

WRC-03 DECISIONS ON HF BROADCASTING

Introduction on digital technology in the HFBC bands

Resolution 517 (Rev.WRC-03) - *Introduction of digitally modulated and single-sideband emissions in the high-frequency bands between 5 900 kHz and 26 100 kHz allocated to the broadcasting service* - entry into force July 2003, encourages the introduction of digital emissions in all of the HFBC bands. The resolution reflects the changes in the use of HFBC bands for the transition to digital emissions rather than to SSB emissions.

The provisional protection ratio values are given in **Resolution 543 (WRC-03) - *Provisional RF protection ratio values for analogue and digitally modulated emissions in the HF broadcasting service***, entry into force 5 July 2003.

The world-wide digital HFBC system (DRM) is described in **Recommendation ITU-R BS.1514 - *System for digital sound broadcasting in the broadcasting bands below 30 MHz***. Other planning parameters are given in **Recommendation ITU-R BS.1615 - *Planning parameters for digital sound broadcasting at frequencies below 30 MHz***.

Propagation calculations and compatibility analysis

Resolution 535 (Rev. WRC-03) - *Information needed for application of RR Article 12* - entry into force 5 July 2003 was revised to include the methodology and data required for the propagation calculations and compatibility analysis relating to digital emissions.

Changes to the publication schedule of HFBC CD-ROM

Resolution 535 (Rev. WRC-03) also specifies changes to the publication schedule of HFBC CD-ROMs to adapt better to the volume of changes to the requirements through out the broadcasting seasons. The total number of the schedules published is not changed; however, the schedule is slightly modified. Before the beginning of each season, where there are many changes in requirements, there will be two Tentative Schedules published one month and two months before each season starts. The currently published Schedule one month before the end of each season will no longer be available.

The changes will take effect with the start of season A 2004 (A04).

Deleting references to SSB-12

Recommendation 517 (Rev.wrc-03) - *Relative RF protection ratio values for single-sideband (SSB) emissions in the HF bands allocated to the broadcasting service* was revised to remove references to SSB at 12 dB carrier reduction relative to peak envelope power.

Realignment of allocations to radio services around 7 MHz

Allocations in the part of the Table of Frequency Allocations between 6 765 MHz and 8 100 MHz are modified that results in the following changes to the allocations to the broadcasting service:

- the broadcasting service is removed from the band 7 100 – 7 200 kHz in R1 and R3;
- the broadcasting service obtains additional 50 kHz in 7 350 – 7 400 kHz worldwide;
- the broadcasting service obtains additional 50 kHz in 7 400 – 7 450 kHz in R1 and R3;

All the above changes become effective as from 29.03.2009.

In addition, Recommendation 718 (WARC-92) dealing with alignment of allocations around 7 MHz has been suppressed as from 5.07.03 since the recommended activities were completed.

Adequacy of allocations to the broadcasting service in the 4 to 10 MHz

It was concluded that the spectrum available to the broadcasting service between 4 and 10 MHz is inadequate. A new **Resolution 544 (WRC-03)** was adopted which resolves to study potential allocations to the broadcasting service between 4 and 10 MHz and to bring the results of these studies to the next WRC.

The Resolution also contains the frequency bands, which were identified as preferred ones for future allocations during previous study period. **Resolution 544 (WRC-03)** enters into force as from 05.07.2003.