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Via Electronic Filing

Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street SW
Washington, DC 20554

Re: ***Terrestrial Use of the 2473-2495 MHz Band for Low-Power Broadband Networks*, IB Docket No. 13-213; *Amendments to Rules for the Ancillary Terrestrial Component of Mobile Satellite Service Systems*, RM-11685**

Dear Ms. Dortch:

On March 10, 2015, Globalstar, Inc. (Globalstar) submitted a high-level description and summary of tests conducted at the Commission's Technology Experience Center. In that filing, Globalstar attempts to demonstrate that its proposal to offer terrestrial broadband service by relying on spectrum between 2473 and 2495 MHz will not unduly impact unlicensed operations in the 2400-2483.5 MHz band.[1] The tests used Wi-Fi-style access points operating on Wi-Fi Channel 14 to simulate Globalstar's terrestrial low-power service (TLPS),[2] at 20 dBm maximum power.[3] The FCC's rules and Globalstar's pending TLPS proposal, however, would allow transmissions up to 36 dBm in the unlicensed band (some 40 times stronger than the equipment tested).[4] Furthermore, nothing in the Commission's current rules for the 2400-2483.5 MHz band would specifically require Globalstar to adopt a polite protocol, as Wi-Fi has, for its TLPS

[1] Letter from Regina M. Keeney, Lawler, Metzger, Keeney & Logan, LLC, Counsel for Globalstar, to Marlene H. Dortch, Secretary, FCC, *Terrestrial Use of the 2473-2495 MHz Band for Low-Power Broadband Networks*, IB Docket No. 13-213 (Mar. 10, 2015).

[2] *Id.*, Attach. 1 at 2.

[3] *Id.* Attach. 2 at 2.

[4] 47 C.F.R. §§ 15.247(b)(1), 15.247(b)(4). Globalstar's petition for rulemaking states that it believes its proposed operation complies with the existing Part 15 rules, and no waivers or rule changes are necessary to enable operation below 2483.5 MHz. Globalstar, Inc. Petition for Rulemaking, RM-11685, at 16 n.24 (filed Nov. 13, 2012); *In the Matter of Terrestrial Use of the 2473-2495 MHz Band for Low-Power Mobile Broadband Networks*; *Amendments to Rules for the Ancillary Terrestrial Component of Mobile Satellite Service Systems*, Notice of Proposed Rulemaking, 28 FCC Rcd. 15351, ¶ 41 n.108 (2013) (NPRM).

operations, if such operations are authorized.[5] For both reasons, real-world operation of TLPS may differ substantially from the conditions tested. There may be other differences as well, depending on the specific capabilities and technical characteristics of the equipment used for testing and the types of transmissions tested. Google looks forward to further input from parties who were invited to observe the testing.

But such technical issues are just one troubling aspect of Globalstar's proposal to use the 2400-2483.5 MHz unlicensed frequencies. Globalstar's request raises a basic question whether it is consistent with the public interest for a Commission licensee to leverage that permission to gain preferential use of spectrum outside the scope of its license, particularly when that other spectrum has been designated for unlicensed use on a shared basis. If the FCC permits Globalstar, and only Globalstar, to use Wi-Fi Channel 14 at full Part 15 power levels, without the current restrictive spectrum mask, it will have granted a single company de facto exclusive use of frequencies between 2472-2483.5 MHz. Neither Commission precedent nor sound spectrum management allows licensees to claim such privileged access to shared frequencies that are outside the scope of the license.

More particularly, Globalstar's argument that it should be granted exclusive rights to offer the proposed TLPS service, while the same spectrum is kept off-limits to Wi-Fi users, suggests that Globalstar has reached one of three conclusions. First, Globalstar may believe that adjacent low-power operations do not significantly degrade its mobile-satellite service (MSS) service, and it simply is trying to gain a special advantage in using the unlicensed spectrum below 2483.5 MHz. Second, Globalstar may be willing to accept degradation to its MSS service because the proposed terrestrial service represents a better business opportunity than mobile satellite. Third, Globalstar may believe that only it can offer a low-power service in the adjacent unlicensed spectrum without causing degradation to its MSS service. None of these three conclusions justifies the authorization Globalstar seeks.

If low power operation in Wi-Fi Channel 14 (2472-2495 MHz) is possible without harmfully interfering with Globalstar's MSS operations, then the Commission should modify its rules to enable intensive use of the frequencies below 2483.5 MHz. That is, if such low-power operations can be conducted, then any entity—not just Globalstar—should be permitted to operate in a manner similar to Globalstar's low-power operations. Globalstar (the party that supports restricting access to unlicensed spectrum adjacent to its MSS operations) should bear the burden of working with other potential users to develop appropriate sharing protocols. Accommodating

[5] The Commission's NPRM in this proceeding states that it "do[es] not intend to grant Globalstar any additional or different interference protection rights than those that currently apply to existing unlicensed operations in the 2473-2483.5 MHz band under Part 15." NPRM at ¶ 19.

more intensive low power use of the band would likely entail loosening the out-of-band restrictions at the top of the 2400-2483.5 MHz band if they are not essential to protect MSS operation.

If Globalstar's proposed TLPS operations in Channel 14 would interfere to some extent with its MSS service, but Globalstar is willing to accept a measure of interference in order to offer terrestrial service, then low power operations that interfere at a level that Globalstar is willing to tolerate should be permitted by Globalstar and others, without regard to the identity of the user. Otherwise the Commission would be giving Globalstar priority rights to unlicensed spectrum without any strong justification grounded in protection of MSS.

Finally, it is possible that Globalstar believes it is uniquely positioned to mitigate interference to its own network by operating its low-power terrestrial service as an integrated ancillary terrestrial component, whereas widespread low-power operations would substantially interfere with MSS service. If that is Globalstar's position, then, with respect to spectrum below 2483.5 MHz, the Commission should treat Globalstar's request as an application for reallocation of the 2472-2483.5 MHz spectrum from unlicensed to exclusive use, with an assignment to Globalstar outside the auction process. Before it could approve that request and grant Globalstar an exclusive assignment, the Commission would need to consider fully all alternative, higher-value licensed and unlicensed uses for the spectrum.

Of course, Globalstar could reframe its proposal to make a more plausible request: For instance, it might ask for permission to operate an ancillary terrestrial network (such as a 10 MHz TD-LTE system) on the spectrum above 2483.5 MHz, for which it already has a license. What the Commission should *not* do is give Globalstar authorization to use shared spectrum between 2472 and 2483.5 MHz on a priority basis, simply because it is the licensee of adjacent spectrum.

Respectfully submitted,

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cc: *Via electronic mail*
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