

Federal Communications Commission Washington, D.C. 20554

August 11, 2015

Elizabeth Park Latham & Watkins LLP 555 Eleventh Street, NW Suite 1000 Washington, D.C. 20004

> Re: Inmarsat Mobile Networks, Inc. IBFS File No. SES-LIC-20150402-00188 Call Sign: E150028

Dear Ms. Park:

This letter requests additional information regarding Inmarsat Mobile Networks, Inc.'s (Inmarsat's) above referenced application to operate earth stations on maritime vessels to communicate with the proposed Inmarsat-5 F3 satellite at the 179.7° E.L. orbital location. Inmarsat states that the earth stations will transmit in the 29.5-30.0 GHz band and receive in the 19.7-20.2 GHz band. To assist the Satellite Division with the processing of this application, we request, pursuant to Section 25.111(a) of our rules, that Inmarsat provide the following information:

- 1) Two degree interference analysis. Section 25.140(a) of the Commission's rules requires applicants to submit an interference analysis showing the compatibility of its proposed system two degrees from any authorized space station. If there are no currently authorized space stations within two degrees of an applicants' proposed station, the applicant must submit an interference analysis, with an assumed two degree separation, using either (1) the technical characteristics of an authorized or proposed satellite located more than two degrees away that meet U.S. two degree compliance rules; or (2) the technical characteristics of the applicant's own satellite. Although Inmarsat states that its system complies with the Commission's two degree spacing policy because it meets the uplink and downlink parameters of Section 25.138 of the Commission's rules, it must still provide an analysis using the technical parameters of another space station or its own space station.²
- 2) Orbital debris mitigation showing. Inmarsat states that two tanks on the Inmarsat-5 F3 satellite will be sealed shortly after launch, and will retain residual pressurized helium. For the helium tanks please provide: (a) the volume of each tank in liters, if the tanks are interconnected provide the combined internal volume of the tanks and the interconnecting

¹ 47 C.F.R. § 25.140(a)); International Bureau, Satellite Division Information: Clarification of 47 C.F.R. § 25.140(b)(2), Space Station Application Interference Analysis, *Public Notice*, 19 FCC Rcd 10652 (Int'l Bur. 2004); International Bureau, Satellite Division Information: Clarification of 47 C.F.R. § 25.140(b)(2), Space Station Application Interference Analysis, *Public Notice*, 18 FCC Rcd 25099 (Int'l Bur. 2003). The Public Notices refer to Section 25.140(b)(2), which was subsequently changed to Section 25.140(a). *See* Comprehensive Review of Licensing and Operating Rules for Satellite Services, *Report and Order*, IB Docket 12-267, 28 FCC Rcd 12403, 12451 (2013).

² Inmarsat Mobile Networks Application, IBFS File No. SES-LIC-20150402-00118, Attachment A at 7.

plumbing, in liters; (b) the estimated mass of the helium, in grams, at the space stations end-of-life; (c) the estimated temperature of the residual helium, in degrees Celsius or kelvins; and (d) the estimated pressure of residual helium, in bars.

Please submit the requested information by September 10, 2015. Failure to do so may result in dismissal of the application pursuant to Section 25.112(c) of the Commission's rules.

Sincerely,

Jose P. Albuquerque Chief, Satellite Division International Bureau