Inmarsat Hawaii Inc. KA25 Request for STA

Request for Extension of Special Temporary Authority and Continuing Waiver Request

Inmarsat Hawaii Inc. ("Inmarsat") requests extension of special temporary authority ("STA") to use its gateway antenna facility in Paumalu, Hawaii, licensed under call sign KA25 ("Paumalu Gateway") for feeder downlinks in the 3550-3600 MHz band from the Inmarsat-4F1 satellite ("I4F1") at the 143.5° E.L. orbital location. Despite its best efforts to complete the transition to the Auckland, New Zealand gateway, Inmarsat is not in a position to transition the traffic from the satellite at this point in time or by the time that the current STA will expire. It is anticipated that Inmarsat will need an additional three months to complete the transition after the expiration of the current STA. Inmarsat, therefore, requests this extended authority for a period of three months commencing on December 20, 2014.

The I4F1 satellite previously conducted its feeder link operations using a gateway located in Subic Bay, Philippines, but is transitioning to a new gateway facility in Auckland, New Zealand. As part of this transition, the ground system in Subic Bay has been removed, and is in the process of being reinstalled and tested in Auckland. During this transition, the I4F1 satellite must use an alternate site for the operation of its feeder links, and Inmarsat has been using the Paumalu Gateway as it is the most suitable site for this interim operation.¹ I4F1 currently is authorized as a point of communication for the Paumalu Gateway.² The Paumalu Gateway is licensed to operate in certain portions of the C-Band, but is not authorized to operate on frequencies below 3600 MHz.

Inmarsat seeks to extend the current STA to operate the Paumalu Gateway on the 3550-3600 MHz downlink band using the following emission designators (same as previous request):

50K0G7W 50K0D7W 25K0G7W 200KD7W 200KG7W

Feeder uplinks to I4F1 will be operated in the 6425-6575 MHz band, using parameters that are within the scope of the existing license. Specifically, the uplinks will use an emission designator of 200KG7W at a maximum EIRP/carrier of 80.70 dBW and a maximum EIRP density of 63.70 dBW/4kHz.

¹ On April 22, 2014, the Commission granted Inmarsat a 180 day STA beginning June 1, 2014 (File No. SES-STA-20140225-00119), with conditions, to operate feeder links using the KA25 antenna with the Inmarsat-4 F1 satellite at the 143.5 degrees E.L. orbital location.

² The I4F1 satellite operates pursuant to authority from the United Kingdom. The Commission previously has reviewed and granted market access for I4F1 at the 143.5° E.L. location. *See, e.g.*, IBFS File Nos. SES-MFS-20080228-00207; SES-LIC-20080306-00242.

During the extended STA operations, I4F1 will continue to be configured to use the 3550-3600 MHz band for feeder downlinks. This band is allocated in Region 3 for FSS on a coprimary basis. However, in the U.S., this band is allocated for radiolocation and radionavigation, and does not include an allocation for FSS. Thus, Inmarsat seeks a waiver of the U.S. Table of Allocations, 47 C.F.R. § 2.106, to allow feeder downlinks in the 3550-3600 MHz band for the proposed interim operations.

Continued grant of the waiver to allow operations of the Paumalu Gateway in the 3550-3600 MHz band "would better serve the public interest than strict adherence to the general rule."³ The I4F1 satellite is configured to support feeder link operations in the frequency range 3550-3600 MHz band. In order to continue commercial operations on the satellite, it is not feasible to reconfigure the satellite to use feeder links in other frequency bands while the gateway is being transitioned. In addition, due to the existing heavy traffic load on the satellite, Inmarsat would be unable to move the downlinks to frequencies above 3600 MHz without displacing service operations. Thus, continued grant of the waiver will enable the provision of service to customers on the I4F1 during the final phase of the gateway transition. Thus, good cause exists for the Commission to continue grant of the waiver.⁴

At the same time, grant of the waiver "would not undermine the policy objective of the rule in question and would otherwise serve the public interest."⁵ Inmarsat is aware that the 3550-3600 MHz band is used by U.S. federal government radar systems.⁶ Continued grant of the waiver and STA will not cause harmful interference into operations in the 3550-3600 MHz band. The I4F1 feeder downlinks consist of a global beam that already covers Paumalu, whose pfd levels and coverage area will not change as a result of the proposed extended STA operations, and thus, the interference environment for operators in the 3550-3600 MHz band will remain the same. Inmarsat will continue to operate in this band on a non-interference basis. Further, Inmarsat's receive operations in the 3550-3600 MHz band at the Paumalu Gateway will not be subject to any interference protection and will be limited to the duration of the I4F1 gateway transition. Inmarsat understands the potential for interference from U.S. government uses of the 3550-3600 MHz band into the proposed operations and accepts the risk of such interference. Inmarsat has experience managing the Paumalu Gateway receiver operations on a non-protected basis with respect to U.S. government users in the vicinity.

³ See WAIT Radio v. FCC, 418 F.2d 1153, 1157 (D.C. Cir. 1969).

⁴ See 47 C.F.R. § 1.3.

⁵ Northeast Cellular Tel. Co. v. FCC, 897 F.2d 1166 (D.C. Cir. 1990); see also Fugro-Chance, Inc., 10 FCC Rcd 2860, at ¶ 2 (1995) (waiver of U.S. Table of Frequency Allocations is appropriate "where there is little potential for interference into any service authorized under the Table of Frequency Allocations and when the non-conforming operator accepts any interference from authorized services.").

⁶ Inmarsat acknowledges that this request is subject to review by NTIA through the IRAC process.

Moreover, grant of this STA extension will facilitate a smooth transition of the gateway facilities for I4F1, enabling continued, seamless service to customers using the global Inmarsat-4 network. Thus, grant of the STA extension would serve the public interest.

Inmarsat is willing to accept the same conditions as set forth by the Commission in the original STA grant.