UNITED STATES OF AMERICA
PROPOSALS FOR THE WORK OF THE CONFERENCE

Agenda Item 9: to consider and approve the Report of the Director of the Radiocommunication Bureau, in accordance with Article 7 of the Convention; 9.1: on the activities of the Radiocommunication Sector since WRC-12:

Background Information: RR No. 5.443C was adopted at WRC-12 in conjunction with a new AM(R)S allocation in 5 030-5 091 MHz to enable use of unmanned aircraft systems in that band while ensuring protection of RNSS systems and networks in the adjacent 5 010-5 030 MHz (space-to-Earth) and (space-to-space) RNSS band. No. 5.443C states:

The use of the frequency band 5 030-5 091 MHz by the aeronautical mobile (R) service is limited to internationally standardized aeronautical systems. Unwanted emissions from the aeronautical mobile (R) service in the frequency band 5 030-5 091 MHz shall be limited to protect RNSS system downlinks in the adjacent 5 010-5 030 MHz band. Until such time that an appropriate value is established in a relevant ITU-R Recommendation, the e.i.r.p. density limit of $-75$ dBW/MHz in the frequency band 5 010-5 030 MHz for any AM(R)S station unwanted emission should be used. (WRC-12)

The BR Director’s CPM Report is very likely to reference RR No. 5.443C, since it contains the phrase, “Until such time that an appropriate value is established in a relevant ITU-R Recommendation...” In May 2012, WP 4C began work toward finalizing the provisional e.i.r.p. density limit of $-75$ dBW/MHz limit in No. 5.443C with a liaison statement to WP 5B (cf. Doc. 5B/57) and this work was reported to SG 4 (cf. Doc. 4/15). However, WP 5B (cf. Doc. 4C/104) and ICAO (cf. § 3.2, Doc. 4C/173) have communicated that no AM(R)S transmitter characteristics are available to perform compatibility studies. Therefore, the ITU can develop no such Recommendation at this time.

Although the USA consented to No. 5.443C, prior compatibility studies had not been performed within the ITU-R for the adjacent-band compatibility of RNSS and AM(R)S in the 5 GHz band. This is reflected in the call for “an appropriate value” of the out-of-band AM(R)S e.i.r.p. density limit. However, the USA has agreed that the current provisional limit is acceptable given the current state of knowledge. At this time, a change to No. 5.443C could have unintended consequences, and so, to prevent WRC-15 from making any changes without having performed the appropriate ITU-R studies, the USA proposes NOC on any proposals to alter RR No. 5.443C.

Proposal:

NOC USA/9.1/1
ARTICLE 5

Frequency allocations

RR No. 5.443C (WRC-12)

Reason: The ITU-R has not yet completed the necessary studies to establish an appropriate value in a relevant ITU-R Recommendation for the e.i.r.p. density limit required in the frequency band 5 010-5 030 MHz for AM(R)S station unwanted emissions in order to ensure protection of RNSS system and network operations (space-to-Earth) and (space-to-space) in that band.