

**III MEETING OF THE PERMANENT  
CONSULTATIVE COMMITTEE I:  
PUBLIC TELECOMMUNICATION SERVICES  
September 5-8, 1995  
Washington, D.C. USA.**

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**FINAL REPORT**

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**REPORT OF THE III MEETING OF THE  
PERMANENT CONSULTATIVE COMMITTEE I (PCC.I):  
PUBLIC TELECOMMUNICATION SERVICES**

The Third Meeting of the Permanent Consultative Committee I (PCC.I) was held in Washington, D.C., September 5-8, 1995, at the Headquarters of the Organization of American States (OAS).

**I. AGENDA**

1. Approval of the Agenda.
2. Integration of the Working Groups of the Meeting.
3. Considerations on unfinished business from the Second Meeting of PCC.I.
4. Considerations on the use of funds provided by the Associate Members.
5. Conclusions, Resolutions and Recommendations derived from Meetings of the Working Groups and Ad Hoc Working Groups. As well as the Report and Assessment of the Development of Activities of the:
  - a. Working Group on Standards Coordination.
  - b. Working Group on Human Resources Development.
  - c. Working Group on Basic and Universal Services.
  - d. Working Group on Network and New Services Modernization.
  - e. Ad Hoc Working Group on Legal Matters.
  - f. Ad Hoc Working Group to Study Alternative Calling Procedures
  - g. Ad Hoc Working Group on Certification Processes.
  - h. Ad Hoc Working Group on Value Added Services.
6. Agenda, Venue and Date of the Fourth Meeting of the PCC.I.
7. Other matters.
8. Approval of the Summary Meetings of the Working Sessions.

**II. AUTHORITIES OF THE MEETING**

Chairperson of the Meeting: Ms. Rosa Maritza Salinas  
Executive Secretary of CITEL: Mr. Roberto Blois  
Chairperson of the of the Final  
Report Drafting Group Mr. Jesus Castellanos

**III. RESOLUTIONS**

**PCC.I/RES.13(III-95)**

**WORK PLAN OF  
THE AD HOC WORKING GROUP ON CERTIFICATION PROCESSES  
WORK PERIOD 1995 - 1998**

The Third Meeting of the Permanent Consultative Committee I: Public Telecommunications Services,

**NOTING:**

That the 34 Heads of Government at the Miami Summit of the Americas agreed to a Plan of Action which included a mandate for CITEL to "promote greater consistency of certification processes of telecommunications equipment," as noted in COM/CITEL Res.8-II/94;

That COM/CITEL Res. 8 (II-94) responded to the Plan of Action by adopting COM/CITEL Res.8(II-94);

That PCC Res. 95/95 established an Ad-Hoc Working Group on Certification Processes (WGCP) in February 1995;

#### **CONSIDERING:**

That PCC Res. 95/95 mandated that the WGCP present a full work plan at the next PCC.I meeting; and

The discussions carried out in the meeting of the WGCP during the Third Meeting of PCC.I,

#### **RESOLVES:**

1. To adopt the attached work plan as the full Work Plan for the Period 1995-1998 for the WGCP;
2. That revisions to the attached Work Plan can be proposed to PCC.I by the WGCP.

### **AD HOC WORKING GROUP ON CERTIFICATION PROCESSES WORK PLAN PERIOD 1995-1998**

#### **INTRODUCTION**

The Chairman of the Ad Hoc Working Group on Certification Processes (WGCP) has drawn up the work plan for the period 1995-1998 in compliance with the mandate given to this working group at the second meeting of the Permanent Consultative Committee I.

The implementation of this plan requires that priorities be kept under constant reevaluation to keep up with new opportunities and changing circumstance. Accordingly, the plan will be subjected to periodic review by the WGCP.

#### **OBJECTIVE**

Based on the mandate contained in Resolution PCC. Res. 8 (II-95), that created the WGCP, the following objective has been defined:

Assume prime responsibility to fulfill the mandate it was given to CITELE in the Miami Summit of the Americas to "examine ways of promoting greater consistency of certification processes for telecommunications equipment."

- \*Coordinate CITELE activities on certification issues with public or private sector regional initiatives and entities and which are addressing this subject."
- \*Prepare summary documents based on information gathered on principle entities and relevant administrative processes in CITELE member states and in bilateral or multilateral forum in which CITELE members participate.
- \*Develop resolutions containing recommendations on how CITELE should proceed in order to promote greater consistency of certification processes for telecommunications equipment among its members.

#### **ACTIVITIES**

1. Gather information on certification processes for telecommunications equipment through questionnaires and other means in order to:

- 1.1 Identify the principal entities in each country responsible with administration of the processes related to certification;

1.2 Obtain, when possible, copies of the relevant administrative processes in place in each country;

1.3 Obtain information on certification process-related activities being carried out in forums in which member countries participate, such as the ITU, ISO, IEC, APEC, OECD, AHCIET, CCT, COMTELCA, ASETA, CANTO, Mercosur, GATT/WTO;

2. Prepare documentation:

2.1A summary document on the certification processes in Member Countries, including: certification, process-related activities being carried out in fora which members participate, some of which are noted in this resolution;

2.2A document that provides an overview of different types of certification processes and how they relate to different types of telecommunications equipment; and

2.3 Other documents that may be useful to determine how PCC.I should proceed in order to "promote greater consistency of certification processes of telecommunications equipment," as noted in document COM/CITEL 55/94 and in Resolution COM/CITEL Res.8(II-94).

3. Liaise with other PCCs to avoid duplication of efforts, optimize use of resources, maximize results, and to stimulate the participation of all CITELE members in the WGCP. The WGCP will take into consideration liaison initiatives from other PCCs, such as those coming from PCC. III.

4. Make recommendations to PCC.I, in coordination with all PCCs, on how CITELE should proceed in response to the order to "promote greater consistency of certification processes of telecommunications equipment," as noted in document COM/CITEL.55/94 and in Resolution COM/CITEL Res. 8 (II-94).

## **ORGANIZATION AND STRATEGIES FOR CARRYING OUT ACTIVITIES**

1. The WGCP Chair, with input from the WGCP, will designate editing groups to assist with WGCP work;

2. The WGCP will organize meetings, interim meetings and seminars to carry out its work plan and to help identify topics of interest;

3. The Working Group will gather information and prepare documents and resolutions to be considered by the WGCP;

4. The WGCP shall endeavor to minimize costs and maximize the effectiveness of its activities by operating mostly through correspondence, including the use of telephone conferences, facsimile, and electronic document handling;

## **WGCP MEETING SCHEDULE 1995-1998**

The WGCP meeting schedule will be based on the following:

1. The WGCP will meet at least once a year;

2. In 1996 the WGCP will meet: (a) During the PCC.I working group meetings that will be held in February 1996, (b) during the regularly scheduled 1996 PCC.I meeting, and (c) subject to availability of resources, an additional WGCP meeting may be scheduled in 1996 between the PCC.I working group meeting and the PCC.I meeting. The Chairman will inform the Chairman of PCC.I whether this additional meeting is needed;

3. More detailed meeting schedules for 1997 and 1998 will be presented at the 1996 PCC.I meeting;
4. WGCP meetings should be held for 2 days;
5. Scheduling of WGCP meetings should take into account the scheduling of meetings of the Working Group on Standards Coordination (WGSC) since many of the participants in the WGCP also participate in the WGSC.

**PCC.I/RES.14(III-95)**

**CITEL YELLOW BOOK ON CERTIFICATION PROCESSES**

The Third Meeting of the Permanent Consultative Committee I: Public Telecommunications Services,

**NOTING:**

That PCC.I Res.8(II/95) established an Ad Hoc Working Group on Certification Processes (WGCP);

That the interim Work Plan in Res.8(II/95) and the full Work Plan of the WGCP called on the WGCP to, among other things, gather information through questionnaires and prepare documents for PCC.I in order to:

1. Obtain information on the principal entities in each country responsible with administration of the processes related to certification;
2. Develop a summary document on certification processes in member countries; and
3. Other documents that may be useful to determine how PCC.I should proceed in order to "promote greater consistency of certification processes of telecommunications equipment,"

**RESOLVES:**

1. That a CITEL Yellow Book On Certification Processes in the Americas (CITEL Yellow Book) be developed by the WGCP;

2. That the CITEL Yellow Book be a summary document with the following elements:

a. Directory of certification authorities in the Americas. Appendix A contains a questionnaire to obtain some of this information.

b. Glossary of certification processes terms. Appendix B contains an initial list of these terms and more detailed description of the glossary. Each CITEL member is encouraged to identify and provide brief definitions of terms that are used in their countries.

c. Country Factsheets on certification processes for telecommunications equipment. Factsheet will only be developed for countries that indicate interest in doing so to the Chairman of the WGCP.

d. Information on bilateral or regional agreements or initiatives dealing with or affecting conformity assessment or certification of telecommunications equipment.

2.5 Other sections deemed appropriate by the WGCP .

3. In order to facilitate the development of the CITEL Yellow Book, the CITEL Executive Secretariat will send a letter with this resolution and the attached appendices to all CITEL members. In the letter the CITEL Executive Secretariat should request:

- a. That CITEL members respond to the attached questionnaire in Appendix A and endeavor to send their responses to the Chair of the WGCP by December 31, 1995. When providing responses to the questionnaire, members are encouraged to provide any documents on certification processes in their countries that they deem may be useful for the development of the CITEL Yellow Book. Members can provide attachments to the questionnaire if the questionnaire does not provide enough space for their responses.
- b. That CITEL members identify which terms listed in the attached glossary of certification processes terms in Appendix B are used in their countries, and endeavor to provide written definitions of these terms as they define them to the Chair of the WGCP by December 31, 1995.
- c. That CITEL members contact the Chair of the WGCP regarding any questions they may have about the questionnaire and glossary.

4. The WGCP should endeavor to use electronic document handling resources to carry out the work of the developing the CITEL Yellow Book.

5. The Chairman of the WGCP will report on the progress made in developing the CITEL Yellow Book at the next PCC.I meeting. The WGCP will endeavor to present a draft of the CITEL Yellow Book by the next PCC.I meeting.

## **APPENDIX A**

### **QUESTIONNAIRE ON CERTIFICATION AUTHORITIES AND PROCESSES**

#### GENERAL INFORMATION

1. Person or entity responding to this questionnaire:

Name:  
Title:  
Agency/Company  
Address:  
Telephone number(s):  
Fax number:  
E-mail:

2. Country:

3. Contact person for CITEL work on certification processes:

Name:  
Title:  
Address:  
Telephone number(s):  
Fax number:  
E-mail:



4. Identify lead governmental agency(s) charged with implementing or overseeing certification processes:

Name of Agency:

Contact person:

Address:

Phone(s) number:

Fax number:

## CONFORMITY ASSESSMENT

5. Does your country, agency or company require telecommunications equipment to be homologated, certified, registered or authorized in order to be imported, used or connected to the public telecommunications network?  yes,  no

6. If answer to 5 was yes, answer the following:

6.1. Identify the terms used by your country, agency or company for the certification requirements imposed on telecommunications equipment:

Homologation:  yes,  no

Certification:  yes,  no

Registration:  yes,  no

Authorization:  yes,  no

Other: \_\_\_\_\_ (specify)

6.2. Specify type of equipment that is covered by each type of certification requirement (homologation, certification, registration, authorization, etc).

For example: All terminal and switching equipment attached to the network needs to be homologated and certified. Equipment that is not attached to the public network only needs to be certified. Radio equipment only needs to be authorized.

