

RESOLUTION 731 (WRC-2000)

**Consideration by a future competent world radiocommunication conference
of issues dealing with sharing and adjacent-band compatibility between
passive and active services above 71 GHz**

The World Radiocommunication Conference (Istanbul, 2000),

considering

- a) that the changes made to the Table of Frequency Allocations by this Conference in bands above 71 GHz were based on the requirements known at the time of the Conference;
- b) that the passive service spectrum requirements above 71 GHz are based on physical phenomena and therefore are well known, and are reflected in the changes made to the Table of Frequency Allocations by this Conference;
- c) that several bands above 71 GHz are already used by Earth exploration-satellite service (passive) and space research service (passive) because they are unique bands for the measurement of specific atmospheric parameters;
- d) that there is currently only limited knowledge of requirements and implementation plans for the active services that will operate in bands above 71 GHz;
- e) that, in the past, technological developments have led to viable communication systems operating at increasingly higher frequencies, and that this can be expected to continue so as to make communication technology available in the future in the frequency bands above 71 GHz;
- f) that, in the future, alternative spectrum needs for the active and passive services should be accommodated when the new technologies become available;
- g) that, following the revisions to the Table of Frequency Allocations by this Conference, sharing studies may be required for services in some bands above 71 GHz;
- h) that interference criteria for passive sensors have been developed and are given in Recommendation ITU-R SA.1029;
- i) that protection criteria for radio astronomy have been developed and are given in Recommendation ITU-R RA.769;
- j) that several satellite downlink allocations have been made in bands adjacent to those allocated to the radio astronomy service;

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k) that, sharing criteria for active and passive services in bands above 71 GHz have not yet been fully developed within ITU-R;

l) that, in order to ensure protection of passive services above 71 GHz, this Conference avoided making allocations to both active and passive services in some bands such as 100-102 GHz, 148.5-151.5 GHz and 226-231.5 GHz, so as to prevent potential sharing problems,

recognizing

that, to the extent practicable, the burden of sharing among active and passive services should be equitably distributed among the services to which allocations are made,

resolves

that a future competent conference should consider the results of ITU-R studies with a view to revising the Radio Regulations, as appropriate, in order to accommodate the emerging requirements of active services, taking into account the requirements of the passive services, in bands above 71 GHz,

urges administrations

to note the possibility of changes to Article [5](#) to accommodate emerging requirements for active services, as indicated in this Resolution, and to take this into account in the development of national policies and regulations,

invites ITU-R

1 to continue its studies to determine if and under what conditions sharing is possible between active and passive services in the bands above 71 GHz, such as, but not limited to, 100-102 GHz, 116-122.25 GHz, 148.5-151.5 GHz, 174.8-191.8 GHz, 226-231.5 GHz and 235-238 GHz;

2 to study means of avoiding adjacent-band interference from space services (down-links) into radio astronomy bands above 71 GHz;

3 to take into account the principles of burden-sharing to the extent practicable in their studies;

4 to complete the necessary studies when the technical characteristics of the active services in these bands are known;

5 to develop Recommendations specifying sharing criteria for those bands where sharing is feasible,

instructs the Secretary-General

to bring this Resolution to the attention of the international and regional organizations concerned.

