \$28,535 for an NGSO space station modification, \$8,285 for a geostationary ("GSO") space station modification, and \$175 for a MES license modification.^{3/} Globalstar has filed an initial application for ATC authority, an application to amend its ATC authority and an application to modify certain conditions on its ATC authority: three applications requiring nearly \$100,000 in application processing fees. In contrast, two of its foreign-licensed potential competitors, TerreStar and ICO Global, were only required to submit \$175 fees for the same authority. The Commission should rectify this disparity by modifying Section 25.117(f) to equalize the required fees in some reasonable manner.

47 C.F.R. § 25.118, Modifications not requiring prior authorization.

Subsection (e) of this section provides considerable flexibility for GSO operators to manage their satellites but no flexibility for NGSO operators to manage their constellations without prior authorization, including the burden of submitting an application filing fee of \$28,535 for relatively minor adjustments to the constellation

^{3/} See 47 C.F.R. § 1.1107.

configuration. For example, in June 2003 Globalstar decided to transition from a 48-satellite Walker configuration (6 satellites in each of 8 planes) to a 40-satellite Walker configuration (5 satellites in each of 8 planes) in order to compensate for the loss of some satellites and to maintain service quality. This represented a decrease, not an increase, in the number of operating satellites. The only difference after the transition would be that the operating satellites would be 72 degrees apart ($360^\circ/5$) versus 60 degrees apart ($360^\circ/6$). Globalstar had to incur thousands of dollars of legal and engineering costs to prepare the application in the form required by the Commission, pay an application filing fee of \$24,270, and then wait 19 months for the application to be granted. NGSO licensees should be entitled to the same treatment for minor modifications of their systems as GSO licensees rather than be burdened with unnecessary costs and processing delays. That is particularly true because adjustments to satellite positions are sometimes required on a real-time basis to maintain service quality, leaving the licensee to decide between maintaining service quality but not obtaining prior authorization in accordance with the rule or allowing service quality to deteriorate while it pursues authorization. Commission regulations should not put licensees in the position of making such a Hobson's choice. Accordingly, the Commission should modify this section to permit NGSO operators to move satellites within their constellations without prior authorization as long as they do not exceed the total number of operating satellites^{4/} and can certify that the changes will not cause increased interference to any other operator.

^{4/} The limitations in the rules related to total number of operating NGSO satellites do not themselves appear rationally related to any legitimate regulatory purpose; however, Globalstar recognizes that modifying the relevant rule sections may go beyond the scope of this rulemaking proceeding.

47 C.F.R. § 25.121, License terms and renewals.

Subsections (d)(2) and (e) of this section refer to NGSO system licenses.

Subsection (d)(2) provides that operating authority for all NGSO space stations brought into service during the license term expires at the end of the 15-year term. Subsection (e) references authorizations for NGSO replacement satellites, but neither subsection provides for filing applications for renewals of space station licenses. For NGSO systems, satellites may be launched over a period of many months or even years.

Globalstar began launching its satellites in February 1998, and the first satellite became operational in April 1998; accordingly, Globalstar's NGSO license expires in April 2013. Globalstar subsequently launched eight on-ground spare satellites in 2007. These satellites and some of the original satellites launched between 1998 and 2000 will continue to operate beyond the 15-year constellation license term. In fact, both Iridium and Globalstar will operate many of their NGSO satellites beyond the initial license terms. The Commission should modify Section 25.121 to provide that NGSO system licensees may file applications for renewals of system licenses, as well as for licenses for replacement satellites prior to the end of the 15-year term where any of the satellites will operate beyond 15 years.

47 C.F.R. § 25.136, Licensing provisions for user transceivers in the 1.6/2.4 GHz, 1.5/1.6 GHz and 2 GHz Mobile Satellite Services.

This is the principal section of Part 25 that delineates rules applicable to user terminals. It uses the term "mobile earth stations," or MES. Sections 25.133(a)(2) and 25.149(c)(1) use the term "mobile earth terminal," or MET, whereas section 25.216 refers to "mobile earth stations." This is confusing. See the modifications recommended in the discussion of Section 25.201, below.

