

### **Request for Special Temporary Authority and Waiver Request**

Inmarsat Hawaii Inc. (“Inmarsat”) requests 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. Inmarsat requests this authority for a period of six months commencing on June 1, 2014.

The I4F1 satellite currently conducts its feeder link operations using a gateway located in Subic Bay, Philippines, but will transition to a new gateway facility in Auckland, New Zealand by the end of this year. As part of this transition, the ground system in Subic Bay will be removed, and 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 determined that the Paumalu Gateway is the most suitable site for this interim operation. I4F1 currently is authorized as a point of communication for the Paumalu Gateway.<sup>1</sup> 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 STA to operate the Paumalu Gateway on the 3550-3600 MHz downlink band using the following emission designators:

50K0G7W  
50K0D7W  
25K0G7W  
200KD7W  
200KG7W

Feeder uplinks to I4F1 will be operated in the 6425-6575 MHz band in accordance with 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.

During the STA operations, I4F1 will be configured to use the 3550-3600 MHz band for feeder downlinks. This band is allocated in Region 3 for FSS on a co-primary 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.

---

<sup>1</sup> 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.

Grant of a 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.”<sup>2</sup> 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, grant of the waiver will enable the provision of service to customers on I4F1 during the gateway transition. Thus, good cause exists for the Commission to grant the requested waiver.<sup>3</sup>

At the same time, grant of the requested waiver “would not undermine the policy objective of the rule in question and would otherwise serve the public interest.”<sup>4</sup> Inmarsat is aware that the 3550-3600 MHz band is used by U.S. federal government radar systems.<sup>5</sup> Grant of the requested 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, and whose pfd levels and coverage area will not change as a result of the proposed STA operations. Thus, the interference environment for operators in the 3550-3600 MHz band will remain the same. Inmarsat would operate in this band on a non-interference basis. Further, Inmarsat’s proposed receive operations in the 3550-3600 MHz 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.

Moreover, grant of this STA 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 would serve the public interest.

---

<sup>2</sup> See *WAIT Radio v. FCC*, 418 F.2d 1153, 1157 (D.C. Cir. 1969).

<sup>3</sup> See 47 C.F.R. § 1.3.

<sup>4</sup> *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.”).

<sup>5</sup> Inmarsat acknowledges that this request is subject to review by NTIA through the IRAC process.