

CGMS-XXIX USA-WP-24  
Prepared by USA  
Agenda Item: I.1  
To be discussed in WG I

**TECHNICAL INFORMATION ON INTERFERENCE BETWEEN  
MTSAT AND GOES**

This document is the USA response to Action 28.19.

## **TECHNICAL INFORMATION ON INTERFERENCE BETWEEN MTSAT AND GOES**

### **1 Introduction**

JMA provided information on activities related to the frequency registration of the MTSAT satellite network after the launch failure of the first MTSAT spacecraft in November 1999. Information was given on the current status of the registration process of MTSAT with the ITU including those related to MTSAT-1R. The launch of MTSAT-1R is planned before August 2003, which is the expiration of the MTSAT filing. Frequency bands of UHF, S-band and USB used by JMA for the BUS and the meteorological missions of MTSAT-1R and MTSAT-2 are the same as those of MTSAT and GMS-5. The procedure of the MTSAT-1R will be planned to proceed as the additional and/or the modification of MTSAT filings. JMA requested CGMS Members to agree with JMA's proposal that ACTION 27.11 would be kept "open" and modified as necessary for the new MTSAT satellites. JMA expressed sincere thanks for kind cooperation of all CGMS Members in these matters. CGMS Members were requested to support the frequency registration process.

### **2. US Response and Recommendations**

Action 28.19: CGMS Members located within the telecommunication coverage of MTSAT satellites to inform their responsible Telecommunication Administration (with a copy to JMA) by a few months before MTSAT will be launched, that they are convinced that there would be no unacceptable interference between their systems and MTSAT network filing.

The USA usually responds to the ITU when there is a concern of possible harmful interference or if asked to respond under a coordination request by the ITU or by an administration. But the USA formally responded to the Telecommunications Bureau, Ministry Posts and Telecommunications, Tokyo, with a copy to the ITU, on December 5, 1997, agreeing to the coordination of assignments in the METSAT bands (400mHz, 1670-1700mHz, 2025-2110mHz, and 200-2290mHz) for the MTSAT-140E and MTSAT-145E satellite networks. Our analysis showed a C/I of 35 dB for the only frequency band that might be affected by MTSAT, viz., our command uplink at 2026 +/- 0.5 MHz from Fairbanks. Because the protection is so high, we did not consider the matter further. None of the GOES uplinks from Wallops Island is visible from either of the GOES positions at 75W and 135W and thus not a concern regarding possible interference from MTSAT. The USA will provide JMA with a copy of the December 5 response that indicated that there is no interference concern.