Description:

6.3. Identify lead governmental agency(s) or other non-governmental bodies charged with implementing these certification requirements

Name of Agency:

Contact person:

Address:

Telephone number(s):

Fax number:

6.4. Are the certification, homologation, authorization, registration, or other certification-related processes imposed on radiocommunications equipment different than that imposed on other telecommunications equipment?

yes,  no

6.5. Are there publicly-available documents detailing certification-related process imposed in your country (if possible, cite or provide copies)?

yes, no

6.5. Identify and cite the law, regulation or policy dealing with certification-related processes in your country (if possible, provide copy):

### TESTING

7. Must tests be conducted on telecommunications equipment in order to demonstrate compliance with the relevant standards or requirements (whether they are for homologation, certification, registration or authorization requirements)? yes, no

8. If a test report is required, does the lead agency accept test reports from any laboratory or facility? yes, no

9. If a test report is required, does the lead agency accept test reports **only** from accredited laboratories or facilities? yes, no

10. If a test report is required, can the lead agency accept test reports from foreign laboratories or facilities (regardless of whether or not they are accredited)? yes, no

11. Are test reports accepted from third-party or private sector laboratories? yes, no

12. Must a manufacturer of equipment, in order to demonstrate compliance with homologation, certification, registration or authorization requirements, submit a report to the lead governmental agency on compliance with relevant mandatory standards? yes, no

13. Are all testing requirements imposed as part of the certification-related processes used in your country published in publicly available documents? yes, no

14. Are all testing/certification/homologation requirements published in publicly available documents? yes, no

### LAB ACCREDITATION

15. Does your country or company require labs or test facilities to be accredited/certified in order for its test results to be accepted for certification processes? yes, no

16. Identify organization charged with granting accreditation/certification of labs or test facilities:

17. Do labs need to be periodically re-accredited or re-certified? yes, no

17.1.If answer to 16 is yes, how often is re-accreditation or re-certification required? \_\_\_\_\_.

18. Does the process of accrediting/certifying labs require a visit to the labs or test facilities by accreditation/certification officials? yes, no

19.Briefly describe how labs or test facilities are accredited:

\_\_\_\_\_.

## APPENDIX B

### GLOSSARY OF CERTIFICATION PROCESSES TERMS

#### 1. KEY CONFORMITY ASSESSMENT TERMS

Authorization  
Authorized equipment  
Homologation  
Certification  
Certification mark  
Certifying authority  
Conformity assessment  
Conformity assessment procedures  
Declaration  
Type approval  
Type certification  
International standardizing bodies  
Laboratory accreditation  
Mutual Recognition Agreements (MRA's)  
Manufacturer's self-declaration/Self declaration  
Registration

#### 2. KEY STANDARDS-RELATED TERMS

##### 2.1. GENERAL

Regulation  
Standard  
Harmonization  
Electromagnetic Compatibility (EMC)  
Harm to the network  
Harmful interference  
Conformance test  
Test Report

##### 2.2. TYPES OF STANDARDS

Mandatory standards  
Voluntary standards  
Technical regulations  
Technical standards  
Performance standard  
Product safety standards  
Interface standards  
Test standards

#### 3. GENERAL/OTHER TERMS

Telecommunication equipment

Terminal attachment  
Terminal equipment  
Network termination point  
Standardizing body  
Standards-Related Measures  
Attachment  
Base station  
Customer premise equipment  
IEC  
ISO  
ISO 9000 Series Standards  
Interface

**PCC.I/RES.15(III-95)**

**DRAFT GUIDELINES ON CERTIFICATION**

The Third Meeting of the Permanent Consultative Committee I: Public Telecommunications Services,

**NOTING:**

That the 34 Heads of Government at the Miami Summit of the Americas agreed to a Plan of Action which included a mandate for CITELE to "promote greater consistency of certification processes of telecommunications equipment," as noted in document PCC.I-55/95(II-95);

That COM/CITELE Res.8(II-94) responded to the Plan of Action by adopting COM/CITELE Res.8(II-94);

That PCC.I Res.8(II/95) established an Ad-Hoc Working Group on Certification Processes (WGCP) in February 1995;

**CONSIDERING:**

That the WGCP seeks to promptly begin the process of fulfilling the mandate of the Summit of the Americas to make certification processes more consistent;

That examination and discussion of how to make certification processes more consistent will be more productive if it is triggered by specific contributions and allows for widespread participation by all CITELE members;

That distribution and awareness of contributions will be more widespread if it is done through PCC.I; and

That over time, the WGCP will likely present several resolutions aimed at making certification processes more consistent,

**RESOLVES:**

1. That this resolution and the attached draft guidelines should be distributed by the Executive Secretariat of CITELE to all CITELE Members. The attached draft guidelines are a first draft;

2. That CITELE members should provide comments, additions or revisions to the attached guidelines to the Chairman of the WGCP by December 31, 1995; and,

3. That WGCP will take the comments on the guidelines into account and revise them for further consideration by the WGCP.

## **DRAFT GUIDELINES ON CERTIFICATION PREAMBLE**

### **PREAMBLE**

To promote the objectives set forth in the Plan of Action agreed to by 34 Heads of Government at the Summit of the Americas in Miami, it is recommended that CITELE member states should adopt and implement the following guidelines to make telecommunications equipment certification processes in the Americas more consistent.

The aim of these guidelines is to ensure that certification processes and technical standards for telecommunications equipment sustain the growth and development of the region for the common good; to foster the development of telecommunications in the region; to encourage the flow of goods and services; to strengthen an open multilateral trading system; and to reduce barriers to trade.

The objectives of these guidelines is to develop a set of harmonized procedures for the certification of telecommunications equipment, acceptance of laboratory test data and technical regulations. This will enable equipment to be provided at lower prices for end-users, foster greater innovation, and at the same time, to improve market access for suppliers to CITELE members.

Recognizing that the immediate implementation of these guidelines may not be consistent with the existing policies of all CITELE members, the following guidelines are provided as guidance on how members may best achieve the objectives set forth by the Heads of Government in the Summit of the Americas Plan of Action. The pace at which these guidelines are implemented by CITELE members will be influenced by their individual circumstances including their own constitutions, laws, policies and regulations.

### **GUIDELINES FOR TELECOMMUNICATIONS EQUIPMENT CERTIFICATION PROCESSES**

For the purposes of harmonizing equipment certification processes across the Americas, CITELE members are encouraged to take into account the following guidelines when developing and implementing laws, rules, policies or regulations governing certification of telecommunications equipment:

1. Administrative procedures governing certification of telecommunications equipment should:

- be non-discriminatory and transparent;
- be undertaken by an entity separate and independent from the network operator;
- be harmonized across the Americas;
- be streamlined so as to minimize administrative obstacles, delays and costs to equipment suppliers;
- provide a transparent and reasonably short period for approval or issuance of certification;
- prevent favoritism or inconsistent treatment to various suppliers;
- be supported by appeal and review processes which are appropriate to CITELE member's regimes; and,
- facilitate the availability of equipment;

2. CITELE members should accept laboratory test data from equipment suppliers from other countries for tests that are performed in accordance with the accepting member's technical regulations. Procedures for accepting test data should be non-discriminatory and minimize administrative obstacles, delays and costs to equipment suppliers.
3. Certification should be on the basis of type, rather than item by item, wherever possible.
4. Certification of telecommunications equipment should be required only for equipment that directly interfaces with the public network or that may cause harm or interference to the public network, network users, operating personnel, or to other users of the radio spectrum.
5. Technical regulations, wherever possible, should conform to international standards. Technical regulations are defined as technical specifications, including the applicable administrative provisions, with which compliance is mandatory.
6. Customer equipment technical regulations should be limited to those necessary to:
  - prevent harm to a public network, network operator personnel, users or customers;
  - maintain network performance and the quality of network services;
  - prevent electromagnetic interference and ensure compatibility with other users of the spectrum.
7. The development of technical regulations should be as open as possible to all interested parties, domestic and foreign -- including service providers, equipment manufacturers and users.
8. Customer equipment technical regulations, including the interface between terminal equipment and the public network should be publicly available. Technical specifications of the transmission lines for purposes of connecting equipment should also be publicly available.
9. Users should be permitted to own their own network termination units located on the user side of the public network interface and unbundled from the service provided by the public network operator.

**PCC.I/RES.16(III-95)**

**PROCEDURES AND WORKING METHODS OF THE WORKING GROUP  
ON STANDARDS COORDINATION (WGSC)**

The Third Meeting of Permanent Consultative Committee I: Public Telecommunications Services,

**CONSIDERING:**

That the First CITELE Plenipotentiary, held in Montevideo, February 1994, established Permanent Consultative Committee I (PCC.I) on Public Telecommunications Services (Res.8(I-94)) with the following mandate:

"To promote and watch over the integration and strengthening of Networks and Public Telecommunications Services operating in the countries of the Americas, taking into account the need for modernization of Networks and promotion of universal telephone basic services, as well as for increasing the public availability of specialized services, and the promotion of the use of international ITU Standards and Radio Regulations."

That PCC.I includes a Working Group on Standards Coordination (WGSC) mandated to address coordinated standards among CITELE member countries;

That the second meeting of PCC.I, held in Tegucigalpa, Honduras, February, 1995, ratified the Objectives, Terms of Reference, Operating Principles and Draft Resolutions, and Coordinated Standards Document (PCC.I Res. 4 (I.94)) of the WGSC; and

That the document on Procedures and Working Methods for the WGSC was received and approved by the WGSC at its meeting in Washington, D.C., September 1995,

## **RECOGNIZING:**

That the Summit of the Americas, held in Miami, December 1994, issued the Telecommunications Action Plan to conduct telecommunications harmonization activities which include Coordinated Standards in the region of the Americas;

That the Second COM/CITELE meeting, held in Montevideo, December 1994, resolved, in response to the Summit of the Americas to provide Coordinated Standards Documents on Signalling System NY 7 in 1H95, on Personal Communications Systems (PCS) Wireless and on Integrated Services Digital Network (ISDN) in 1995 and on Intelligent Networks (IN) in 1H96 COM/CITELE/RES.8 (II-94); and

That WGSC Procedures and Working Methods are urgently required particularly in support of COM/CITELE RES.8(II-94),

## **RESOLVES:**

1. To adopt the WGSC Procedures and Working Methods contained in the attachment.
2. To recommend maintenance of the adopted Procedures and Working Methods by the WGSC. Such maintenance will include proposals to modify and/or to amend the document in order to cover future requirements within the work process, to be considered by PCC.I at a future time.

## **DRAFT PROCEDURES AND WORKING METHODS OF THE WORKING GROUP ON STANDARDS COORDINATION (WGSC)**

### **1. Introduction**

1.1 To facilitate the activities of the Working Group on Standards Coordination (WGSC), this document contains an operating Process covering all aspects from development of the work plan to format and approval of deliverables. Also included are objectives and operating principles which provide the basis for the overall process, and in particular, the objective of the WGSC to develop Coordinated Standards Documents and accompanying Resolutions.

1.2 The WGSC was established by PCC.I in recognition of the important role of telecommunications standards in the work of CITELE. Activities of the WGSC, and the need for an agreed operating process has taken on more significance in view of the directives given to CITELE by the Summit of the Americas "Telecommunications Action Plan" (Miami, December 9-11, 1994). Resulting from the directives, COM/CITELE adopted a Resolution which includes the establishment of priorities and timelines for PCC.I in the standards coordination area, in the 1995/1996 time frame.

1.3 Principles underlying the operating process take into account the promotion of compatibility and interoperability between the member states, the benefits of voluntary standards, the consensus nature of the process, compatibility with ITU Recommendations (and other international standards) and an agreed work plan.

