PCC.III/DEC. 49 (XIX-01)[1]

CONSIDERATION OF SPECTRUM ARRANGEMENTS FOR IMT-2000

The XIX Meeting of Permanent Consultative Committee III: Radiocommunications,

DECIDES

1. To request from the Member States views for the XX Meeting of PCC.III on the annex Draft Recommendation PCC.III/REC.xx (XIX-01) "Spectrum Arrangements for IMT-2000 in the Bands 806 to 960 MHz and 1710 to 2200 MHz".

2. To instruct the Executive Secretary to distribute this decision to the Member States.

[1] Document PCC.III/doc.2124/01

ANNEX PCC.III/DEC. 49 (XIX-01)

Draft Recommendation
PCC.III/REC.XX (XIX-01)
Spectrum Arrangements for IMT-2000 in the Bands 806 to 960 MHz and 1710 to 2200 MHz

The XIX Meeting of the Permanent Consultative Committee III: Radiocommunications,

CONSIDERING:

a) That the ITU Radio Regulations identify the bands 806-960 MHz, 1 710-1 885 MHz, 1 885-2 025 MHz, 2 110-2 200 MHz and 2 500-2 690 MHz as intended for use on a worldwide basis by administrations wishing to implement IMT-2000;

b) That CITEL Recommendation PCC.III/Rec.12 (III-95) "Designation of Spectrum for Personal Communications Systems in the Americas in the 2GHz Band" recommends that "PCS systems consider strategies for the evolution towards 3G";

c) That IMT-2000 represents an opportunity for a major improvement in mobile or portable communication services for individuals or businesses which would be integrated into a variety of competing networks;

d) That spectrum arrangements should be defined which are technology neutral i.e. any of the proposed IMT-2000 technologies can be used in these bands;

e) That the bands identified for IMT-2000 should be considered on a global basis as a set, to achieve a comprehensive, global solution that will ensure that there is an approach that meets all requirements and that a significant level of interoperability is achieved;

f) That Administrations should harmonize frequency arrangements to the greatest extent possible to facilitate worldwide compatibility, global roaming and create economies of scale;

g) That evolution from pre-IMT-2000 systems to IMT-2000 is enabled by providing compatible frequency arrangements thus leading to flexible regulatory approach;

h) That indication of mobile transmit or base transmit operation does not preclude the use of these frequency bands for TDD applications, and

i) That the IMT-2000 identified bands are shared on a co-primary basis with other Services, which should be protected accordingly,

RECOMMENDS:

1. That CITEL Administrations to the extent possible should identify spectrum for IMT-2000 mobile systems based on the following five principles:

a) Maximize harmonization of the IMT-2000 identified bands with existing 2G and 3G band plan pairings for implementation of IMT-2000 services;
b) Maximize the use of the entire 1710-1850 MHz band ;
c) Maximize harmonization with the global 2110-2170 MHz Base Transmit Band;
d) Facilitate global roaming;
e) Minimize equipment costs.

2. That for the purpose of economies of scale, and roaming, it is highly desirable that global bands and pairings are harmonized. For Administrations wishing to implement only part of a band, the channel pairing should be consistent with the duplex frequency separations of the full band plan.

3. That CITEL Administrations to the extent possible should select from the following Spectrum band pairing options.

Note: Three Administrations have presented considerations and information concerning the advantages and disadvantages of the recommended spectrum band pairing options (PCC.III/Inf.2077/01) and this matter should be further studied.

Recommended Spectrum Band Pairing Options

Figure 1 shows the recommended spectrum band pairing options.

1) Mobile transmit band 1 920-1 980 MHz, paired with the global base transmit band 2 110 2 170 MHz, with a 190 MHz duplex separation - some countries may wish to implement part of the band.

2) Mobile transmit band 1 710-1 785 MHz, paired with a base transmit band 1 805-1 880 MHz, consistent with a duplex separation of 95 MHz (aligned with GSM1800 bandplan). For countries having implemented option 3, the upper edge for the mobile transmit band is 1 755 MHz and for the base transmit band is 1 850 MHz.

3) Mobile transmit band 1 850-1 910 MHz, paired with a base transmit band 1 930-1 990 MHz, consistent with a duplex separation of 80 MHz (aligned with PCS1900 bandplan).

4) Mobile transmit band 1 755-1 805 MHz[2], paired with the global base transmit band 2 110-2 160 MHz, with a 355 MHz duplex separation.

5) Mobile transmit band 1 710-1 770 MHz, paired with the global base transmit band 2 110-2 170 MHz, consistent with a duplex separation of 400 MHz.

6) Mobile transmit band starting at 824 MHz paired with a base transmit band starting at 869 MHz, consistent with a duplex separation of 45 MHz.

3

[2] The precise band edges of 1 755 – 1 805 MHz are under discussion in some Administrations.

[3] The upper band limits in some countries are 1 755 and 1 850 MHz.

