

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.