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Informal Working Group 4

DRAFT PRELIMINARY VIEWS ON WRC-07 Agenda Item 1.13

Agenda Item 1.13: *taking into account Resolutions 729 (WRC-97), 351 (WRC-03) and 544 (WRC-03), to review the allocations to all services in the HF bands between 4 MHz and 10 MHz, excluding those allocations to services in the frequency range 7 000-7 200 kHz and those bands whose allotment plans are in Appendices 25, 26 and 27 and whose channeling arrangements are in techniques and the spectrum requirements for HF broadcasting;*

ISSUE: There are three Resolutions relating to different services to be addressed:

- a. Resolution **729 (WRC-97)**, to consider frequency assignments for frequency adaptive systems in frequency bands allocated for fixed/mobile services operation,
- b. Resolution **351 (WRC-03)**, that, as soon as ITU-R studies are completed, a future competent conference should consider necessary changes to Appendix **17** to enable the use of new technology by the maritime mobile service (MMS), and
- c. Resolution **544 (WRC-03)**, to consider identification of additional spectrum for HF broadcasting between 4-10 MHz. In particular, with focus on the following HFBC preferred bands:

4 500-4 650 kHz
5 060-5 250 kHz
5 840-5 900 kHz
7 350-7 650 kHz
9 290-9 400 kHz
9 900-9 940 kHz,

BACKGROUND: There are three separate issues to be addressed within agenda item 1.13. Each Resolution, although related due to the possible impact to other services, will be studied in a separate ITU-R Working Party (WP) which has the primary lead. The commonality between these items comes in the form of interested ITU-R WPs:

- a. Resolution **729 (WRC-97)** was not successfully completed at the time. The lead group is ITU-R WP 9C.
- b. Resolution **351 (WRC-03)** and the studies for a technology or interoperable technologies have not been completed. The lead group is ITU-R WP 8B.
- c. WRC-03 agreed that no additional HF broadcasting spectrum would be allocated at that conference. By Resolution **544 (WRC-03)**, WRC-07 was directed to resolve this issue on additional HF broadcasting spectrum allocation(s). This was a very contentious issue at WRC-03 and at past WRCs where it had been discussed. The lead group is ITU-R WP 6E. It is important that the U.S. complete its studies in timely fashion in the event that WRC-07 decides to allocate/re-allocate the spectrum of other radiocommunication services in order to address the HFBC spectrum issue.

U.S. Preliminary View: These issues, although related should still be addressed separately in the ITU-R WPs assigned primary responsibility with cooperation and technical characteristics from the WPs of related services be achieved through liaison statements and cross participation from administration experts that attend contributing WPs and administration groups for each issue.

Resolution 729 (WRC-97). Before this resolution can be resolved; development of an ITU-R Recommendation for technical and operational characteristics for HF Frequency Adaptive systems is needed. In addition, review of the use of current and proposed future fixed HF operations is required. Once this has been accomplished within WP 9C, then the feasibility and need of modifying the HF channel plans to accommodate HF adaptive systems can be investigated and determined. This resolution is not limited to the 4-10 MHz band and could impact all fixed HF channel plans (3-30 MHz).

Resolution 351 (WRC-03). Given the vital nature of the safety systems listed in Appendix **17** of the **ITU-R Radio Regulations (RR)**, that a thorough review of digital techniques for the HF/MF bands must be accomplished before any changes to Appendix **17** are made. An ITU-R Recommendation that details the technical and operational characteristics of digital systems, and a review of Appendix **17** operations must be accomplished to fully determine the impact of any changes to existing services. This resolution is not limited to the 4-10 MHz band and could impact all of Appendix **17**.

Resolution 544 (WRC-03). This resolution deals with the contentious issue that spectrum in the 4-10 MHz band for allocation to the HF broadcasting service must be considered carefully, taking into account the impact on existing services after a careful review of the HF broadcasting service's requirements. Initial investigation shows that the allocation of the entire spectrum identified as "preferred" bands is problematic for the United States given that vital government systems operate in all of these bands. In a proposal to WRC-03 the United States limited allocations to 250 kHz of spectrum for the HF broadcasters in the 4-10 MHz band. WRC-03 did not make the allocation to the HF broadcasting service that was requested. However, 50 kHz was allocated in Region 2 to the broadcasting service as a result of the realignment portions of the 7 MHz band under AI-1.23. The United States is investigating the current requirement that is needed to meet broadcasting needs.

The U.S. agrees with the need for thorough and timely studies of the consequences of the current HF broadcasting mission, augmented with projections of future HF broadcasting and fixed/mobile services use. There should be a clear set of findings from the studies of the representative ITU-R WPs of the maximum amount of spectrum required and in-use by existing services.

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