

PCC.III/RES. 72 (XI-98)¹

**COMMON INTER-AMERICAN PRINCIPLES SUPPORTING
EVOLUTION TO IMT-2000**

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

WHEREAS:

- a) The Member States of CITEI, participated in the 1997 World Radiocommunication Conference and submitted common proposals for the work of the conference;
- b) The Member States of CITEI participated in the World Telecommunications Development Conference 1998 (WTDC-98) and submitted common proposals for the work of the WTDC-98;
- c) The Regional Telecommunications Organizations, such as CITEI, are instrumental in carrying out the strategies and plans of the Development Sector of ITU and can facilitate coordination between the Member States of CITEI and the ITU-R and ITU-T.

CONSIDERING:

- a) That Member States of CITEI seek to harmonize their use of standards and spectrum, in accordance with the Recommendations of the ITU; and
- b) That the ITU is seeking to meet the needs of developing countries in their development of IMT-2000 and would benefit from having the views of CITEI Member States.

FURTHER CONSIDERING:

- a) That Footnote S5.388 of the ITU Radio Regulations indicates that *“the bands 1 885 – 2 025 MHz and 2 110 – 2 200 MHz are intended for use, on a worldwide basis, by administrations wishing to implement International Mobile Telecommunications – 2000 (IMT-2000). Such use does not preclude the use of these bands by other services to which these bands are allocated. The bands should be made available for IMT-2000 in accordance with Resolution 212 (Rev.WRC-97)”*;
- b) That PCC.III/REC.11(III 95) and PCC.III/REC.12 (III 95) recommend assigning 1850 – 1990 MHz for implementation of PCS, and that CITEI Member Administrations, in the introduction of PCS systems, consider strategies for the evolution towards IMT-2000;
- c) That some CITEI countries have allocated, or are planning to allocate, spectrum for PCS in the 2 GHz band (1850-1990 MHz), taking into account PCC.III/REC.11 (III-95) and PCC.III/REC.12 (III-95);

¹ Reference: PCC.III/doc.1138/98 rev.1.

- d) That there is an interest in a number of CITEC countries in rapidly deploying PCS;
- e) That some administrations in the Region intend to allow PCS operators to evolve or migrate to IMT-2000 within their current PCS allocation;
- f) That ITU-R Handbook on Land Mobile (including Wireless Access) – Volume 2, provides an excellent overview of principles and approaches to be considered in the evolution of existing and emerging systems, as well as in the development of IMT-2000 Recommendations that will allow an evolutionary option;
- g) That, according to this ITU handbook:
 - IMT-2000 Recommendations should enable the provision of cost-effective, efficient inter-working with pre-IMT-2000 mobile systems and fixed systems;
 - Provisions should be made for the development of protocols and interfaces to facilitate the support of terminal roaming between pre-IMT-2000 and IMT-2000 systems;
 - The IMT-2000 radio interfaces should, as far as possible, enable elements of pre-IMT-2000 infrastructure (e.g. cell sites, transmission capabilities, switches) to be re-used;
- h) That this ITU handbook is intended for both operators of existing systems and developers of Recommendations and Standards for IMT-2000;
- i) That ITU-R Recommendation M 1308 provides further guidance to the designers of pre-IMT-2000 systems that plan to evolve their systems towards IMT-2000;
- j) That regulatory authorities in the Americas could benefit from considering the principles and approaches established in this handbook in their planning for the introduction of IMT-2000 in their countries.

RECOGNIZING:

- a) That ITU-R Task Group 8/1 will complete its evaluation of Radio Transmission Technology (RTT) proposals that may satisfy the objectives established for IMT-2000 services;
- b) That some RTT proposals being submitted to the ITU-R Task Group 8/1 will provide for backward compatibility and interoperability of IMT-2000 networks with existing cellular and PCS (pre-IMT-2000) networks in the Americas;
- c) That the ITU established the concept of a “*Family of Systems*” to facilitate interoperability among networks, allowing for multiple IMT-2000 systems to coexist and inter-work;
- d) That the ITU-R has not as yet determined whether one or more radio transmission technologies will be included within IMT-2000;

- e) That the “*Family of Systems*” approach that was recently adopted in the ITU-T Study Group 11 is still being developed in the context of a future ITU Recommendation (ref. Information paper on ITU-T Q.1710).

