In the Matter of
Globalstar, Inc. Petition for Rulemaking to Reform the Commission’s Regulatory Framework for the Terrestrial Use of the Big LEO MSS Band

To: The Commission

COMMENTS OF THE WIRELESS INTERNET SERVICE PROVIDERS ASSOCIATION

The Wireless Internet Service Providers Association (“WISP A”), pursuant to Section 1.405 of the Commission’s Rules, hereby provides its Comments with respect to the Petition for Rulemaking (“Petition”) filed November 13, 2012 by Globalstar, Inc. (“Globalstar”). WISP A respectfully requests that the Commission initiate a rulemaking proceeding to develop a thorough record on issues related to the operation of unlicensed Part 15 devices in the 2.4 GHz band.

Introduction

WISP A is the trade association that represents the interests of wireless Internet service providers (“WISPs”) that provide fixed wireless broadband services to consumers, businesses and first responders across the country. WISP A’s members include approximately 700 WISPs, equipment manufacturers, distributors and others. WISP A estimates that WISPs serve more than 3,000,000 people, many of whom reside in rural, unserved and underserved areas where wired

---

technologies like DSL and cable Internet services may not be available. In these areas, WISPs are the only terrestrial option for fixed broadband access.

WISPs rely principally on unlicensed spectrum in the 900 MHz, 2.4 GHz and 5 GHz bands, along with “lightly licensed” spectrum in the 3650-3700 MHz band, to deliver fixed broadband services. These bands are shared with other WISPs, industrial users such as smart grid companies, and consumer devices like baby monitors, garage door openers and cordless telephones. WISPs thus are experienced in interference mitigation techniques such as cross-polarization, sectorization and other noise reduction techniques that enable effective spectrum sharing.

In the United States, the 2.4 GHz Industrial, Science and Medical (“ISM”) band extends from 2400 MHz to 2483.5 MHz and, under the 802.11b/g standard, consists of 13 overlapping channels each 22 MHz wide. WISPs typically operate on Channel 1 (2401-2423 MHz), Channel 6 (2426-2448 MHz) and Channel 11 (2451-2473 MHz). Use of Channels 12 and 13 for WISP operations is restricted because of the need to protect licensed operations at 2483.5 MHz and above.

Globalstar proposes to combine the 2473-2583.5 MHz portion of the ISM band with its Upper Big LEO band spectrum at 2483.5-2495 MHz for its terrestrial low-power service (“TLPS”). Consistent with the 802.11 channelization scheme, this would create a 22 megahertz channel for terrestrial broadband use. Globalstar would work with unnamed “terrestrial partners” that would provide TLPS “only to authenticated users and devices and utilizing available technologies to prevent unauthorized use of this spectrum.”

---

2 See Petition at 4.
3 Id. at 17.
4 Id. at 38-39.
Discussion

WISPA commends Globalstar on its creative approach to spectrum use, but takes no position at this time on the potential benefits claimed in the Petition. Although WISPA generally supports the creation or assignment of more spectrum for fixed broadband, it has some questions on which the Commission should invite comment if it adopts a notice of proposed rulemaking.

First, WISPA notes that Channels 1, 6 and 11 are separated by three megahertz of spectrum. Globalstar’s TLPS service would have no spectrum separation at the upper limit of Channel 11 (2473 MHz) where it is adjacent to the Channel 14 spectrum that Globalstar plans to use (2473-2495 MHz). The Commission therefore must seek comment on the potential for harmful interference that Globalstar’s TLPS could potentially cause to Channel 11 and other channels within the 2.4 GHz unlicensed band.

Second, in proposing to authenticate TLPS users and devices, Globalstar essentially seeks to privatize the 2473-2483.5 MHz portion of the unlicensed band. While it is true that, at the present time, broadband services do not operate in this spectrum, the Commission should consider whether Globalstar’s proposed use of this portion of the unlicensed band is consistent with sound spectrum policy. In addition, the Commission should seek comment on Globalstar’s statement that the TLPS “would co-exist with existing Bluetooth and other unlicensed users of ISM spectrum without raising any harmful interference issues.” The Commission must be assured, based on a thorough record, that the “Globalstar-managed” network will not exclude or disrupt incumbent Part 15 uses.

---

5 Id. at 16, n.24.
6 Id. See, e.g., Order, WT Docket No. 11-49, DA 11-2036 (rel. Dec. 20, 2011) (approving waivers for Progeny LMS, LLC to provide licensed services in unlicensed 900 MHz band only if it can demonstrate that there would not be “unacceptable levels of interference” to Part 15 devices).
Third, the Commission should determine the extent to which existing handsets and devices can be upgraded through a software download to enable use for TLPS, as Globalstar states. In so doing, the Commission can better assess the public costs and benefits of Globalstar’s proposal and the time it would take to deploy a viable nationwide TLPS network.

Conclusion

WISPA appreciates the opportunity to submit Comments in this proceeding and looks forward to further participation if the Commission initiates a rulemaking proceeding.

Respectfully submitted,

January 14, 2013

WIRELESS INTERNET SERVICE PROVIDERS ASSOCIATION

By: /s/ Elizabeth Bowles, President
    /s/ Matt Larsen, FCC Committee Chair

Stephen E. Coran
Lerman Senter PLLC
2000 K Street, NW
Suite 600
Washington, D.C. 20006-1809
(202) 416-6744
Counsel to the Wireless Internet Service Providers Association

---

7 Petition at 17.