1.4 The operating process includes formats and numbering schemes covering input and output documentation. In particular, a format is included covering the WGSC deliverables. This takes the form of a Resolution containing the key recommendations/enhancements and an accompanying set of guidelines and technical information.

1.5 The work objective is to develop a Resolution for each technical area under study. As such, this provides a focus for WGSC activities and is the vehicle by which PCC.I will convey the results of its work to CITELE. Resolutions will be reviewed on a two-year cycle.

## **2. Terms of Reference and Objectives**

### **2.1 Terms of Reference**

2.1.1 To be the Working Group for standards coordination in CITELE, in close cooperation with the Working Groups of all PCCs.

2.1.2 To focus on technical questions and issues in the area of standardization coordination using, as a frame of reference, standardization activities underway at the international level in the ITU and other international standardization organizations.

2.1.3 To provide a focus for the interaction of standards organizations in the region that wish to cooperate on matters of common interest and to agree on the undertaking of important work by telecommunications standardization bodies in the Americas.

### **2.2 Objectives**

2.2.1 The WGSC responsibilities and objectives are outlined in Resolution PCC.I RES.4(I-94) which provides the basis for the development of a work plan in the standards coordination area.

2.2.2 The following objectives should be considered in the course of the work of the WGSC.

a. To promote harmonization of telecommunications standards among Member States of the region by stimulating coordination and cooperation on standards matters, which facilitate interconnectivity and interoperability and harmonized services. Special emphasis is to be given to the body of standards laid down by the ITU and other international standardization organizations such as ISO/IEC,

b. Enhance the participation and effectiveness of CITELE countries within the ITU and other international standardization organizations through better cooperation within the region on standardization activities. Broaden the exchange of information among CITELE member states and the various Standards Development Organizations in the region, and,

c. Coordinate with the Working Groups of all PCCs in those areas relating to standards coordination in order to meet the common objectives of CITELE.

## **3. Operating Principles**

3.1 The principles underlying the WGSC operating process are based on the fundamental premise that the WGSC will not develop standards, but will achieve consensus on Coordinated Standards Documents taking into



account the different needs and telecommunications networks/services status within CITELE countries and within the framework of regional/global harmony and interworking.

3.2 Basic to the operating process are the principles of:

- a. Promotion of compatibility/interoperability among CITELE countries,
- b. Promotion of compatibility with the ITU Recommendations and other international standards, and,
- c. Endorsing existing standards, if appropriate.

3.3 The Coordinated Standards Documents will contain pertinent information, including references to existing standards and standards under development (with references to their source), and guidelines on the technical information.

3.4 It is recognized that Resolutions resulting from the WGSC will be based on the concept of voluntary acceptance of recommendations contained in such Resolutions. This refers to the application of coordinated standards by network providers, manufacturers and end-users.

By virtue of being voluntary, the coordinated standards can promote forward - looking and market - driven solutions achieving the flexibility necessary to meet the needs of the CITELE countries.

3.5 The work will be based on an a need to work plan driven by contributions primarily from CITELE members and associate members.

3.6 There will be unrestricted access within CITELE to WGSC documentation including contributions and working documents. These documents will not include any information of a commercial nature.

3.7 The principle of promoting information exchange with Standards Organizations will be encouraged. This includes interaction/documentation addressing specific CITELE coordinated standards needs and future work directions.

3.8 It is recognized that the use of Electronic Document Handling (EDH) in the activities of the WGSC will have clear advantages. The WGSC will consider the development of its own EDH capability, taking into account systems already in place, in order to make EDH available quickly to the WGSC members.

#### **4. Work Plan**

4.1 The period between CITELE Assemblies is considered to be the work period. At the beginning of each work period, a proposed organization and action plan for the work period shall be prepared by the WGSC Chairman. The work plan should take into account any priorities and coordination arrangements recommended by COM/CITELE.

4.2 For projects involving more than one Working Group, baseline documents may be prepared in order to provide the basis for coordinated study among various Working Groups. The term "baseline document" refers to a document which contains the elements of common agreement on an ongoing basis.

#### **5. Structure**

##### **5.1 Working Group**

5.1.1 The WGSC has a Chairman, Vice Chairman and a Secretary.

5.1.2 The WGSC Chairman is responsible for the establishment of structure for the distribution of work and appointment of Sub-Working Group Chairmen, as required.

## 5.2 Sub-Working Groups

5.2.1 Sub-Working Groups have a Chairman or Chairmen, as appropriate. The appointment of Sub-Working Group Chairmen shall take into account WGSC member's advice as well as the technical and managerial competence of the candidates.

## 5.3 Rapporteurs

5.3.1 The Chairman of the WGSC and its Sub-Working Groups are encouraged to make effective use of their limited resources by delegating responsibility to Rapporteurs for the detailed study of individual topics.

5.3.2 The following guidelines should be used:

- a. Rapporteurs may be appointed at any time with the agreement of the WGSC or Sub-Working Group. The term of the appointment relates to the work to be done.
- b. The appointment of Rapporteurs should be based primarily on their expertise in the topic(s) to be studied.
- c. The basic goal of each Rapporteur is to assist the WSGS to develop new and revised documents,
- d. Rapporteurs are responsible for the quality of their documents and shall be involved in the final review process.

## 6. Meetings

### 6.1 Frequency and Timetable

6.1.1 The WGSC will meet to facilitate its work toward the development and approval of Standards Coordination Documents and Draft Resolutions. Such meetings will only be held with the approval of PCC.I.

6.1.2 In the establishment of the work program, the timetable of meetings must take into account the time required for participating bodies to react and prepare contributions. Meetings should not be held more frequently than necessary to provide the documentation. Meetings scheduled in less than 3 month intervals may incur the possibility of full documentation not being available.

6.1.3 In principle, the timetable of WGSC meetings should be prepared on a ready basis and be submitted to PCC.I for approval. In addition, the timetable should be distributed to participating bodies well in advance, by the CITEI Secretariat (hereafter referred to as the Secretariat), to enable timely development of contributions.

6.1.4 Subject to availability of resources, the WGSC will schedule interim meetings, as will Sub-Working Groups and Rapporteur Groups, to conduct ongoing activities within their mandates in the time period between regular WGSC meetings. Such meetings will be posted in the report of the previous regular WGSC meeting.

### 6.2 Notification

6.2.1 Notification of WGSC meetings held in concert with PCC.I meetings will be part of the PCC.I notification.

6.2.2 For all other WGSC meetings, including interim meetings, the following procedures apply:

a. A meeting notice announcing the location and draft agenda of the next WGSC meeting and containing the draft day-by-day work plan shall be prepared by the Chairman and sent to the WGSC mailing list and to the Secretariat.

b. A registration form will be sent out with the meeting notice. The registration form is required to indicate participation in the meeting. Individuals who attend without pre-registration may experience a delay in receiving their documents.

c. The package containing the meeting notice and registration form should be received by the WGSC mailing list two months prior to the meeting.

d. If the WGSC meeting has not been previously planned and scheduled a meeting notice should be received at least two months before the meeting.

e. Sub-Working Group, Rapporteur Group and Ad Hoc Group meetings must be planned and agreed upon at the previous WGSC meeting.

### 6.3 Participants

6.3.1 Member States, Associate Members and other authorized entities may be represented in the WGSC by participants registered by name and chosen by them.

6.3.2 Observers may be invited, subject to agreement by the WGSC.

### 6.4 Conduct

6.4.1 The Chairman shall manage the agenda and direct discussions during the meeting, with the assistance of the Vice Chairmen and the WGSC Secretary (hereafter referred to as the Secretary).

6.4.2 Work Plan topics which have not elicited any contributions over the work period will be deleted from the list of items for study by the Chairman.

6.4.3 The WGSC may set up temporary working teams for the duration of the meeting to study specific topics.

### 6.5 Reports

6.5.1 A Summary Report on WSCG status shall be prepared by the Chairman as input to the PCC.I meeting. This should be as brief as possible (i.e. two or three charts) and should include a summary of decisions, actions, outstanding issues, future work, questions to PCC>I interim meetings and liaisons.

6.5.2 A WGSC Meeting Report will be prepared by the Secretary, reviewed by the Chairman and then distributed by the Secretary to the WGSC mailing list, in the Secretary's native language, within thirty days. The report will also be sent to the Secretariat for translation and distribution. The report will contain resolutions presented to PCC.I for approval, key details of discussions, a list of contributions with summary descriptions, the Chairman's Summary Report and the results of any Seminars held during the meeting. The Meeting Report will be approved at the next WGSC meeting.

6.5.3 The WGSC reports and documents are not confidential. They may be distributed to non-members, with the approval of the WGSC Chairman, for the furtherance of CITEL initiatives.

6.5.4 On an annual basis, the WGSC Meeting Report shall include the current list of Rapporteur. The list shall be updated, if required, in subsequent reports.

6.5.5 The format and content guidelines for WGSC meeting reports, as given in the Appendix (ANNEX A), should be followed.

## **7. Contributions**

### 7.1 Sources

7.1.1 Member states, associate members, other duly authorized entities (e.g. ITU) and WGSC Chairman/Vice -Chairmen/Rapporteur are eligible to present contributions to the Working Group.

### 7.2 Types

7.2.1 Contributions submitted to the Secretariat two months in advance of a meeting will be numbered, translated and distributed to the WGSC membership. Submission in two languages is desirable. A copy must also be sent to the Chairman for his review with the Secretariat as to the appropriateness of the contribution (e.g. format, content). If a contribution is considered inappropriate, the author will be notified by the Secretariat and the contribution will not be translated and distributed.

7.2.2 Contributions submitted to the Secretariat in less than two months but not less than ten working days before the meetings will be distributed and numbered at the meeting. Submission in two languages is advised as the contribution will not be translated. A copy must also be sent to the Chairman for his review with the Secretariat as to its appropriateness.

7.2.3 Contributions carried into the meeting will be designated as Working Documents. The WGSC will decide whether to include the document in its discussions. The document may be referred to the next meeting as a contribution.

7.2.4 Contributions of an administrative nature from the WGSC Chairman, Sub-Working Group Chairmen and Rapporteurs may be submitted during meetings as Working Documents.

7.2.5 A document generated during a WGSC meeting will also be designated a Working Document and be numbered as such.

### 7.3 Presentation

7.3.1 Contributions not presented at the meeting by a source representative will be considered at the discretion of the Chairman, taking into account, the views of the WGSC.

### 7.4 Guidelines

7.4.1 With regard to the presentation of Contributions to the study items assigned to the WGSC, the following guidelines apply:

a. Contributions should be concisely drafted, avoiding unnecessary details, tables or statistics that make no direct contribution to the study. They should be clearly written with a view to being universally understood, i.e. they should be as codified as possible, use international terminology and avoid technical jargon peculiar to the author's country. When a contribution deals with several study subjects, these should be separated so that the text relating to each one begins on a fresh sheet of paper (not on the back of a page).

b. A contribution should not as a rule exceed about 2500 words (five pages), nor should it include more than three pages of figures (making eight pages in all). It should be accompanied by an abstract which is no more than 150-200 words, and which summarizes the aim of the contribution and its technical content. Whenever possible, a section with the headline DISCUSSION (or RATIONALE), should be used for the main text which sets forth the essential information required for justifying the proposals or conclusions of the contribution. The contribution should end with a PROPOSAL or if not feasible, a CONCLUSION (both if required). For self-explanatory proposals, the discussion section may be omitted.

c. Documents of purely theoretical interest which are not directly related to the study should not be submitted.

d. Passages of an unduly commercial nature should not be included in the contribution.

