

RECOMMENDATION ITU-R M.1044-2*

**Frequency sharing criteria in the amateur and
amateur-satellite services**

(Question ITU-R 48/8)

(1994-1998-2003)

Scope

This Recommendation lists the radiocommunication services with which the amateur and amateur-satellite services may readily share, and those services with which sharing would be difficult. It states that the amateur services operate with relatively weak signals and provides mitigation procedures that facilitate sharing.

The ITU Radiocommunication Assembly,

considering

- a) that the Radio Regulations (RR) define an amateur service and an amateur-satellite service, allocate frequencies to them on an exclusive or shared basis, and provide for the cessation of emissions from amateur satellites in the event of interference;
- b) that the amateur-satellite service shares certain allocated frequency bands with the amateur service and other radiocommunication services;
- c) Resolution 641 (Rev.HFBC-87) of the World Administrative Radio Conference for the Planning of the HF Bands Allocated to the Broadcasting Service (Geneva, 1987) on the use of the frequency band 7 000-7 100 kHz,

recommends

- 1** that the amateur and amateur-satellite services may share, subject to suitable sharing criteria, with the radiolocation service, the fixed service, mobile services where traffic density is low, some meteorological aids and certain satellite services with low power flux-densities;
- 2** that the amateur and amateur-satellite services should not share with safety, distress and operational traffic of the aeronautical or maritime mobile services for safety of life reasons. Any additional sharing with the amateur and amateur-satellite services should not introduce services, systems or stations with high signal densities, such as high density land mobile systems;
- 3** that future sharing studies should consider the needs of the amateur and amateur-satellite services for weak signal reception, in at least a part of each allocated band;
- 4** that for space stations operating in the amateur-satellite service:
 - 4.1** space telecommand be used as the principal means of reducing power or ceasing emissions in the event of interference;

* Radiocommunication Study Group 5 made editorial amendments to this Recommendation in 2008 in accordance with Resolution ITU-R 44.

4.2 that, in implementing the provisions specified in RR No. 25.11 administrations and space telecommand operators should be promptly notified in the event that interference is reported, so that immediate corrective action can be taken;

4.3 in bands shared with services other than the amateur service, suitable transmission techniques, such as bandwidth expansion and energy dispersal modulation techniques be chosen, as appropriate to the sharing situation, as a means of maximizing shared use;

4.4 accordingly, power flux-density limits need not be imposed;

5 that Recommendation ITU-R F.240 – Signal-to-interference protection ratios for various classes of emission in the fixed service below about 30 MHz, may be used for sharing studies involving the amateur services and other services unless more specific technical information is available.
