question ITU-R 282/4

Frequency sharing issues related to the introduction
of the broadcasting-satellite service (sound)
in the frequency range 1-3 GHz

(2009)

The ITU Radiocommunication Assembly,

considering

*a)* that frequency allocations to the broadcasting‑satellite service (BSS) (sound) and complementary terrestrial broadcasting exist in bands near 1.5, 2.3 and 2.6 GHz for digital sound broadcasting to portable and vehicular receivers;

*b)* that all three of the allocated bands contain allocations to certain terrestrial services, and that the 2.6 GHz band also contains an allocation to the fixed‑satellite service (space‑to‑Earth) in Regions 2 and 3 and to the mobile‑satellite service (Earth‑to‑space);

*c)* that it is necessary to ensure that the introduction of the BSS (sound) and complementary terrestrial broadcasting proceeds in a flexible and equitable manner;

*d)* that this objective is addressed by Resolution 528 (Rev.WRC‑03), which calls for the convening of a competent conference for the planning of the broadcasting‑satellite service (sound) in the allocated bands, and the development of procedures for the coordinated use of complementary terrestrial broadcasting;

*e)* that Resolution 528 (Rev.WRC‑03) also specifies a coordination procedure to be used for the introduction of digital sound broadcasting‑satellite systems in the interim period prior to the conference, and that the calculation methods and interference criteria to be employed in the application of this procedure be based upon relevant ITU‑R Recommendations;

*f)* that Resolution 528 (Rev.WRC‑03) calls upon the conference cited in *considering* d), above, to review the criteria for sharing with other services,

decides that the following Questions should be studied

1 What are the preferred technical and operational characteristics of the BSS (sound) systems to be protected, including the noise and interference performance requirements and the budgeting of interference?

2 What are the interference protection requirements of the various types of BSS (sound) systems expressed, for example, in terms of the maximum acceptable level of power flux‑density incident from other systems?

3 What constraints on the technical characteristics (e.g. e.i.r.p., pointing angle, pfd) of BSS (sound) systems and on the service they provide (e.g. coverage, availability) might be acceptable in the interest of reducing interference into the systems of other services to acceptable levels?

4 What are the means for coordinating and avoiding mutual harmful interference between BSS (sound) systems, and how do these means compare in effectiveness?

5 What are the means for coordinating BSS (sound) systems with the systems of other services, and what sharing criteria should be used to trigger such coordination?

6 What changes, if any, are needed in the ITU‑R Recommendations that specify the calculation methods and interference criteria to be used in evaluating interference under the interim coordination procedures cited in *considering* e)?

7 What are the technical bases for resolving the issues to be addressed by the conference cited in *considering* d)?

NOTE – See Report ITU‑R BO.2006 and Recommendation ITU‑R BO.1383,

further decides

1that the results of the above studies should be included in appropriate Recommendations and/or Reports;

2that the above studies should be completed by 2025.

Category: S1