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## **IWG-4**

### **Informational Report To WRC-07 Advisory Committee Regarding an AM(R)S allocation in the 5 to 6 GHz Band**

**Agenda Item 1.6:** to consider additional allocations for the aeronautical mobile (R) service in parts of the bands between 108 MHz and 6 GHz, in accordance with Resolution **414(WRC-03)**.

The CPM text for Agenda Item 1.6 was developed by Working Party 8B after liaison with Working Party 8D. This text reflects the possibility of using the 5000-5010 MHz and 5010-5030 MHz bands currently allocated to the aeronautical radionavigation service (ARNS), aeronautical mobile satellite (R) service (AMS(R)S) and Radionavigation Satellite Service (RNSS) to provide for AM(R)S under the provision that the AM(R)S could not cause harmful interference to, nor claim protection from, nor constrain the development of the RNSS.

In response, the U.S. GPS Industry Council, on behalf of the U.S. RNSS private industry and users of RNSS services (including the U.S. GPS system) presented a proposal to IWG-4 that the U.S. propose to WRC '07 that there be no change to the Table of Allocations in the frequency bands 5000-5010 MHz and 5010-5030 MHz. This proposal was opposed by ASRI (Aviation Spectrum Resources, Inc.) on behalf of the civil aviation community, citing the existing congestion of AM(R)S spectrum, and recent International Civil Aviation Organization (ICAO) studies pointing to a need for up to 100 MHz of new spectrum to support civil aviation airport surface communications.

Given the new nature of the RNSS allocation at WRC-03, the U.S. RNSS industry has not yet had the opportunity to develop applications for its use. However, industry envisions the possibility of its use for both RNSS service and feeder-link applications, and would not want to have these possible applications foreclosed by a new additional allocation in these bands. Consequently, the RNSS industry is opposed to the use of the aforementioned RNSS bands for any other service if interference cannot be prevented by the new service or if constraints on use of the band for RNSS are reasonably expected to result from the new service.

The aviation community pointed to ITU-R studies and the recent introduction of RNSS into the heavily used 1164-1215 MHz band (e.g., GPS L5) as models demonstrating the feasibility of achieving compatibility between RNSS and AM(R)S. Civil aviation indicated it believes that sharing between RNSS and AM(R)S is feasible and further noted that any RNSS applications for those bands are far-term at best (e.g., the only mention in the current GPS III specification is for a possible future 5010-5030 MHz feeder link), and leaving the band fallow could set a bad precedent from a spectrum efficiency perspective.

IWG-4 considered the proposal suggested by the U.S. RNSS industry and the comments of the civil aviation community and was not able to reach consensus. Nonetheless, IWG-4 wishes to have the Report of WAC-'07 note the suggestions of both the U.S. RNSS industry and the US aviation community for consideration by the U.S. Government as it develops U.S. proposals to WRC '07.