47 C.F.R. § 25.143, Licensing provisions for the 1.6/2.4 GHz mobile-satellite service and 2 GHz mobile-satellite service.

As with Section 25.136, above, this section presents a small but potentially confusing inconsistent use of terminology. Throughout Part 25 the terms “mobile-satellite service,” “Mobile-Satellite Service,” “mobile satellite service” and “Mobile Satellite Service” are used interchangeably. Section 25.201, Definitions, uses the term “Mobile-Satellite Service” (and “mobile earth stations” - see above). This version should be used consistently in Part 25 or changed.

Globalstar understand that this proceeding is intended to consider only non-substantive updates to Part 25. Nevertheless, Globalstar wants to bring to the Commission’s attention that Subsection 25.143(b), in particular, is badly in need of updating in light of the manner in which global NGSO constellations actually operate. The Commission has extrapolated the application requirements^{5/} in 47 C.F.R. § 25.143(b)(1) and (2) to be continuing operational requirements for Big LEO and 2 GHz MSS systems. Regulations adopted for the purpose of accepting and evaluating applications are not necessarily appropriate for continuing oversight once a system meeting the application requirements is launched and operating. Operation and maintenance of a multiple-satellite NGSO system is extremely challenging. In Globalstar’s case, coverage (Sections 25.143(b)(2)(ii) & (iii)) can be elastic when there are temporary outages or spare satellites are moved into operational positions. This section of the rules should be modified to add flexibility in light of the way systems

^{5/} E.g., “a *proposed* system in the 1.6/2.4 GHz MSS frequency bands” See 47 C.F.R. § 25.143(b)(2)(i). See also 47 C.F.R. § 25.149(b), which contains substantially similar, but not identical, requirements for an applicant for ATC authority.

actually behave once they are launched and in light of the operators' desired service to its intended market segments.

47 C.F.R. § 25.161, Automatic termination of station authorization.

Subsection (b) contains an incorrect reference to “§ 25.120(e).” The correct reference is “§ 25.121(e).”

47 C.F.R. § 25.201, Definitions.

(a) Add a definition of “Big LEO” or delete the term “Big LEO” from the ATC rules in Section 25.149, the only place it is used.

(b) “Land Mobile Earth Station” is defined, but “Land Mobile Satellite Service” is not defined in, and is not a recognized service under, Part 25.

There are three references to Land Mobile Earth Stations in Part 25: Sections 25.114(d)(8), 25.201 (in the definition of “Base Earth Station), and 25.213(a)(1). In Section 25.213(a)(1), the term is used generically, not as a term of art that defines a particular regulated device as part of a service regulated under Part 25. This creates confusion. The definitions of “Land Mobile Earth Station” and “Land Mobile-Satellite Service” appear in Part 2 of the Commission’s rules because they are used in the ITU Radio Regulations (see 47 C.F.R. § 2.1). Inasmuch as MSS operators may operate portable, mobile or fixed MESs on land or at sea, and Inmarsat, the traditional maritime operator, may serve MESs on land, there would seem to be no reason to retain the definition of Land Mobile Earth Station in Part 25.^{6/}

^{6/} But see L-3 Communications Titan Corporation, Memorandum Opinion, Order and Authorization, DA 09-587 (rel. Mar. 16, 2009). In this case, it appears that L-3 Communications requested authority to provide Mobile-Satellite Service using frequencies designated for the Fixed-Satellite Service. L-3 Communications is not a

(c) As discussed above, “Mobile Earth Station” is defined in this section but “mobile earth terminal” is not. Neither is “Mobile Earth Terminal” defined or used in Part 2. The Commission should discontinue using the latter term in Part 25 and change the references to “Mobile Earth Terminal” or “MET” to “Mobile Earth Station” or “MES” in Sections 25.133(a)(1) and (2), 25.149(c)(1), and 25.213(a).

Respectfully submitted,

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licensee of the “Land Mobile Satellite Service,” nor could it be because there is no such service in Part 25.