

## RESOLUTION 729 (REV.WRC-07)

**Use of frequency adaptive systems in the MF and HF bands\***

The World Radiocommunication Conference (Geneva, 2007),

*considering*

- a) that the efficiency of spectrum use will be improved by the use of frequency adaptive systems in the MF and HF bands shared by the fixed and the mobile services;
- b) that trials and deployment of frequency adaptive systems have been under way during the past 30 years and have demonstrated the effectiveness of such systems and improved spectrum efficiency;
- c) that such improved efficiency is attained through:
  - shorter call set-up and improved transmission quality by selection of the most suitable assigned channels;
  - reduced channel occupancy, permitting the same channels to be used by different networks, yet decreasing the probability of harmful interference;
  - minimization of the transmitter power required for each transmission;
  - continued optimization of the emissions owing to the sophistication of the systems;
  - simple operation by the use of intelligent peripheral equipment;
  - reduced need for skilled radio operators;
- d) that following WRC-95, the Radiocommunication Bureau no longer undertakes examination with respect to the probability of harmful interference caused by new assignments recorded in the Master International Frequency Register (MIFR) in the non-planned bands below 28 MHz;
- e) that WRC-97 introduced a means for notification of block assignments;
- f) that frequency adaptive systems will actively contribute to the avoidance of interference since, when other signals are observed on the channel, the frequency adaptive system will move to another frequency,

*resolves*

- 1 that, in authorizing the operation of frequency adaptive systems in the fixed and mobile services for the MF and HF bands, administrations shall:
  - 1.1 not make assignments in those bands:
    - governed by the Appendix 25 frequency allotment Plan for the maritime mobile service or the Appendix 27 frequency allotment Plan for the aeronautical mobile (R) service;

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\* This Resolution should be brought to the attention of ITU-D Study Group 2.

## RES729-2

- shared on a co-primary basis with the broadcasting service, radiodetermination service or the amateur services;
  - allocated to the radio astronomy service;
- 1.2 avoid use which may affect frequency assignments involving safety services made in accordance with Nos. **5.155**, **5.155A** and **5.155B**;
- 1.3 take into account any footnotes applicable to the proposed bands and the implications regarding compatibility;
- 2 that frequency adaptive systems shall automatically limit simultaneous use of frequencies to the minimum necessary for communication requirements;
- 3 that, with a view to avoiding harmful interference, frequency adaptive systems should evaluate the channel occupancy prior to and during operation;
- 4 that assignments for frequency adaptive systems shall be notified to the Bureau in accordance with the provisions of Article **11** and Appendix **4**.