

## **RESPONSE TO QUESTION 7**

### **DESCRIPTION OF THE PROPOSED EXPERIMENTAL USES AND REQUEST FOR EXPEDITED TREATMENT**

Inmarsat plc owns a global fleet of L-Band MSS spacecraft, which includes the Inmarsat-4F2 spacecraft currently operating at 52.75° W.L. One of the services proposed to be offered to the United States over Inmarsat-4F2 is Inmarsat plc's Broadband Global Area Network ("BGAN") service. BGAN (which is already available in Europe, Africa, and parts of Asia) enables mobile broadband service to notebook-sized mobile terminals.

Through this Application, Inmarsat plc's wholly owned subsidiary, Inmarsat, Inc. ("Inmarsat"), seeks authority to operate four different types of mobile earth terminals over this spacecraft that are planned to be used to provide BGAN in the United States. This authorization will be used to allow Inmarsat, its manufacturers, distributors and resellers to: (i) conduct technical demonstrations and testing of BGAN service and these terminals to ensure the service and terminals perform in accordance with design specifications; (ii) demonstrate performance of the terminals to prospective purchasers; and (iii) perform limited market studies. *See* 47 CFR §§ 5.3(d), (f), (g), (j). These demonstrations, tests, and studies require that the terminals be used at various locations throughout the United States.

Inmarsat requests expedited treatment of this Application in order to conduct BGAN demonstrations at the request of the Department of Defense ("DoD"), which are scheduled to begin on February 20, 2006 with systems integration and testing, well ahead of Inmarsat's original plan for North American testing and demonstration. Specifically, the proposed BGAN demonstrations are part of the Department of Defense Integrated Communications Environment ("DICE") series of experiments and demonstrations of communications technologies for potential DoD use. The next demonstration period, sponsored by the U.S. Northern Command, begins February 20, 2006 and ends on March 3, 2006. The United States Army has shown considerable interest in BGAN and has requested that Inmarsat participate in this DICE demonstration period.

The frequencies to be employed have been successfully used by Inmarsat to serve the United States for years, and the EIRP spectral density proposed is no greater than that Inmarsat has previously used with other terminals operating in these same bands in the United States.

The frequencies to be used by these terminals are assigned by the satellite network, through Inmarsat-controlled earth station facilities located in Burum, the Netherlands and in Fucino, Italy. Thus, Inmarsat will remain in ultimate control of these experimental uses. The terminals themselves may be owned by Inmarsat's manufacturers, distributors and resellers in some cases.

The BGAN user terminals provide terminal identification to the network via the International Mobile Subscriber Identity (IMSI) process, rather than by voice or Morse code, as specified in the Commission's rules.

The operation of these user terminals will comply with the Commission's radio frequency (RF) exposure guidelines. Table 1 of Section 1.1307(b)(1) of the Commission's Rules provides that routine environment evaluation is not required for Experimental Radio Services if the power is less than 100 Watts ERP. The maximum power from these terminals is less than that value, as demonstrated on the accompanying FCC Form 442. Moreover, these user terminals will be secured from access by the general public and will be operated by experienced test personnel.