

RECOMMENDATION ITU-R M.1089-1^{*,**}**Technical considerations for the coordination of mobile-satellite systems relating to the aeronautical mobile satellite (R) service (AMS(R)S) in the bands 1 545 to 1 555 MHz and 1 646.5 to 1 656.5 MHz**

(1994-2002)

The ITU Radiocommunication Assembly,

considering

- a) that, in accordance with Article 43 of the Radio Regulations (RR), the aeronautical mobile-satellite (R) service (AMS(R)S) is reserved for communications relating to safety and regularity of flight;
- b) that there is concern over the availability of adequate spectrum for mobile-satellite services, e.g., AMS(R)S use in certain service areas served by different satellite networks;
- c) that there is concern regarding the availability of adequate power and spectrum for AMS(R)S messages on individual satellites designed to provide mobile-satellite services;
- d) that coordination of mobile-satellite networks is complex, e.g., because radiation patterns for some mobile station antennas do not provide much discrimination towards other mobile-satellite networks;
- e) that the spectrum allocated to the AMS(R)S will be used by multiple AMS(R)S systems;
- f) that the need for coordination between geostationary-satellite networks is determined using the methods set forth in RR Appendix 8 (Rev.WRC-03);
- g) that the Standards and Recommended Practices (SARPs) in the International Civil Aviation Organization (ICAO) Annex 10 define the technical parameters for AMS(R)S;
- h) that AMS(R)S requires special measures to ensure freedom from harmful interference to provide protection for safety and distress communications (see RR No. 4.10);
- j) that the World Radiocommunication Conference (Istanbul, 2000) (WRC-2000) modified RR No. 5.357A and adopted Resolution 222 (WRC-2000) to ensure spectrum availability to AMS(R)S in the bands 1 545 to 1 555 MHz, and 1 646.5 to 1 656.5 MHz in a flexible and efficient manner;
- k) that priority access and immediate availability of spectrum for distress, emergency and safety communications of the AMS(R)S communications is of vital importance for the safety of life,

* The Director, Radiocommunication Bureau, should bring this Recommendation to the attention of the International Civil Aviation Organization (ICAO).

** Radiocommunication Study Group 8 made editorial amendments to this Recommendation in 2004 in accordance with Resolution ITU-R 44.

recommends

1 that the following guidelines be used during the detailed coordination of satellite networks and for frequency assignments in bands used by AMS(R)S to ensure appropriate spectrum availability for AMS(R)S use:

- the satisfying of AMS(R)S requirements by each system should be taken account of in the coordination process. The coordination process should provide the flexibility to accommodate future requirements including peak AMS(R)S traffic within each system;
 - administrations responsible for mobile-satellite system coordination should consider latest available ICAO global and regional plans;
 - operational measures should be taken to implement the latest technical advances in order to maximize spectrum efficiency to the extent that it is operationally, technically, and economically feasible;
 - system providers should explore technical and operational means to share the spectrum efficiently.
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