

**PCC.II / REC. 31 (XVIII-11)<sup>1</sup>**

**HARMONIZED USE OF THE 450-470 MHZ BAND FOR FIXED AND MOBILE BROADBAND WIRELESS SERVICES PARTICULARLY IN UNDERSERVED AREAS**

The XVIII Meeting of Permanent Consultative Committee II: Radiocommunications including Broadcasting (PCC.II),

**CONSIDERING:**

- a) That Recommendation PCC.II/REC.10 (V-05) “Use of the 410-430 MHz and 450-470 bands for fixed and mobile services for digital communication particularly in low population density areas” notes consideration of the use of these bands taking into account the regulatory process of each Administration;
- b) That the World Radiocommunication Conference 2007 (WRC-07) identified the 450-470 MHz band for use by administrations wishing to implement International Mobile Telecommunications (IMT);
- c) That it is necessary to promote and improve the delivery of wireless broadband services in the region;
- d) That spectrum is a limited resource, managed by each Administration;
- e) That digital wireless technologies enable more efficient use of the spectrum, which encourages the development of applications that help reduce the digital divide and promote social inclusion;
- f) That the significant advantages of propagation provided by the 450-470 MHz band enable the provision of advanced wireless services covering large geographical areas with a smaller number of base stations;
- g) That the characteristics of the spectrum in the bands under consideration allow for an affordable supply of services in urban and underserved rural areas, promoting universal access to broadband services;
- h) That some countries in the region have deployed IMT systems using the 450-470 MHz band,

**RECOGNIZING:**

- a) That some Administrations are developing national broadband plans and have decided to promote the use of the 450-470 MHz band for these services;
- b) That broadband wireless systems enable applications to provide telemedicine, tele-education, remote access to businesses, public services, and public safety applications to assist in disaster relief among others;
- c) That given the small relative size of the 450-470 MHz band as compared to other bands identified for IMT, better use of the band would be achieved by assigning it to a single network within a given area;

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<sup>1</sup> CCP.II-RADIO/doc. 2854/11 rev.2

- d) That the Draft Revision of Recommendation ITU-R M.1036-3 has identified frequency arrangements D1 to D10 for the band in question;
- e) That some countries in the region with IMT systems deployed in this band are using D1 and/or D4 frequency arrangements;
- f) That the D10 frequency arrangement defines the range 451-458 MHz for transmission from the mobile terminal and the range 461-468 MHz for transmission from the base station;
- g) That the frequency arrangement for the 450-470 MHz band mentioned in the above *recognizing* establishes two 7 MHz blocks, extending the bandwidth available for advanced wireless telecommunications as compared to frequency arrangements D1 and D4;
- h) That the assignment of all of the 2 paired blocks of 7 MHz to a single network per geographical area allows the aggregation of multiple carriers, providing the most advanced capabilities of IMT in this band, achieving greater efficiency in spectrum use;
- i) That, to take advantage of the infrastructure implemented in the allocated network, the model of Mobile Virtual Network Operators could be used, ensuring more efficient use of radio spectrum;
- j) That the regulatory measures that require infrastructure sharing and resale of services, including mobile virtual network operators, can boost competition;
- k) That encouraging network deployment in underserved areas in the region can produce economies of scale to benefit end users;
- l) That in footnote 5.286AA of the Radio Regulations, “the band 450-470 MHz is identified for use by administrations wishing to implement International Mobile Telecommunications (IMT). See Resolution **224 (Rev.WRC-07)**. This identification does not preclude the use of this band by any application of the services to which it is allocated and does not establish priority in the Radio Regulations.” ,

**RECOMMENDS:**

That CITEL Administrations that seek to use the 450-470 MHz band for mobile broadband wireless services, achieve harmonized use of the band and contribute to the development of economies of scale taking into account the national regulatory procedures of each administration, considering the following:

1. In preparing National Broadband Plans, Administrations include the 450-470 MHz band as a band to provide universal access to broadband, particularly in underserved areas;
2. For the new allocations preferably adopt the frequency arrangement D10 (451-458/461-468 MHz);
3. That those Administrations that are unable to adopt the D10 frequency arrangement preferably allocate two paired blocks of 7 MHz in mentioned band, with 10 MHz duplex separation, this being the lowest frequency block for transmission from the mobile terminal and the high frequency block for transmission from the base station;

4. That to achieve effective and efficient use of the above-mentioned frequency band in the new allocations, the Administrations promote the adoption of rules and procedures that contemplate, to the extent possible, the following:

- (i) Allocation of all of the paired blocks of 7 MHz for use in a single network per geographical area;
- (ii) Allocation of radio spectrum with quality of service requirements and coverage obligations in rural and underserved urban areas; and
- (iii) The implementation of financing mechanisms, coverage obligations or other mechanisms that would make it possible to roll out IMT networks in rural and low population density areas and that, if the promotion of competition is needed in these networks, consider regulatory models such as Mobile Virtual Network Operators or other similar models;

5. In the case of border areas, conduct frequency coordination agreements.