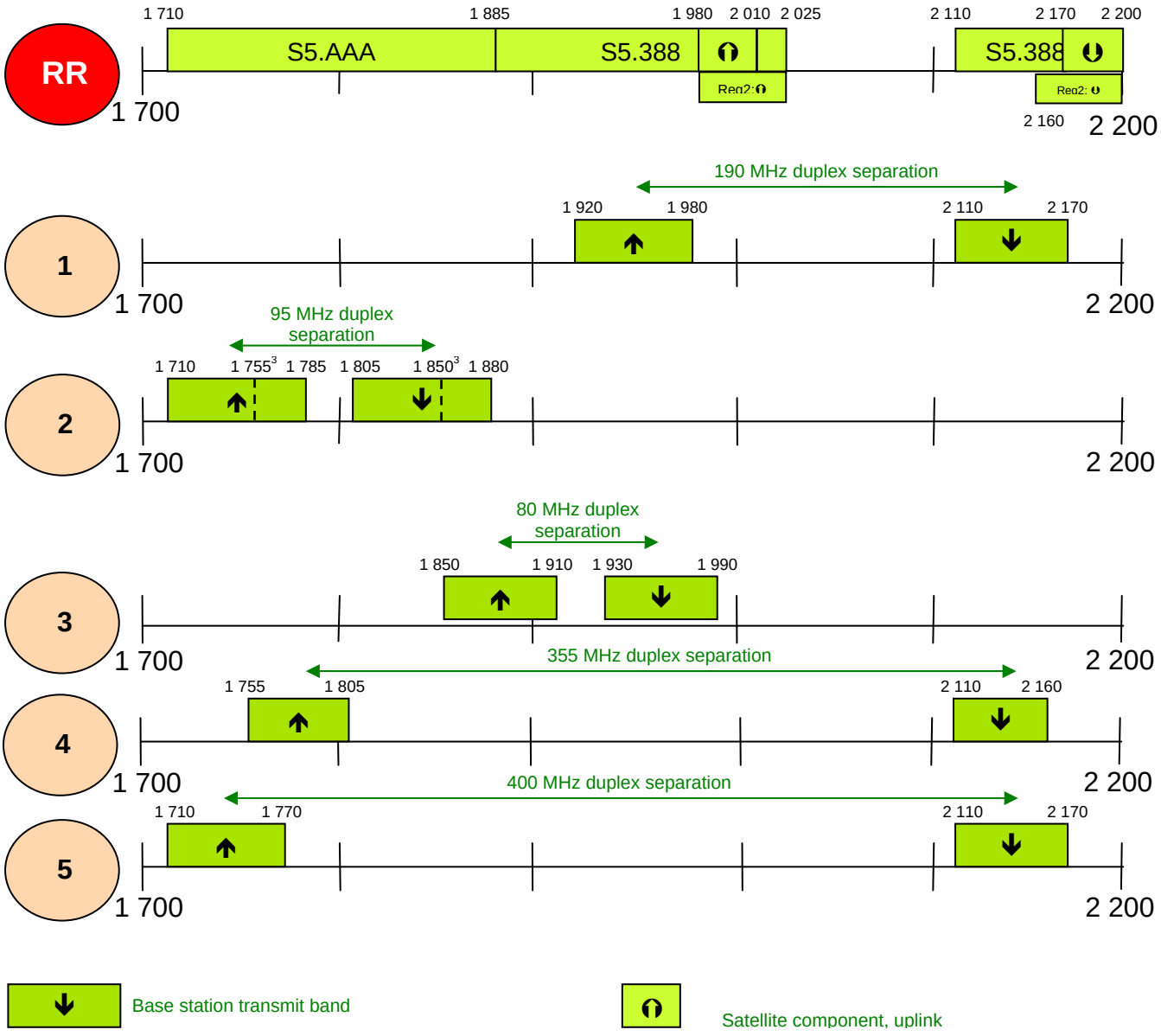

Figure 1: Recommended Band Pairing Options
1710-2200 MHz Band

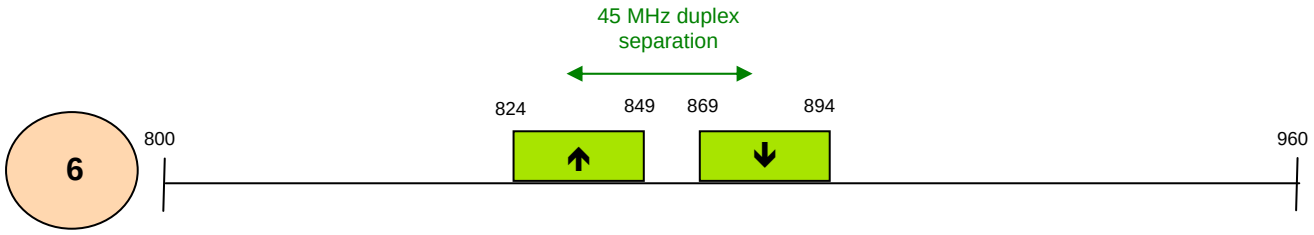

Figure 2: Recommended Band Pairing Options
806-960 MHz Band