

## RESOLUTION 212 (REV.WRC-15)

### **Implementation of International Mobile Telecommunications in the frequency bands 1 885-2 025 MHz and 2 110-2 200 MHz**

The World Radiocommunication Conference (Geneva, 2015),

*considering*

- a) that Resolution ITU-R 56 defines the naming for International Mobile Telecommunications (IMT);
- b) that the ITU Radiocommunication Sector (ITU-R), for WRC-97, recommended approximately 230 MHz for use by the terrestrial and satellite components of IMT;
- c) that ITU-R studies forecast that additional spectrum may be required to support the future services of IMT and to accommodate future user requirements and network deployments;
- d) that ITU-R has recognized that space techniques are an integral part of IMT;
- e) that, in No. **5.388**, WARC-92 identified frequency bands to accommodate certain mobile services, now called IMT,

*noting*

- a) that the terrestrial component of IMT has already been deployed or is being considered for deployment in the frequency bands 1 885-1 980 MHz, 2 010-2 025 MHz and 2 110-2 170 MHz;
- b) that both the terrestrial and satellite components of IMT have already been deployed or are being considered for deployment in the frequency bands 1 980-2 010 MHz and 2 170-2 200 MHz;
- c) that the availability of the satellite component of IMT in the frequency bands 1 980-2 010 MHz and 2 170-2 200 MHz simultaneously with the terrestrial component of IMT in the frequency bands identified in No. **5.388** would improve the overall implementation and the attractiveness of IMT,

*noting further*

- a) **that** co-coverage, co-frequency deployment of independent satellite and terrestrial IMT components is not feasible unless techniques, such as the use of an appropriate guardband or other mitigation techniques, are applied to ensure coexistence and compatibility between the terrestrial and satellite components of IMT;
- b) that, when the satellite and terrestrial components of IMT are deployed in the frequency bands 1 980-2 010 MHz and 2 170-2 200 MHz in adjacent geographical areas, technical or operational measures may need to be implemented to avoid harmful interference, and further studies by ITU-R are required in this regard;
- c) that some difficulties have been raised in addressing potential interference between the satellite and terrestrial components of IMT;

d) that Report ITU-R M.2041 addresses sharing and adjacent band compatibility in the 2.5 GHz band between the terrestrial and satellite components of IMT-2000,

*resolves*

that administrations which implement IMT:

- a) should make the necessary frequencies available for system development;
- b) should use those frequencies when IMT is implemented;
- c) should use the relevant international technical characteristics, as identified by ITU-R and ITU-T Recommendations,

*invites ITU-R*

to study possible technical and operational measures to ensure coexistence and compatibility between the terrestrial component of IMT (in the mobile service) and the satellite component of IMT (in the mobile service and the mobile-satellite service) in the frequency bands 1 980-2 010 MHz and 2 170-2 200 MHz where those frequency bands are shared by the mobile service and the mobile-satellite service in different countries, in particular for the deployment of independent satellite and terrestrial components of IMT and to facilitate development of both the satellite and terrestrial components of IMT,

*encourages administrations*

- 1 to give due consideration to the accommodation of other services currently operating in these frequency bands when implementing IMT;
- 2 to participate actively in the ITU-R studies in accordance with *invites ITU-R* above,

*instructs the Director of the Radiocommunication Bureau*

to include in his report, for consideration by WRC-19, the results of the ITU-R studies referred to in *invites ITU-R* above,

*further invites ITU-R*

to continue its studies with a view to developing suitable and acceptable technical characteristics for IMT that will facilitate worldwide use and roaming, and ensure that IMT can also meet the telecommunication needs of the developing countries and rural areas.