7.4.2 The format and content guidelines for contributions as given in the Appendix (ANNEX B) should be followed.

## **8. Coordination With Other Working Groups**

8.1 When a broad subject is studied in more than one Working Group (either within PCC.I and/or across one or more PCCs), it may require coordination of planned work effort in terms of subject matter, timeframes for meetings and publication objectives. When such a broad study can profit from such coordination, it may be accomplished by the establishment of a Coordination Group in consultation with the Chairman of the PCC or, if necessary, with the Chairmen of PCCs. The work will be conducted in the relevant Working Groups and the results subject to the normal approval processes within each Working Group.

8.2 Any Working Group may propose a joint coordination effort, seek the approval to act as the Lead Working Group and provide one of its Vice-Chairmen, Sub-Working Group Chairman, or exceptionally, one of its Rapporteurs, as a Chairman of the Coordination Group. Any Working Group should first be discussed informally among the relevant Chairmen to seek agreement, and then approved by consensus at a meeting of the Working Group which is so identified to take the lead.

8.3 The proposal to establish a Coordination Group and take the responsibility of a Lead Working Group should first be discussed informally among the relevant Chairmen to seek agreement, and then approved by consensus at a meeting of the Working Group which is so identified to take the lead.

8.4 The role of Coordination Group does not confer any authority upon its members not already provided by the Working Groups involved.

## **9. Liaisons**

9.1 WGSC may liaise with any Working Group within CITEL. Liaisons are approved by the WGSC and communicated by the WGSC Chairman with a copy to the PCC.I Chairman.

9.2 Approval to liaise with organizations external to CITEL is subject to approval by the PCC.I Chairman.

9.3 To content guidelines for external liaison proposals and liaison documents as given in the Appendix (ANNEX C1 and C2, respectively), should be followed.

## **10. Numbering and Documents**

WGSC documents should be numbered as follows:

Where X=R (for reports)

X=D (for working documents)

X=C (for contributions)

YYY=sequential number (over the work period)

Z=E (for English original text)

Z=S (for Spanish original text)

## **11. Draft Resolutions, and Coordinated Standards Documents**

### 11.1 Summary

11.1.1 The outcome of a WGSC technical study is a Draft Resolution, and a Coordinated Standards Document (CSD). The Draft Resolution, to be approved at the PCC.I level, contains the principal recommendations. The CSD will be annexed to the Draft Resolution and will contain the technical information on which the Draft Resolution is based.

### 11.2 Draft Resolutions

11.2.1 Resolutions are the vehicles used by PCC.I to convey the principle recommendations from WGSC studies to PCC.I members. As such, Draft Resolutions from the WGSC cover the following, aspects:

- a) Considering and recognizing statements,
- b) Endorsements of existing standards,
- c) Recommendations regarding options from existing standards,
- d) Appropriate references to international and national standards,
- e) Recommended actions by Standards Development Organizations which address specific CITEL needs, and,
- f) Statement regarding the voluntary nature of the recommendations contained in Resolutions.

11.2.2 Details of the format and content guidelines for Draft Resolutions are given in the Appendix (ANNEX D), and should be followed.

### 11.3 Coordinated Standards Documents (CSDs)

11.3.1 Details of the format and content guidelines for CSDs - Initiation Stage and CSDs are given in the Appendix (ANNEX E1 and E2, respectively), and should be followed.

### 11.4 Final Form

11.4.1 A composite document of the PCC.I agreed Resolution, and the CSD (including Guidelines on Use of Technical Information and a Summary) comprise the final form.

11.4.2 Details of the content guidelines for Final Form are given in the Appendix (ANNEX F), and should be followed.

## **12. Approval Procedures**

### 12.1 Normal

12.1.1 At an appropriate time in the CSD initiation stage, the CITEI Secretariat will distribute the document to CITEI member Countries and associate members to stimulate awareness and interest and to generate information and comments.

12.1.2 The normal approval process is as follows:

- a) The Draft Resolution, with the accompanying CSD (including guidelines), will be approved by WGSC for submission to PCC.I for their final approval.
  - b) PCC.I approval of a Draft Resolution requires consensus with no objections.
  - c) Following approval of the Resolution by PCC.I, the Final Form will be distributed by the CITEI Secretariat to member States and associate members.
  - d) Any comments from member States and associate members will be considered in the next issue of the Resolution and CSD.
- COM/CITEI will be informed of the Resolution as part of the PCC.I Report. CITEI will be informed of the Resolution.

### 12.2 Alternative Approval Procedure

The WGSC will, from time-to time, require an alternative procedure for PCC.I approval by correspondence.

## 13. Maintenance

13.1 If comments and/or contributions are received, the Resolution and CSD will be reviewed and reissued, if appropriate, in not less than two years.

13.2 Four years after issue, if no comments have been received, a reaffirmation process will be initiated.

## 14. Electronic Document Handling (EDH)

14.1 It is recognized that the use of the EDH in the activities of the WGSC will have advantages.

14.2 The WGSC will consider developing its own EDH capability, taking into account systems already in place.

## APPENDIX:

### DOCUMENT FORMAT AND/OR CONTENT GUIDELINES

#### A - Format for WGSC Reports

ORGANIZATION OF AMERICAN STATES  
Inter-American Telecommunication Commission WGSC - R.yyy - E

logo

#### Permanent Consultative Committee I

WORK PERIOD 1994 - 1998

SOURCE: WGSC Chairman

TITLE: Report of the ( ) Meeting of the Working Group on Standards Coordination

PLACE  
and DATE:

CONTACT: (name) Tel:  
Fax:  
e-mail:

### **A-1:Content Guidelines for Reports**

- 1.Introduction
- 2.Executive summary
- 3.Details of WGSC discussions (e.g. Sub Working Group reports)
- 4.Interim meetings and subsequent PCC.I action
- 5.Resolution status and subsequent PCC.I actions
- 6.Liaisons
- 7.EDH Status
- 8.Future Work
- 9.APPENDIX

- 9.1Agenda
- 9.2List of Attendees (country, organization, address, telephone, fax and e-mail)
- 9.3List of Contributions and Working Documents
- 9.4Coordinated Standards Documents (full text or referenced as appropriate)

Notes:WGSC Reports will be prepared by the WGSC Secretary, sent to the WGSC Chairman for comments, and distributed in the Secretary's native language within 30 days.

A copy will be sent to the Secretariat for translation and distribution.

### **B: Format for Contributions**

ORGANIZATION OF AMERICAN STATES  
Inter-American Telecommunication Commission WGSC - C yyy - E  
Permanent Consultative Committee I  
Working Group on Standards Coordination

WORK PERIOD 1994 - 1998

SOURCE: (member or associated member)

TITLE:

PLACE and DATE:

ABSTRACT:

CONTACT PERSON: (name) TEL:+



FAX:+  
e-mail:

## **B- 1:Content Guidelines for Contributions**

- 1.Abstract
- 2.Background
- 3.Statement of the Problem
- 4.Detailed information input
- 5.Conclusions/Proposals/Recommendations
- 6.References
- 7.APPENDIX
  - 7.1Tables
  - 7.2 Figures

Notes:The author(s) should configure Sections 3, 4 and 5 above to suit the particular nature of the contribution.

Advanced contributions (two months prior to the meeting), delayed contributions (no less than ten days prior to the meeting) and contributions carried into the meeting (Working Documents), should follow the above format.

As an alternative to 7 above, Tables and Figures may be included in the text.

## **C:Content Guidelines for Proposal to Liaise With an External Organization**

- 1.Source: PCC.I Working Group on Standards Coordination
- 2.Location of WGSC Meeting
- 3.Date of WGSC Meeting
- 4.Title: Liaison to ( ) on ( )
- 5.Point of Contact in WGSC: Name, Organization, Address
- 6.Specific Description of Topic(s) and Key Words
- 7.Specific External Organization or Group
  - 8.1Technical discussion areas
  - 8.2Procedure (correspondence, attendance, etc.)
  - 8.3Special instructions/constraints
  - 8.4External organization schedule
  - 8.5External organization contact
- 9.Lead PCC (in the case of liaisons from two or more PCCs to the same external organization)

Note:This liaison proposal should be kept to one page in presentation format.

## **D:Content Guidelines for Liaison Documents**

- 1.Abstract
- 2.Background

- 3.Statement of the Problem
- 4.Detailed Information
- 5.Conclusions/Proposals/Recommendations
- 6.References
7. APPENDIX

- 7.1Tables
- 7.2Figures

Notes:The WGSC Editor(s) will configure Sections 3, 4 and 5 above to suit the particular nature of the liaison.

The liaison document will be transmitted via a cover letter from the WGSC Chairman to the Chairman of the liaised organization.

### **E:Format and Content Guidelines for Draft Resolutions**

1.Source:WGSC

2.Title:Draft Resolution on ( )

3.Considering that ( )

Refer to work plan, members priorities and interests, impact on other technologies, services needs, timeliness, etc.

4.Recognizing that ( )

Refer to existing ITU/International Standards, voluntary acceptance, member States status (as listed in the CSD), etc.

5.Resolves that ( )

Refer to specific endorsements of existing standards, options in those standards, member States needs (as listed in the CSD), etc

6.Recommends that ( )

Refer to new areas of standardization to meet specific needs of member States which should be addressed by ITU or other standards bodies, new PCC work activities, etc.

### **F:Content Guidelines for Coordinated Standards Document - Initiation Stage**

1. Introduction

2.Objectives of the Work Activity

3.Background

4.Summary of Standards Activities

5.1.International Standards

5.1.1ITU-T Recommendations

5.1.2Other International Standards Organizations

## 5.2.Regional Standards Summary

5.2.1Region 1

5.2.XRRegion X

6.Evolution of Standards Towards a CSD

7.Challenges and Opportunities to CITEL Countries

8.Conclusions

9.Acknowledgements

10.References

Notes:A technical point-of-contact should be indicated in the document.

For format, see ANNEX A

### **G:Format for Coordinated Standards Documents**

logo

ORGANIZATION OF AMERICAN STATES  
Inter-American Telecommunication Commission

PCC.I RESOLUTION RES No. ( )

TITLE:

WGSC  
WORKING GROUP  
ON STANDARDS  
COORDINATION

Permanent Consultative Committee I - PCC.I

Place, day/month/year

### **H: Content Guidelines for Final Form**

1.Title:PCC.I Resolution ( )

2.Technical Area Addressed

3.Date of Issue, Issue Number

4.Contents List

5.Executive Summary

6.Resolution in Full

7.Guidelines on Use of Technical Information

8.ANEX: Coordinated Standards Document (CSD)

Note:The final form packages the PCC.I Resolution and CSD into a single convenient document for distribution to CITEL member States.

For front page format, see G.

**PCC.I/RES.17(III-95)**

**2 GHz PERSONAL COMMUNICATIONS SERVICES (PCS)/WIRELESS**

The Third Meeting of Permanent Consultative Committee I:Public Telecommunications Services,

**CONSIDERING THAT:**

PCS/Wireless has been identified as a technical priority for CITELE as stated in COM/CITELE Res.8(II-94), which mandates PCC.I to provide a coordinated standards document (CSD) by the end of 1995;

Several CITELE countries are allocating spectrum for PCS in the 2 GHz band (1850-1990MHz) and allowing service providers to select the radio technology most appropriate for their application;

There is a high level of interest in a number of CITELE countries in rapidly deploying PCS;

The WGSC has completed a substantial amount of work on PCS/Wireless standards coordination;

The selection of a digital second generation wireless "air interface" standard, greatly impacts interoperability (roaming and handover) between PCS providers; and

There is a project recommendation written in PCC.III (PCC.III-123/95 Rev.1, March 15, 1995) to assign 1850-1990 MHz for PCS,

**RECOGNIZING THAT:**

United States standards bodies have completed six PCS air interface standards for the 2 GHz band, based upon consideration of existing and new digital technology;

Common allocation of spectrum in the 2 GHz band in CITELE countries, along with selection from these standards, will allow obtaining the benefits of economy of scale and multiple vendors providing compatible equipment within a standard;

Service providers selecting technology within a group of standards allows fitting the most appropriate technology to each environment and application but creates a great challenge to support interoperability (roaming and handover) between wireless systems; and

Standards to support roaming and handover between systems are being developed,

**RESOLVES THAT:**

Service providers should be encouraged to select the radio technology most appropriate for their application based upon standards described in the attached CSD for 2 GHz PCS.

