

RESOLUTION 232 (WRC-12)

Use of the frequency band 694-790 MHz by the mobile, except aeronautical mobile, service in Region 1 and related studies

The World Radiocommunication Conference (Geneva, 2012),

considering

- a) that IMT systems are intended to provide telecommunication services on a worldwide scale, regardless of location, network or terminal used;
- b) that some administrations are planning to use the band 694-862 MHz, or part of that band, for IMT;
- c) that the frequency band 470-806/862 MHz is allocated to the broadcasting service on a primary basis in all three Regions and used predominantly by this service, and that the GE06 Agreement applies in all Region 1 countries, except Mongolia, and in the Islamic Republic of Iran in Region 3;
- d) that the band 645-862 MHz is allocated on a primary basis to the aeronautical radionavigation service in the countries listed in No. **5.312**;
- e) that cellular mobile systems in the three Regions in the bands below 1 GHz operate using various channelling arrangements;
- f) that where cost considerations warrant the installation of fewer base stations, such as in rural and/or sparsely populated areas, bands below 1 GHz are generally suitable for implementing mobile systems including IMT;
- g) that bands below 1 GHz are important, especially for some developing countries and countries with large areas where economic solutions for low population density areas are necessary,

noting

- a) that, as a result of the transition from analogue to digital terrestrial television broadcasting, some countries are planning to make, or are making, the band 694-862 MHz, or parts of that band, available for applications in the mobile service;
- b) that the transition from analogue to digital television shall end on 17 June 2015 at 0001 hours UTC according to Article 12.6 of the GE06 Agreement;
- c) that the transition from analogue to digital television is expected to result in situations where parts or all of the band 470-806/862 MHz will be used extensively for both analogue and digital terrestrial transmissions, and that the demand for spectrum during the transition period may be even greater than the stand-alone usage of analogue broadcasting systems;
- d) that Recommendation ITU-R M.819 describes the objectives to be met by IMT in order to meet the needs of developing countries, and in order to assist them to “bridge the gap” between their communication capabilities and those of developed countries;
- e) that Recommendation ITU-R M.1645 also describes the coverage objectives of IMT;
- f) that WRC-12 has approved Resolution **233 (WRC-12)** which includes studies to be carried out by ITU-R in time for WRC-15,

recognizing

- a) that there is a need, in many developing countries and countries with large areas of low population density, for the cost-effective implementation of IMT, and that the propagation characteristics of frequency bands below 1 GHz identified in Nos. **5.286AA** and **5.317A** result in larger cells;
- b) that some countries also plan to use the band 470-862 MHz for HDTV and other higher definition modes;
- c) that in Region 1, in accordance with No. **5.296**, a number of countries have deployments of applications ancillary to broadcasting operating on a secondary basis, which provide tools for the daily content production for the broadcast service;
- d) that the GE06 Agreement contains provisions for the terrestrial broadcasting service and other primary terrestrial services, a Plan for digital television, and a list of stations of other primary terrestrial services;
- e) that the time-frame and transition period for the analogue to digital television switchover may not be the same for all countries;
- f) that there is a need for countries to assess the consequences of a new allocation for the mobile service below 790 MHz on the equitable access to spectrum in the GE06 Plan,

resolves

- 1 to allocate the frequency band 694-790 MHz in Region 1 to the mobile, except aeronautical mobile, service on a co-primary basis with other services to which this band is allocated on a primary basis and to identify it for IMT;
- 2 that the allocation in *resolves* 1 is effective immediately after WRC-15;
- 3 that use of the allocation in *resolves* 1 is subject to agreement obtained under No. **9.21** with respect to the aeronautical radionavigation service in countries listed in No. **5.312**;
- 4 that the lower edge of the allocation is subject to refinement at WRC-15, taking into account the ITU-R studies referred to in *invites ITU-R* below and the needs of countries in Region 1, in particular developing countries;
- 5 that WRC-15 will specify the technical and regulatory conditions applicable to the mobile service allocation referred to in *resolves* 1, taking into account the ITU-R studies referred to in *invites ITU-R* below,

invites ITU-R

- 1 to study the spectrum requirement for the mobile service and for the broadcasting service in this frequency band, in order to determine as early as possible the options for the lower edge referred to in *resolves* 4;
- 2 to study the channelling arrangements for the mobile service, adapted to the frequency band below 790 MHz, taking into account:
 - the existing arrangements in Region 1 in the bands between 790 and 862 MHz and defined in the last version of Recommendation ITU-R M.1036, in order to ensure coexistence with the networks operated in the new allocation and the operational networks in the band 790-862 MHz;
 - the desire for harmonization with arrangements across all Regions;
 - the compatibility with other primary services to which the band is allocated, including in adjacent bands;

- 3 to study coexistence between the different channelling arrangements which have been implemented in Region 1 above 790 MHz, as well as the possibility of further harmonization;
- 4 to study the compatibility between the mobile service and other services currently allocated in the frequency band 694-790 MHz and develop ITU-R Recommendations or Reports;
- 5 to study solutions for accommodating applications ancillary to broadcasting requirements;
- 6 to report, in time for WRC-15, the results of these studies,

invites the Director of the Radiocommunication Bureau

to work, in cooperation with the Director of the Telecommunication Development Bureau, to bring assistance to developing countries wishing to implement the new mobile allocation in order to help these administrations to determine the modifications of the Geneva-06 Plan necessary to keep sufficient capacity for broadcasting,

invites administrations

to participate in these studies and to indicate as quickly as possible, in the process of preparation for WRC-15, the spectrum requirement for the mobile service, the broadcasting service and the other services, in order to determine the options for the frequency band to be allocated to the mobile service, as well as the related channelling arrangements.