FURTHER RECOGNIZING:

- a) The CITEL Assembly adopted resolution CITEL/RES.25 (II-98) calling on PCC.I and PCC.III to continue their work to enable roaming on mobile telecommunications systems in the Americas;
- b) That handset technology is likely to have evolved substantially by around 2000-2005 and multi-mode handsets may be common and could facilitate terminal roaming among pre-IMT-2000 and IMT-2000 networks;
- c) That there is likely to be demand for:
 - (i) certain operators to continue to support pre-IMT-2000 systems as well as providing IMT-2000 (there will therefore be a need to achieve a “best” cost base by exploiting both pre-IMT-2000 and IMT-2000 systems in terms of coverage, capacity and features);
 - (ii) terminal roaming between pre-IMT-2000 and IMT-2000 systems.

RECALLING:

- a) That PCC.III/RES.39 (V-96) recognized, “that the participation of CITEL in the IMT-2000 evaluation will greatly enhance the ability of its Permanent Consultative Committee III to meet its mandate ‘to promote the application of compatible technologies that have been standardized at the global level by the ITU’”;
- b) That PCC.III/RES.39 (V-96) resolved:
 - (i) That CITEL PCC.III review and provide input to the TIA and Committee T1 on the results of the TIA and Committee T1 evaluation;
 - (ii) That CITEL members consider the endorsement in the ITU of IMT-2000 radio transmission technologies developed within Region 2.

TAKING INTO ACCOUNT

- a) That operators expect that suppliers of second generation systems will ensure that those implemented networks will have the possibility to evolve to meet the specifications of IMT-2000;
- b) That operators expect that third generation systems will take full advantage of new technologies that will allow optimal use of spectrum and superior performance.

RESOLVES:

1. To encourage CITEI Member States to review the submission of RTT proposals for IMT-2000 and consider participating in the evaluation process for radio interface technologies in the ITU.
2. To request the CITEI Member States to consider the Common Principles in the Annex to this Resolution in their participation in the ITU process for IMT-2000.
3. To invite the Standards Organizations listed in the Annex II to this Resolution that are collaborating with the ITU on the development of standards for IMT-2000 take into consideration the Common Principles presented in the Annex I in their standardization activities.
4. To urge the CITEI Members to participate in the development of IMT-2000 Recommendations in the ITU and support these Common Inter-American Principles (IAP).

INSTRUCTS THE EXECUTIVE SECRETARIAT:

1. To expeditiously re-distribute this Resolution to the CITEI Administrations pointing out the importance of their support for the above mentioned principles, and urges the Administrations to support the principles contained in this Resolution in future meetings of ITU-R Task Group 8/1;
2. To send this Resolution to the Standards Organizations listed in the Annex II of this document inviting them to take into consideration the Common Principles presented in the Annex I in their standardization activities.

ANNEX I

COMMON INTER-AMERICAN PRINCIPLES (IAP) SUPPORTING EVOLUTION TO IMT-2000

To facilitate the consensus building process in the ITU, the following are principles supported by ITU Member States from the Americas Region, that should be taken into account as input to the ITU-R Task Group 8/1 for developing ITU Recommendations for IMT-2000:

1. That ITU should develop IMT-2000 recommendations in such way that they will include consideration of evolution or migration paths for pre IMT-2000 systems so that negative impacts on existing customers' functionality and service providers' investment are mitigated.
2. To the extent possible, IMT-2000 technology and standards should be developed in a manner that is frequency-band independent;
3. The ITU should give consideration to radio transmission technologies that facilitate evolution from pre-IMT-2000 mobile communications systems operating in the Americas and around the globe. Critical IMT-2000 system characteristics such as security, ease of cell planning, services provided and performance must also be factors in consideration;
4. IMT-2000 Recommendations and Standards should include requirements for interfaces and protocols to facilitate terminal roaming and service delivery between pre-IMT-2000 mobile (including cellular and PCS) communications and future IMT-2000 networks that may operate in the Americas and around the globe.
5. The ITU should encourage harmonization and consolidation of RTT proposals to the fullest extent possible;
6. The IMT-2000 radio interface(s) should, as far as possible, enable elements of pre-IMT-2000 infrastructure to be re-used;
7. The potential benefits of software-defined radio technologies are encouraging and should be thoroughly examined as the IMT-2000 Recommendations are developed.

ANNEX II

STANDARDS ORGANIZATION

ETSI	(Europe)
MII	(China)
ARIB	(Japan)
TTC	(Japan)
TTA	(Korea)
Committee T1	(US)
TIA	(North America)
TSAAC	(Canada)
CRC – BTN	(Australia)
RSMG	(New Zealand)
ITU Malaysia	(Malaysia)