**RECOMMENDS THAT:**

PCC.I strongly supports PCC.III in recommending common spectrum allocation for PCS in the 2 GHz band (1850-1990MHz).

Selection of air interface standards should take into consideration the needs of different service providers covering areas of high common interest so as to minimize potential difficulties with roaming and handover between systems.

Service providers be encouraged to actively participate in the standards working groups, so as to support international roaming and handover between systems.

## **Working Group on Standards Coordination Coordinated Standards Document**

Title: 2 GHz Personal Communications Services (PCS)/Wireless

Wireless Services/Systems SEG Mel Woinsky/Victor Perez, Co-Chairs

PCS/Wireless Task Group Mel Woinsky/Victor Perez Co-Rapporteur

1. Executive Summary
2. Introduction-Personal Communications Services
3. Background
  - 3.1 Wireless Access Mobility Services
  - 3.2 Universal Personal Telecommunications
  - 3.3 Terminology
  - 3.4 Focus in CITEI/PCC.I Committee T1
  - 3.5 WARC 92
    - 3.5.1 WARC 92 Results
    - 3.5.2 Significance of WARC 92 Results
4. Standards
  - 4.1 International Standards
    - 4.1.1 ITU-R Recommendations
    - 4.1.2 ITU-T Recommendations
  - 4.2 Regional Standards
    - 4.2.1 Europe
    - 4.2.2 Japan
  - 4.3 CITEI Countries
    - 4.3.1 U.S.A.
    - 4.3.2 Canada
    - 4.3.3 Mexico
    - 4.3.4 Chile
    - 4.3.5 Argentina

5. Conclusions
6. Proposals
7. Future Work

Figures 1-6

Table 1

## **1. Executive Summary**

This Coordinated Standards Document (CSD) reviews standards activity on a global basis related to Personal Communications Services (PCS) with a focus on digital second generation wireless "air interface" standards. Specifically it is noted that several CITELE countries are allocating spectrum for PCS in the 2 GHz band (1850-1990MHz) and allowing service providers to select the radio technology most appropriate for their application. In addition, United States standards bodies have completed six PCS air interface standards for this band based upon consideration of existing and new digital technology.

Common allocation of spectrum in this band in CITELE countries, along with selection from these standards, will allow obtaining the benefits of economy of scale and multiple vendors providing compatible equipment within a standard. Service providers selecting technology within a group of standards allows fitting the most appropriate technology to each environment and application but creates a great challenge to support interoperability (roaming and handover) between wireless systems. Standards to support roaming and handover between systems are being developed, but selection of air interface standards should be coordinated between communities of high common interest.

Progress is continuing to be made on PCS related standards. As a result, this CSD is a dynamic document and the information on standards status represents the view in September 1995.

## **2. Introduction - Personal Communications Services (PCS)**

Personal Communications Services (PCS) will offer the user the ability to configure telecommunications services in a manner which best meets the user's individual needs at any time or location.

The key attributes of PCS are:

- Terminal and Personal Mobility
- Connectivity to the PSTN
- Effective coverage tailored to various user needs, ranging from Telepoint islands to ubiquitous coverage to global coverage.
- High quality and availability
- Wired and wireless access
- Utilization of Intelligent Network capabilities
- Voice and data capabilities
- Range of equipment and service costs, depending on functionality.

Personal communications encompasses a continuum of services and features that offer personal communication users various degrees of terminal mobility and personal mobility. These services range from voice access using a pocket-sized wireless communicator (terminal mobility) to feature transportability (e.g., speed-calling list) from the user's primary network access (wireline or wireless-based service provider) to an alternate network access (personal mobility). These services will be limited by the capabilities of the network provider, service provider and regulatory considerations. There will likely be an evolution from islands of wireless coverage to ubiquitous coverage and connectivity.

There is a general understanding that the goal of personal communications should be to provide users with greater flexibility in their use of telecommunication services in terms of mobility and control. Mobility addresses the ability of the user to use any available terminal for network access. In addition, it also allows the use of a portable terminal which provides network access at different locations and while in motion. Control addresses the ability of the user to control access to services and associated services parameters, and to have control over the completion of calls to the user. These mobility and control aspects can be defined in terms of personal mobility, terminal mobility, and service profile management .

Personal mobility allows a user to access services (e.g., make and receive calls) at any terminal in accordance with the user's service profile and to receive incoming calls at the user's current terminal or direct them to some other destination. A user may be called using the user's identifier and such calls will be completed in accordance with instructions in the user's service profile either to the terminal currently associated with the user or some other destination. This involves a unique user identifier which the network can use to identify and locate users. In addition, charge records for services should be associated with the user.

Terminal mobility allows a user's terminal to access the network at different locations and also while in motion. This involves a unique terminal identifier which the network can use to identify and locate terminals. Note that terminal mobility really consists of two distinct attributes: access at different locations and access while in motion. The latter is associated specifically with wireless terminals. Consideration is given to both "High-tier" systems, with high power large cells and vehicular speeds, and "Low-tier" systems with small cells low power and pedestrian speeds.

Service profile management allows a user to review and modify the user's service profile. Since the service profile controls the services provided to the user, the ability to control this profile gives the user a customized telecommunications environment not available in today's networks.

### **3. Background**

#### **3.1 Wireless-Access Mobility Services**

Wireless-access mobility services conferring terminal mobility allows users to originate and terminate calls from small lightweight portable devices. Wireless access mobility services, as end-to-end services, uses emerging digital wireless technologies to enable a user-on-the-move to communicate.

Following is a list of key aspects of wireless access mobility services

##### **3.1.1 Voice-grade and bearer services:**

- a. making and receiving calls;
- b. simple and easy to use (e.g., automatic registration);
- c. wireless access technology;
- d. small, lightweight handsets.

##### **3.1.2 Security comparable to wireline;**

##### **3.1.3 Quality comparable to wireline.**

#### **3.2 UPT Services**

Universal Personal Telecommunication (UPT) Services will provide personal mobility, and allow users to access a variety of telecommunications services. UPT services will enable users to originate and terminate calls based on a user defined profile and UPT number.

Following is a list of key aspects of UPT:

### 3.2.1 Services

- a.making and receiving calls from anywhere;
- b.reachable by a UPT number regardless of location;
- c.simple and easy to use;
- d.access technology independent

### 3.2.2 Portability of a common set of services;

- a. portability of user selected services;
- b.transparency across networks

### 3.2.3 Security and quality comparable to wireline.

### 3.2.4 Incoming/Outgoing Call Management

## 3.3 Terminology

PCS terminology is clarified in Figure 1. Personal Communications Services (PCS) is an umbrella term which includes wireless access mobility services and UPT. In the longer term, third generation wireless access services will be based on Future Public Land Mobile Telecommunication Systems (FPLMTS) recommendations which are primarily being developed in Task Group 8/1 of the ITU-R. Service description and networking aspects of FPLMTS are being considered in several Study Groups of the ITU-T. UPI services which can be provided with wireline or wireless access will be based on ITU-T Recommendations.

### 3.4 Focus in CITEI/PCC.I

At the November 14, 1991 Miami meeting of the Ad Hoc Coordination Group CITEI/PCC.I and Committee T1, it was agreed to focus on the wireless access aspects of PCS.

### 3.5 WARC 92

The World Administrative Radio Conference (WARC) met in Torremolinos Spain from February 3 to March 3, 1992. Although spectrum allocation is the responsibility of PCC.III and is not a standards issue for PCC.I consideration, the WARC results have important implications for wireless standards development and are briefly summarized below.

There are three world regions for frequency allocation and, as shown in Figure 5 the Americas are part of Region 2.

#### 3.5.1 WARC 92 Results

Mobile service status is raised to primary in the band 942-960 MHz. It was secondary in Region 2 and primary in Regions 1 and 3. This action was based on a Canadian proposal which was aimed at providing spectrum in Region 2 for initiatives to implement cordless phone/personal communication systems.

The bands 1885-2025 MHz and 2110-2200 MHz (230 MHz) are designated (in a footnote) for FPLMTS on a primary basis. Such use does not preclude the use of these bands by other services to which these bands



are allocated (RR 764 A). Within these bands, there is a total of 70 MHz not allocated to mobile satellite service, 1885-1930 MHz and 2010-2025 MHz in the lower band and 2110-2120 MHz in the upper band. In Region 2 there is a total of 80 MHz with mobile satellite designated on a secondary basis, 1930-1970 lower band, and 2120-2160 MHz upper band.

There is a total of 80 MHz that are primary co-designated for mobile satellite and mobile services; in the lower band in Region 2 only 1970-1980 MHz. and 1980-2010 MHz in 811 regions including Region 2, in the upper band in region 2 only 2160-2170 MHz, and 2170-2200 MHz in all regions including Region 2.

### 3.5.2 Significance of WARC 92 Results

Upgrading the status of mobile to primary in the band 942-960 MHz will provide urgently need spectrum for cordless phone and personal communications systems.

The outcome of WARC-92 will be assessed by each administration to determine the actions required on a national basis. It will be necessary to develop national plans for reallocating fixed service users and making available spectrum for mobile service users such as FPLMTS.

PCC.III is studying the possible designation of common bands for implementation of PCS in the Americas.

## 4. Standards

There are several wireless access interfaces, as shown in Figure 2, which may be standardized. Digital cordless telephony based on CT2, CT2 Plus, PHP, and DECT standards represent near term wireless systems focused on low cost, and simple wireless PSTN access.

Wireless access requiring mobility services is provided by 800 MHz cellular, ESMR, and 1.8 GHz PCS technologies, AMPS, NAMPS, TDMA, CDMA, Composite CDMA/TDMA, GSM, and MIRS, etc. are technologies which are in various phases of standardization in the U.S.A. and Europe for cellular/PCS systems.

Very wide area wireless communications services are to be offered by Low Earth Orbit (LEO) and synchronous mobile satellite systems.

4.1 International Standards: The relevant international standards group are shown in Figure 3. Wireless standards have traditionally been developed on a national or regional basis. However, forward looking wireless standardization is being pursued in the ITU-R.

4.1.1 ITU-R: The key forum is ITU-R Task Group 8/1 which is active in defining recommendations for Future Public Land Mobile Telecommunications Systems (FPLMTS). The FPLMTS vision is global personal wireless communications for both voice and non-voice services and for cell sizes ranging from pico cells (in building) to mega cells (satellite) applications. TG 8/1 has currently defined user service requirements, network architecture, and performance requirements for FPLMTS terrestrial systems. Currently being finalized are air interface selection procedures, satellite system framework requirements, FPLMTS evolution issues, and a number of other areas that are critical to the on going development of the FPLMTS specifications. An important aspect of the work is the consideration that third generation FPLMTS must accommodate the evolution of second generation systems in order for FPLMTS to be successful.

