

QUESTION ITU-R 108/6*

Digital sound broadcasting in band 7 (HF) in the Tropical Zone

(2003)

The ITU Radiocommunication Assembly,

considering

- a) that the digital broadcasting system at frequencies below 30 MHz is at a developmental stage in several parts of the world;
- b) that tropical broadcasting is the most economical and efficient means to provide short-distance coverage in the Tropical Zone;
- c) that Recommendation ITU-R BS.1348 recommends technical and operational characteristics and capabilities for digital sound broadcasting services from terrestrial transmitters, intended for vehicular, portable and fixed reception in the LF, MF and HF bands;
- d) that Recommendation ITU-R BS.1349 recommends that any system developed for digital sound broadcasting to vehicular, portable and fixed receivers in the LF, MF and HF bands should have emission characteristics which are compatible with the channel width currently in use, e.g. 10 kHz, 9 kHz and 5 kHz;
- e) that Recommendation ITU-R BS.1514 recommends the system characteristics which meet the service requirements of Recommendation ITU-R BS.1348 and any relevant new and revised Recommendations;
- f) that the determination of the power requirement to provide satisfactory coverage using the digital system in the Tropical Zone requires precise knowledge of transmission and reception characteristics and the impact of statistical variation of atmospheric radio noise on digital signals;
- g) that the studies to determine planning parameters for digital broadcasting in the Tropical Zone would be helpful to plan services in the bands allocated for tropical broadcasting,

decides that the following Question should be studied

- 1 What should be the value of carrier-to-noise ratio required for satisfactory reception in the Tropical Zone and the impact of atmospheric radio noise on the reception quality of digital services in this zone?
- 2 What should be the values of the following parameters for the planning of broadcasting services in the HF bands in the Tropical Zone?
 - minimum usable field strength;
 - RF protection ratios for the following cases:

Wanted emission	Unwanted emission
Digital	Digital

* This Question should be brought to the attention of Radiocommunication Study Group 3.

Digital	AM
AM	Digital

- 3 What should be the sharing criteria between the digital broadcasting services and fixed and mobile services in HF bands in the Tropical Zone?

further decides

- 1 that the results of the above studies should be included in a Recommendation;
- 2 that the above studies should be completed by 2005.
