# RESOLUTION 716 (REV.WRC-23)

# Use of the frequency bands 1 980-2 010 MHz and 2 170-2 200 MHz in all three Regions and 2 010-2 025 MHz and 2 160-2 170 MHz in Region 2 by the fixed and mobile-satellite services and associated transition arrangements

The World Radiocommunication Conference (Dubai, 2023),

### considering

- a) that WARC-92 allocated the bands 1 980-2 010 MHz and 2 170-2 200 MHz for the mobile-satellite service (MSS) with a date of entry into force of 1 January 2005, these allocations being co-primary with fixed and mobile service allocations;
- b) that the use of the frequency bands 1 980-2 010 MHz and 2 170-2 200 MHz in all three Regions and 2 010-2 025 MHz and 2 160-2 170 MHz in Region 2 by the MSS, in accordance with the provisions of Nos. **5.389A** and **5.389C** of the Radio Regulations, as adopted by WRC-95 and WRC-97, is subject to a date of entry into force of 1 January 2000, 1 January 2002 (for Region 2) or 1 January 2005:
- c) that these bands are shared with the fixed and mobile<sup>1</sup> services on a primary basis and that they are widely used by the fixed service in many countries;
- d) that the studies made have shown that, while sharing of the MSS with the fixed service in the short to medium term would be generally feasible, in the long term sharing will be complex and difficult in both bands, so that it would be advisable to transfer the fixed service stations operating in the bands in question to other segments of the spectrum;
- e) that for many developing countries, the use of the 2 GHz band offers a substantial advantage for their radiocommunication networks and that it is not attractive to transfer these systems to higher frequency bands because of the economic consequences that this would entail;
- f) that ITU-R has developed a new frequency plan for the fixed service in the 2 GHz band, set out in Recommendation ITU-R F.1098 which will facilitate the introduction of new fixed service systems in band segments that do not overlap with the above-mentioned MSS allocations at 2 GHz;
- g) that sharing between fixed service systems using tropospheric scatter and Earth-to-space links in the MSS in the same frequency band segments is generally not feasible;
- h) that some countries utilize these bands in application of Article 48 of the ITU Constitution,

<sup>&</sup>lt;sup>1</sup> This Resolution does not apply to the mobile service. In this respect, the use of these bands by the MSS is subject to coordination with the mobile service under the provisions of No. **9.11A**, where applicable.

### recognizing

- a) that the bands 1 885-2 025 MHz and 2 110-2 200 MHz have been identified for worldwide use by International Mobile Telecommunications (IMT), the satellite component being limited to the bands 1 980-2 010 MHz and 2 170-2 200 MHz, and that the development of IMT can offer great potential in helping the developing countries develop more rapidly their telecommunication infrastructure:
- b) that WARC-92 resolved to request the Telecommunication Development Bureau, when formulating its immediate plans for assistance to the developing countries, to consider the introduction of specific modifications in the radiocommunication networks of the developing countries and that a future world development conference should examine the needs of developing countries and should assist them with the resources needed to implement the required modifications to their radiocommunication networks.

### noting

that in response to Resolution **716** (WRC-95)\*, <sup>2</sup>, ITU-R developed Recommendation ITU-R F.1335, which provides planning tools necessary to assist those administrations considering replanning of their terrestrial networks to accommodate the MSS in the 2 GHz bands.

### resolves

- 1 to request administrations to notify to the Radiocommunication Bureau the basic characteristics of frequency assignments to existing or planned fixed stations requiring protection, or those typical<sup>3</sup> of existing and planned fixed stations brought into use before 1 January 2000 in the frequency bands 1 980-2 010 MHz and 2 170-2 200 MHz in all three Regions and 2 010-2 025 MHz and 2 160-2 170 MHz in Region 2;
- that administrations proposing to bring an MSS system into service must take account of the fact that, when coordinating their system with administrations having terrestrial services, such administrations may have existing or planned installations covered by Article 48 of the Constitution;
- that in respect of stations of the fixed service taken into account in the application of No. **9.11A**, administrations responsible for MSS networks operating in the bands 1 980-2 010 MHz and 2 170-2 200 MHz in all three Regions and 2 010-2 025 MHz and 2 160-2 170 MHz in Region 2 shall ensure that unacceptable interference is not caused to fixed service stations notified and brought into use before 1 January 2000;

<sup>\*</sup> Note by the Secretariat: This Resolution was revised by WRC-12 and WRC-23.

<sup>&</sup>lt;sup>2</sup> Reference to Resolution **716 (WRC-95)** is provided as background information.

With respect to the notification of frequency assignments to stations in the fixed and mobile services, it was possible to notify the characteristics of typical stations in the fixed service in accordance with No. 11.17 without restriction up until 1 January 2000.

- 4 that to facilitate the introduction and future use of the 2 GHz bands by the MSS:
- 4.1 administrations are urged to ensure that frequency assignments to new fixed service systems, to be brought into operation after 1 January 2000, do not overlap with the frequency bands 1 980-2 010 MHz and 2 170-2 200 MHz in all three Regions and 2 010-2 025 MHz and 2 160-2 170 MHz in Region 2 MSS allocations, for example by using the channel plans of the most recent version of Recommendation ITU-R F.1098;
- 4.2 administrations are urged to take all practicable steps to phase out troposcatter systems operating in the band 1 980-2 010 MHz in all three Regions and 2 010-2 025 MHz in Region 2 by 1 January 2000. New troposcatter systems shall not be brought into operation in these bands;
- 4.3 administrations are encouraged, where practicable, to draw up plans for the gradual transfer of the frequency assignments to their fixed service stations in the bands 1 980-2 010 MHz and 2 170-2 200 MHz in all three Regions and 2 010-2 025 MHz and 2 160-2 170 MHz in Region 2 to non-overlapping bands, giving priority to the transfer of their frequency assignments in the band 1 980-2 010 MHz in all three Regions and 2 010-2 025 MHz in Region 2, considering the technical, operational and economical aspects;
- 5 that administrations responsible for the introduction of mobile-satellite systems should take into account and address the concerns of affected countries, especially developing countries, to minimize the possible economic impact of transition measures in respect to existing systems;
- to invite the Telecommunication Development Bureau to provide assistance to developing countries requesting it for the introduction of specific modifications to their radiocommunication networks that will facilitate their access to the new technologies being developed in the 2 GHz band as well as in all coordination activities;
- that administrations responsible for the introduction of mobile-satellite systems urge their mobile-satellite system operators to participate in the protection of terrestrial fixed services especially in the least developed countries,

### invites the ITU Radiocommunication Sector

to conduct, as a matter of urgency, further studies, in conjunction with the Bureau, to develop and provide to administrations the necessary tools in a timely manner to assess the impact of interference in the detailed coordination of mobile-satellite systems,

# invites the ITU Telecommunication Development Sector

to evaluate, as a matter of urgency, the financial and economic impact on the developing countries of the transfer of fixed services, and to present its results to a future competent world radiocommunication conference and/or world telecommunication development conference.

## **RES716-4**

invites the Director of the Telecommunication Development Bureau

to implement *invites the ITU Telecommunication Development Sector* by encouraging joint activities between the relevant study groups of both ITU-D and ITU-R,

instructs the Director of the Radiocommunication Bureau

to submit a report on the implementation of this Resolution to world radiocommunication conferences.