4.1.2 ITU-T: The focus of the ITU-T with regard to PCS is on UPT. There is also service description work for FPLMTS in Study Group 1 and 11.

4.1.2.1 Mobile Station Identifiers: International Mobile Station identifier (IMSI) is a fifteen digit non-dialable number that identifies a specific mobile phone worldwide. The first three digits indicate the Mobile Country Code (MCC), and the next two or three digits indicate the Mobile Network Code (MNC). The remaining nine or ten digits indicate the Mobile Station Identifier Number. The IMSI code is contained within the mobile unit or within a Subscriber Identification Module (SIM) card. MSI is based upon ITU-T Recommendation E.212 and is used today in GSM. It is currently supported in TIA's interim Standard IS-136 (TDMA), IS-95 (CDMA), and the JTC's J-STD-007 (PCS-1900) and is to be used in PCS, cellular, MSS, and other wireless applications in North America to help avoid international roaming problems. In August 1995 PCC.III recommended that administrations of the CITELE member nations should encourage their wireless operators to consider the use of Recommendation E.212 in planning the assignment of international mobile station identifiers.

#### 4.2 Regional Standards:

##### 4.2.1 Europe (ETSI)

To be provided in the next revision of this CSD.

##### 4.2.2 Japan

Japanese domestic standards for personal digital cellular (PDC) networks have been developed by ARIB (Association of Radio Industries and Business- Established July 1995 -formerly named RCR) and TTC. The ARIB standard covers air interfaces, while TTC standards cover interfaces of network aspects. The ARIB standard for PDC currently consists of versions up to the fifth version, called "RCR-STD27D", which was developed this year. It covers basic aspects of air interfaces including full-and half-rate codecs as well as 800MHz and 1.5GHz.

The current TTC standard for PDC is called "JJ-70.10 ver 3". It was developed in November 1994 and supports basic and various enhanced services. In March 1996 JJ-70.10 ver 4 will be available, which enables packet switched wireless data communications among other capabilities.

Japanese domestic standards for the Personal Handy Phone System (PHS) consists of ARIB and TTC standards. Like PDC standards, ARIB and TTC standards cover air interfaces and network related interfaces, respectively. The ARIB standard for PHS is RCR-STD28, the first version of which was developed in 1993, and has been enhanced continuously. Currently there are several TTC standards for PDC such as IT-Q931-b, JTQ932-a and JT-Q1218-a. They were developed in 1994 and 1995, and supports basic services and roaming. In a half year or so, they will be enhanced to support, for example, advanced roaming based on VLR.

#### 4.3 CITELE Countries

Currently there are some groups inside government regulatory entities (Mexico, Brazil), initiating studies about PCS/ Wireless services and corresponding standards proposals.

Other Latin American countries are still in the process of granting licenses for Cellular, Trunking and Paging services including the privatization of the Telephone companies. They are reorganizing their regulatory/standards organization.

##### 4.3.1 U.S.A.

Since a knowledge of spectrum usage is important to understand the wireless standards activity, the following summary is provided on PCS spectrum allocation in the U.S.A. On Sept. 23, 1993 the FCC authorized new PCS in the 2 GHz emerging technologies bands. The plan was modified on June 9, 1994. Figure 6, attached gives an overview of the current FCC spectrum allocation. The Commission allocated a total of 120 MHz for licensed PCS at 1850-1910, and 1930-1990. Unlicensed PCS is allocated 20 MHz at 1910-1930. The PCS areas adopted were Major Trading Areas (MTAs) and Basic Trading Areas (BTAs), generally as defined by the Rand McNally Atlas. A "Spectrum Etiquette" plan containing most of the aspects of the plan suggested by the WINForum was adopted to govern the technical operation of unlicensed equipment.

There are three 30 MHz licenses and three 10 MHz licenses. The 30 MHz licenses are required to provide coverage to one-third of their service area population within five years of initial licensing and two-thirds within ten years. The 10 MHz licensees are required to show equivalent or substantial service. Mobiles are authorized to operate at powers up to 2 watts and base stations to 1640 watts equivalent isotropically radiated power (e.i.r.p.). The transmitter output power of the base station is limited to 100 watts. By limiting transmitter output power and e.i.r.p., the intent is to promote the use of high gain directional antennas to achieve larger coverage areas. Additional spectrum allocation will be considered for unlicensed operations and for mobile satellite services (MSS).

The U.S.A. standards group are shown in Figure 4. ANSI accredited Committee T1 has focused mainly on public network standards including access, but is not limited to such standards. Several Technical Subcommittees (TSC) are involved with PCS. Committee T1 recognized the broad scope of PCS standards and that many different Technical Committees would be involved. As a result, T1 formed T1P1, a new Technical Subcommittee, on systems engineering, standards planning and program management. T1P1 has this generic responsibility for complex projects but is primarily dealing with PCS. The function includes high level service descriptions, architectures, systems objectives and requirements as well as program management across the many groups involved with PCS standardization. In order to strengthen the T1 effort and further increase the focus on PCS standardization, in June 1993 T1 assigned T1P1 the additional responsibility for selected detailed technical standards development including the T1 portion of the Joint Technical Committee (JTC) on wireless access, radio related access signaling, privacy and authentication, and routing and addressing. The T1A portion of the JTC is TR-46.

The ANSI accredited Telecommunications Industry Association (TIA), addresses cellular, PBX equipment, and private and personal communications systems standards. Technical committee TR45 of the TIA developed standardized air interfaces, including the AMPS (EIA/TIA-SS3) and NAMPS (IS-88) analog cellular standards and also the TDMA (IS-54) and the more recent CDMA (IS-95) digital cellular standards. TR45 has also issued and continues to develop enhancements of IS-41, the standard for interoperability for 800 MHz cellular networks. Committee TR46 of the TIA was set up in 1992 to address the development of PCS standards for systems at 1.8 Ghz.

In December 1992, T1 initiated a Joint Technical Committee on wireless access between T1 and the Telecommunications Industry Association (TIA), with the end goal of developing a common interface standard (s). In order to support this activity, T1, TIA and Telocator (a PCS industry association now referred to as the Personal Communication Industry Association-PCIA) sponsored a Joint Experts Meeting on PCS Air Interface Standards in November 9-13 1992, to provide input to the JTC. Important inputs included the T1P1 Technical Report (TR), "Low Power Wireless Access to Personal Communications Services System & Service Objectives."

T1, TIA, and Telocator sponsored a Joint Experts Meeting on Privacy and Authentication on Nov. 8-12, 1993 in Phoenix.

The following list identifies Technical Reports and Standards related to PCS developed by Committee T1 and the T1/TIA JTC.

### **Published T1 Technical Reports**

#### **•Wireless Personal Communications: Transmission Performance Guidelines for Speech and Voiceband Data-TR No. 19, June 1993.**

Transmission performance guidelines are provided for digital systems using wireless terminals that can be used to access the Public Switched Telecommunications Network (PSTN). The goal is to achieve end-to-end quality similar in a broad sense to that achieved within the PSTN, although perhaps qualitatively different due to technology differences. It is assumed that the PSTN transmission and switching is also digital, end office-to-end office, with analog or digital access. The focus of the report is on digital systems that involve the use of terminals whose output is to a digital radio channel.

#### **•System and Service Objectives for Low Power Wireless Access to PCS-TR No. 21, Sept. 1993**

This report describes objectives for services using wireless access to Personal Communications. It further establishes system objectives for wireless systems necessary for a quality wireless service. It is primarily intended for use in defining specifications for low-power radio systems operating in the frequency spectrum for emerging technologies, but may be used broadly for higher power systems as well.

#### **•Privacy and Authentication Objectives for Wireless Access to Personal Communications- TR No. 22, Sept. 1993**

This report proposes and prioritizes objectives for system design in the areas of privacy and authentication for PCS. The objectives are explained in the context of personal communications. The final section provides an indication of relative priority for each objective. While the report addresses privacy and authentication needs for both personal and terminal mobility services, the primary emphasis is on privacy and authentication requirements associated with wireless access services. This report recognizes the related needs for validation requirements and protection of other user data, but does not address these needs.

#### **•Personal Communications Terminology TR No. 23, October 1993**

This technical report provides a repository for personal communications terminology. It contains definitions, acronyms and abbreviations associated with personal communications.

#### **•UPT Numbering and Addressing In World Zone 1-TR No. 30, April 1994**

This report provides the World Zone 1 Telecommunications Sector with technical alternatives for the numbering and addressing aspects of implementing UPT in World Zone 1 based on alternatives in ITU-T Recommendation E. 168.

#### **•Minimum Service Capabilities for Low Power Wireless Access to PCS TR No. 32, April 1994**

This document provides a high level overview of the initial service capabilities that should be supported across the standard interfaces associated with low-power wireless access to Personal Communications Services (PCS). The document specifies such key service capabilities as; discrete terminal mobility, pedestrian-speed mobility, flexible bearer channels, automatic

terminal registration and consolidation, access to advance features, privacy and authentication, and access for emergency calls.

**•Network Capabilities, Architecture and Interfaces for Personal Communications, TR No.34, April, 1994**

This report addresses the network infrastructure required to support personal communications which includes wireless access, terminal mobility, and personal mobility, analogous to Future Public Land Mobile Telecommunication Systems (FPLMTS) and Universal Personal Telecommunication (UPT) service under discussion in the International Telecommunication Union (ITU).

**•UPT Routing for Networks Served by the North American Numbering Plan, TR No. 41, May 1995**

This report provides technical routing alternatives based on numbering and addressing aspects of implementing UPT utilizing the NANP as described in T1 Technical Report No. 30, UPT Numbering and Addressing in World Zone 1.

**Published TIA Interim Standards**

**•TIA/EIA/IS-104**

Personal Communications Service Descriptions for 1800 MHz

This document contains Stage 1 service descriptions for 1800 MHz PCS.

**Published T1 American National Standards**

**•Universal Personal Telecommunication (UPT) Service Description (Service Set One) - ANSI T1.701-1994-May 1994.**

This standard establishes general principles and a service description for Universal Personal Telecommunication (UPT). It provides a general service description from the point of view of the individual UPT user. UPT allows personal mobility, enables users to access a variety of telecommunication services, and to originate and receive calls based on user-defined service profile and a UPT number. The standard is a U.S. "delta" modification of Recommendation F.851 developed in the ITU-T Study Group 1.

**T1 Standards in Progress**

**•Universal Personal Telecommunication (UPT)-Service Set 1-Stage 3 Service Description-4Q95**

The Stage 3 Service Description provides signalling protocol standards for Service Set-1, a stable draft is expected 4Q95.

**•Standards for PCS OAM&P-Final Editing for Publication**

Version 1 of the standard, in ballot, follows the principles of TMN (Telecommunications Management Network) and deals primarily with management of wireless access. The standard consists of a generic core with provisions for technology specific extensions so that it can be applied to all PCS technologies.

**•Stage 1&2-Service Description-Wireless Access Service-Final Editing for Publication**

Service descriptions from a user perspective (stage 1) and end-to-end protocol independent network information flows (stage 2) to support wireless access aspects of PCS basic call/bearer service.

**•Stage 1&2 - Service Descriptions - Wireless Access Service - Packet Mode Switch Bearer - 4Q95**

Service descriptions from a user perspective (stage 1) and end to-end protocol independent network information flows (stage 2) to support wireless access aspects of packet mode switch bearer service.

**•Stage 3 - Service Description - Wireless Access Service - Basic Call / Bearer - In T1 Ballot Resolution Process**

Network signalling protocols, at multiple network reference points, to support wireless access aspects of PCS basic call/ bearer service.

**•Stage 1&2 &3 - Service Descriptions Wireless Access Service - Supplementary Services - 4Q95**

Service descriptions from a user perspective (stage 1), end-to-end protocol independent network information flows (stage 2), and network signalling protocols to support wireless access aspects of PCS supplementary services.

**•Personal Communications Terminology - Final Editing for Publication**

**•Standards Requirement for a UIM for PCS · 4Q95**

This specification defines the interface between the User Identity Module (UIM) and the Radio Personal Terminal (RPT) for use by a PCS network. It also defines those aspects of the internal organization of the UIM which are needed to provide proper information to the network. This is to ensure inter-operability between a UIM and an RPT independent of equipment manufacturer and network operator.

**•IN Capabilities for CS-1 · 4Q95**

**•IN Capabilities for CS 2 - 4Q97**

**•4Kb/s Speech Coding Standard - Performance Characteristics and Algorithms 3Q98**

**TIA Standards in Progress**

**•Air Interface Privacy and Authentication Requirements**

**•Personal Communications Service Description for 1800 MHz (PN-3168)**

This document covers the service description for Stage 1 of 1800 MHz.

**•Personal Communication Service Description for 1800 MHz, revision A (PN-3369)**

This document covers the service description for Stage 1 of 1800 MHz.

Personal Communications System Requirements for 1800 MHz (PN-3167)

This document focuses on the system requirements.

**•Radio System-PCS (A-Interface) Requirements for 1800 MHz (PN-3307)**

This document focuses on the A-Interface Requirements for PCS.

**•PCS Network Reference Model I(s) for 1800 MHz (PN-316g)**

This document describes the network reference model for 1800 MHz.

**•PCS Network Reference Model I(s) for 1800 MHz (PN-3346)**

This document describes the network reference model for 1800 MHz.

**•SS7 Based A-Interface (PN 3343)**

This document covers signaling.

**•ISDN-Based A-Interface Stage 2 & 3 (PN-3344)**

This document covers signaling.

**•Intersystem Operations Between PCS 1800 MHz Networks, Based on IS-41 Map (PN-3341)**

This document covers intersystem operations.

**•PCN to PCN Intersystem Operations Based on DCSM 1900 (PN-3342)**

This document covers intersystem operations.

**•Intersystem Networking (PN-3212)**

This document covers intersystem operations.

**•Internetwork Operations for PCS 1800 MHz Networks with Other Networks (PN-3211)**

This document covers intersystem operations.

**•SS7 Signaling Network Routing (PN-3513)**

This document covers intersystem operations.

**•PCS 1800 MHz Air Interface Standards (PN-3342)**

This document covers air interface.

Table I also shows the completed PCS standards and those in progress in TIA.

**Standards in Progress in the T1/Tia Joint Technical Committee (JTC)**

The JTC is developing seven air interface technology standards. The following describes each technology and the status of the standardization effort. The information below will be updated as appropriate in the future.

- IS-95-Based CDMA** - A 1.25 MHz Spread Spectrum CDMA air interface for the PCS spectrum, suitable for high-and low-mobility, licensed-band applications, handling various **cell** sizes. It is a derivative of the TIA IS95 CDMA technology from 800 MHz cellular, supports soft hand-off, uses variable-rate speech coders for capacity, and supports a 13.3 Kbps user information rate. **Approved on April 21, 1995 by both Committee TI and TIA for publication as an ANSI standard and is in the process of being forwarded to ANSI for approval (ANSI J-STD-008).**
  
- DCS-BASED TDMA** - An eight-timeslot TDMA air interface suitable for high-and low-mobility and for large and small-cell licensed-band applications which is a derivative of Digital Cellular System (DCS) 1800, the frequency-shifted variant, of the Global system for Mobile communications (GSM) 900 MHz air interface. The proposal supports the use of multiple codecs (up to 16). **Approved on Feb. 3, 1995 by both Committee TI and TIA for publication as an ANSI standard and is in the process of being forwarded to ANSI for approval (ANSI J-STD-007).**
  
- IS-54 (IS-136)-Based TDMA** - A three-timeslot TDMA air interface for high-and low-mobility, licensed-band applications, capable of handling various cell sizes; extendible to six-timeslot TDMA with halfrate speech codecs; and which is a derivative of TIA Interim Standard IS-54 technology from 800 MHz cellular. **Approved on April 21, 1995 by both Committee TI and TIA for publication as ANSI standards and are in the process of being forwarded to ANSI for approval (ANSI J-STD-011,010,009).**
  
- Composite CDMA/TDMA** - A composite Code Division Multiple Access (CDMA)/TDMA TDD air interface for large-cell, licensed-band, applications and small-cell, unlicensed-band applications. CDMA is used between cells and TDMA within cells. The proposal is based upon a technology that has received a Federal Communications Commission (FCC) "Pioneer's Preference" award of the New York Major Trading Area (MTA). **Approved by Committee TI as an ANSI Trial-Use standard on August 4, 1995 and by TIA as an Interim standard.**
  
- PACS TDMA** - The Personal Access Communications System (PACS) proposal covers both licensed and unlicensed band operations. For the licensed band, the specification is derived from the Bellcore-specified Wireless Access Communications System (WACS). There are two annexes for the unlicensed band, one based on the Japanese Personal Handy Phone System (PHS), and the other on a derivative of WACS. It is an eight-timeslot Time Division Multiple Access (TDMA) air interface with a Frequency Division Duplex (FDD) mode for small-cell, licensedband applications, and a Time Division Duplex (TDD) mode for small-cell, unlicensed-band applications. **Approved on August 4, 1995 by both Committee TI and TIA for publication as an ANSI standard and is in the process of being forwarded to ANSI for approval (ANSI J-STD-014.)**
  
- Wideband CDMA** - A 5 MHz CDAM air interface for large-and small cell licensed-band applications. The basis of this proposal is derived from wideband technologies supporting the aggregation of traffic channels within a radio frequency (RF) channel to support higher data rates. **Approved by Committee TI as an ANSI Trial-Use standard on August 4, 1995 and by TIA as an Interim standard.**
  
- DECT-Based TDMA** - A twelve-timeslot TDMA air interface for smallcell applications which is derived from the Digital European Cordless Telephone Standard. Work on a proposal for



operation in the unlicensed band is being undertaken through a cooperative effort with another TIA Engineering Committee.

### **Program Management**

·TUPI established a program management plan and team with representatives from all Technical Subcommittees in TI working on PCS, and representatives from other standards groups, TIA TR 46 and IEEE, and from the Personal Communications Industry Association (PCIA); formerly Telocator. The team has issued a comprehensive plan for PCS standards development. The fourth issue was in April 1995 (TIP1/95-098).

·**Program Management of Standards for Personal Communications - TR No. 26, Nov. 1993** - This report is a program management guide for the development of Personal Communications Standards. The objective is to indicate the areas of needed standardization, and the responsible standards bodies, provide agreed upon schedules and priorities, and provide a means for tracking the status of standards development.

·**Program Management of Standards for Complex Projects No. 29, Jan. 1994** - This document is intended to serve as a program management guide for the development of standards plans for complex projects. A complex project is one which potentially involves multiple standards bodies and encompasses multiple technical and administrative issues.

The TI committees contribute regularly to the ITU, through the appropriate State Department groups, to the work on UPT and on Future Public Land Mobile Telecommunications Systems (FPLMTS).

The Personal Communications Industry Association (PCIA formerly Telocator) is an association promoting PCS and is very active with marketing, consumer affairs, regulatory activities and technical committees. PCIA does not develop standards but does provide service descriptions and user requirements as input to the standards groups.

### **4.3.2 Canada**

On Nov. 29, 1994 the Canadian Government department "Industry Canada" received 29 responses to a Canada Gazette Notice seeking public comment on proposed policy to introduce 2 GHz PCS service. After considering the inputs, the government department announced the policy and band allocations, and called for license applications in a further Canada Gazette issued June 1995.

The new policy designates three 30 MHz, and three 10 MHz spectrum blocks within the 2 GHz range for licensed PCS systems; maintaining 20 MHz for licensed-exempt devices; this spectrum allocation is compatible with that adopted by the US. It was also stipulated that established carriers (e.g. cellular) will have the opportunity to acquire additional spectrum to a maximum of 40 MHz. (Cellular carriers existing licenses provide 25 MHz of spectrum.) In addition the government did not stipulate a technology, but left it to the Service Providers to determine for themselves.

The 3-phase license process was identified: expressions of interest were to be received by June 19, 1995, followed by license filings and evaluation and selection. License criteria were spelled out and included emphasis on innovative new services, business viability, early deployment, and contribution to the economy, among a number of other requirements. License applications were to be filed by Sept. 15, 1995 and licenses were expected to be awarded by the end of 1995, for licensed services. Both National and Regional licenses are possible. No spectrum auctions were to be undertaken, and fixed service incumbents were given 2-3 \_years to vacate the re-assigned bands (depending on the service), with no public compensation.

The above 2 GHz service introduction followed an earlier PCS introduction based on CT2PIus, an enhanced CT2 evolution, in the 944-948 MHz band. This service resulted from a set of policy proposal issued by the Canadian government in late 1989, and a decision in May 1992 to implement a single standard CT2PIus service in Canada in this band. Four national licenses were awarded to services providers on December 22, 1992. More than 1000 Private systems were expected to be in service by the end of 1995.

### **4.3.3 Mexico**

Based on the Metrology/Standardization law published on July 1, 1992, the S.C.T. (Communication and Transportation Secretariat) constituted and integrated the National Consultative Committee of Information Technology and Communications Standardization, (NCC-IT & CS) on March 1993. This entity is responsible of elaborating the mandatory standards for the Telecommunications services/systems/equipment.

This NCC-IT & CS was divided into 4 Subcommittees with sub working groups:

- a) Radio Communications
  - Fixed and Land Mobile systems
  - Mobile Maritime and Aeronautical Services
  - Radio Amateur, Experimental and High Density Microwave
- b) Broadcasting
  - Radio
  - Television
- c) Telephone and Data
  - Terminal Equipment
  - Premises Distribution
  - Data Networks
  - Telecommunications Networks
- d) Satellite Services
  - Fixed Satellite Services
  - Mobile Satellite Services
    - Broadcast Satellite Services
    - Telegraph Services
  - Data Networks Services
  - Value Added Services

SECOFI (Commerce and Industrial Development Secretariat) also, on March 5/93 constituted and integrated the National Standardization Consultative Committee to deal with safety and commercial practices:

- a) Human Security
- b) Environmental Protection and Two of Commercial practices.

The Mexican Government published its new Telecommunications Law in June 1995. Also in June 1995 the Mexican and U.S. Governments signed an agreement for the use of the same frequency band for PCS along the common border.

#### **4.3.4 Chile**

Telecommunications and Transports Ministry through the Telecommunications Undersecretariat (Subtel) published on April 1995 the PCS Digital Cellular Mobile Telephony Terms of Reference which includes the decision on letting the carriers select the best technology (standard) for their specific projects. Chile allocated PCS spectrum based on the FCC plan.

#### **4.3.5 Argentina Standards Organization**

Argentina allocated PCS spectrum based on the FCC plan.

### **5. Conclusions**

Several CITELE countries are allocating spectrum for PCS in the 2 GHz band (1850-1990MHz) and allowing service providers to select the radio technology most appropriate for their application. In addition, United States standards bodies have completed six PCS air interface standards for this band based upon consideration of existing and new digital technology.

Common allocation of spectrum in this band in CITELE countries, along with selection from these standards, will allow obtaining the benefits of economy of scale and multiple vendors providing compatible equipment within a standard. Service providers selecting technology within a group of standards allows fitting the most appropriate technology to each environment and application but creates a great challenge to support interoperability (roaming and handover) between wireless systems. Standards to support roaming and handover between systems are being developed, but selection of air interface standards should be coordinated between communities of high common interest.

### **6. Proposals**

PCC.I strongly supports PCC.III in recommending common spectrum allocation for PCS in the 2 GHz band (1850-1990MHz). Service providers should be encouraged to select the radio technology most appropriate for their application based upon standards described in this CSD for 2 GHz PCS. Common allocation of spectrum in CITELE countries, along with selection from these standards, will allow obtaining the benefits of economy of scale and multiple vendors providing compatible equipment within a standard.

Selection of air interface standards should be coordinated between communities of high common interest so as to minimize potential difficulties with roaming and handover between systems.

### **7. Future Work**

The Wireless Service/Systems SWG of the Working Group on Standards Coordination has an ongoing Task Group on Future Public Land Mobile Telecommunications Systems (FPLMTS) which will follow the ITU-R activity and generate a CSD for the Americas that focuses on evolution I of second generation systems in the Americas to FPLMTS. The current CSD will be amended as necessary based on new developments, particularly with a focus on standards coordination to support roaming and handover.

### **ATTACHED**

Figures 1-6

Table 1



















**PCC.I/RES.18 (III-95)**

**ESTABLISHMENT OF A JOINT PCC.I, II, AND III  
WORKING GROUP ON LEGAL MATTERS**

The Third Meeting of the Permanent Consultative Committee I: Public Telecommunications Services,

**NOTING:**

That COM/CITEL RES.7 (Extra-93) created the Ad Hoc Working Group on Legal Matters and this Group has work underway of importance to all the PCCs;

That the Third Meeting of the PCC.I Ad Hoc Working Group on Legal Matters, held in Washington on April 25-26, 1995, considered it advisable to recommend the establishment of a single working group, in which associated members would also participate, to advise all the Permanent Consultative Committees (PCCs);

That the Third Meeting of the Permanent Consultative Committee III, held in Mexico City on August 21-25, 1995, adopted CCP.III/RES. 26 (III-95), entitled "Consideration of the Establishment of a Joint PCC.I, II, and III Ad Hoc Working Committee on Legal Matters,"

**CONSIDERING:**

That the Summit of the Americas asked CITEL to carry out a work program to evaluate legal means to promote liberalization, common standards, interoperability of networks and compatible use of the radio spectrum;

That creation of a Joint Working Group on Legal Matters would avoid duplication of effort among PCCs and provide for consideration of issues that are of common interest; and

That the terms of reference of any Joint Working Group on legal matters must be clearly drawn up to focus work on legal aspects concerning the work programs of the PCCs and avoid duplication of work in PCCs that concern technical, economic, regulatory policy, operational and other issues,

**RESOLVES:**

1. To request the Permanent Executive Committee of CITEL (COM/CITEL) at its meeting in December 1995, to replace the present Ad Hoc Working Group on Legal Matters with the creation of a Joint Working Group on Legal Matters, in accordance with Articles 93.11 and 99 of the CITEL Rules of Procedure.
2. To request COM/CITEL to appoint the chairman of this Joint Working Group, to hold the position for the same term of office as the Chairman of COM/CITEL.
3. To request COM/CITEL to authorize the scheduling of the first meeting of the Joint Working Group as soon as possible, following consultations with the chairmen of the three PCCs and the Executive Secretary of CITEL.
4. The Office of Vice Chairman of the Joint Working Group shall be held by three vice chairmen, designated, respectively, by the chairman of each of the three PCCs. The vice chairmen shall remain in their positions for the same term as the chairman of the respective PCC.
5. The three vice chairmen of the Joint Working Group shall report on the work of the group to their respective PCC. The chairman of the Joint Working Group shall report on the same work once a year to the chairmen of the three PCC at the COM/CITEL Coordination Committee Meeting.

**REQUESTS THE EXECUTIVE SECRETARY:**

1. To bring this matter to the attention of the Chairman of COM/CITEL so that he might include it on the agenda of the COM/CITEL meeting and invite comments from Members on the terms of reference for this Joint Working Group as far in advance of the meeting as possible.
2. To bring this matter to the attention of the chairmen of PCC.II and PCC.III, so that they might consider it, along with the chairman of PCC.I, at the next meeting of the COM/CITEL Coordination Committee Meeting.

**PCC.I/RES.19(III-95)**

**INTEGRATED SERVICES DIGITAL NETWORK (ISDN)**

The Third Meeting of the Permanent Consultative Committee I: Public Telecommunication Services,

**CONSIDERING:**

That the 34 heads of state who met at the Summit of the Americas, held in Miami from December 9 through December 11, 1994, asked the Inter-American Telecommunications Committee of the OAS (CITEL), in coordination with the subregional organizations, to compile and implement a working plan to evaluate the regulatory, technical and legal media to promote liberalization, the establishment of coordinated standards and the interoperability of the systems;

That COM/CITEL Resolution 8 (II-94) asked Permanent Consultative Committee I--and, by extension, the Working Group on Standards Coordination--to furnish documentation relative to ISDN in the course of 1995;

That standards coordinating activities must be considered an issue of interest within CITEL in order to expedite the interconnection of telecommunications systems of countries in the Americas;

That the PCC.I, through the Working Group on Standards Coordination, decided to start by examining standards for the international interface necessary to support ISDN; and

That information relative to services, interface and protocols of the countries in the region has been gathered to determine common elements,

**RECOGNIZING:**

That the Working Subgroup on Common Channel Signaling System (No. 7) has drafted a resolution on MTP and ISUP;

That the use of ISDN in the public telecommunications systems of CITEL member countries is considered to be of interest; and

That acceptance of the recommendations adopted and set forth in this resolution is voluntary,

**RESOLVES:**

1. To adopt annexes 1 and 2 (included in document WGSC-019-S as ANNEXES 1 and 2) as coordinated standards documents for the international signaling interface to support ISDN.

2. To adopt the ITU-T recommendations in Annex 3 (included in document WGSC-019-S as ANNEX 3) as a coordinated standards document for the Physical Interface between International Switching Centers to support ISDN.

3. To adopt as supplementary services between the international switching centers supported by ISDN those recommended by the ITU-T in Recommendation Q.767, which are indicated in Annex 4 (included in document WGSC-019-S as ANNEX 4).

## **ANNEXES**

### **1. SUMMARY**

This document has the purpose of establishing ITU-T recommendations relating to the signaling and physical interfaces for interconnection of CITELE member country centers and to offer ISDN services. It also includes a listing of additional end-to-end services supported by ISDN through the international interconnection networks.

### **2. INTRODUCTION**

Annexes 1, 2, 3 and 4 specify the ITU-T recommendations used with the pertinent exceptions.

## **ANNEX 1**

### **ISDN USER PART RECOMMENDATIONS FOR CITELE MEMBER COUNTRIES GATEWAY APPLICATION**

#### **1. INTRODUCTION**

This Annex indicates the ITU-T Recommendations that shall apply to the ISDN User Part (ISUP) for the international interconnection between CITELE member Countries. In addition, it indicates the exceptions that will apply to the referred to recommendations.

#### **2. RECOMMENDATIONS**

To follow the Recommendation made in CITELE Document No. WGSC-D 014-E "Standard Coordinated Document on SS No. 7 ISUP part, Annex 1".

Recommendations shall apply to the international Gateways:

#### **3. EXCEPTIONS: None**

## **ANNEX 2**

### **MESSAGE TRANSFER PART RECOMMENDATIONS FOR CITELE MEMBER COUNTRIES GATEWAY APPLICATION**

#### **1. INTRODUCTION**

This Annex indicates the ITU-T Recommendations that shall apply to the Message Transfer Part (MTP) of the Signalling System No. 7 for the international interconnection between CITELE member Countries. In addition, it indicates the exceptions that will apply to the referred to recommendations.

#### **2. RECOMMENDATIONS**

To follow the CITELE Standards Coordinated Document N. WGSC-D 014-E "Standards Coordinated Document on SS No. 7 Annex 2".

Recommendations shall apply to the international Gateways:

### **3.EXCEPTIONS: None**

## **ANNEX 3**

### **RECOMMENDATIONS ON THE PHYSICAL INTERFACE FOR CITELE MEMBER COUNTRIES TO BE APPLIED IN THE INTERNATIONAL CENTERS**

#### **1. INTRODUCTION**

This annex indicates the ITU-T recommendations that will be applied to the physical interface that will support the Common Channel Signaling System (CCSS No. 7) (General aspects of digital transmission systems; terminal equipment) for international connections among CITELE member countries.

This annex is based on ITU-T Recommendations G.703 (physical and electric characteristics of ranked digital interfaces) and ITU-T G.704 (Synchronous section frames used in primary and secondary hierarchical levels) adopted in Geneva on April 5, 1991.

All the requirements of these recommendations apply to this area, except in the cases explained below.

#### **2. RECOMMENDATIONS**

The following recommendations apply to the international centers:

-ITU-T Recommendation G.703. Physical and Electrical Characteristics of Digital Hierarchical Interfaces, 1991.

-ITU-T Recommendation G.704. Synchronous Frames used on Primary and Secondary Hierarchical Levels.

#### **3. EXCEPTIONS TO ITU-T RECOMMENDATION G.703.**

3.1G.703 "recommends" Note 1: Applies only to binary speeds of  $n \times 64$  Kbits/s ( $n = 2$ ) exclusively for interfaces of 2048 Kbit/s.

3.2G.703 "recommends" Note 2: Points 7,8, and 9 do not apply.

3.3G.703 "recommends" Note 3: Points 2, 3, 4, 5, 7, 8 and 9 do not apply.

3.4 G.703 "recommends" Note 4: Applies only to binary speeds of  $n \times 64$  Kbits/s ( $n = 2$ ) exclusively for interfaces of 2048 Kbit/s.

3.5G.703 section 1.1.3 (64 Kbit/s Interface - Functional requirements)

Except as indicated in the following paragraph:

"As specifically concerns sources of binary streams based on octet timing, in 1544 kbit/s digital networks, there must be at least one binary in each of the octets of a 64 kbit/s signal. In binary streams not based on octet timing, the 64 kbit/s signal may not have more than seven consecutive ZEROES."

3.6G.703, section 1.2.3.1.3 (Electric Characteristics of the 64 Kbit/s Contradirectional Interface).

Note does not apply:

”If necessary at the national level to provide a separate alarm indication through the interface, this can be accomplished by interrupting the 8 KHz timing signal in the direction in question, that is, inhibiting the code violations introduced into the corresponding compound timing signal (see further on).”

3.7G.703, section 2 (1544 Kbit/s Interface): Does not apply.

3.8G.703, section 3 (6312 Kbit/s Interface): Does not apply.

3.9G.703, section 4 (32064 Kbit/s Interface): Does not apply.

3.10 G.703, section 5 (44736 Kbit/s Interface): Does not apply.

3.11 G.703, section 7 (8448 Kbit/s Interface): Does not apply.

3.12 G.703, section 8 (34368 Kbit/s Interface): Does not apply.

3.13 G.703, section 9 (139264 Kbit/s Interface): Does not apply.

3.14 G.703, section 11 (97728 Kbit/s Interface): Does not apply.

3.15 G.703, section 12 (155520 Kbit/s Interface): Does not apply.

#### **4. EXCEPTIONS TO ITU-T RECOMMENDATION G.704.**

4.1G.704, section 2.1 (1544 kbit/s basic frame structure): Does not apply.

4.2 G.704, section 2.2 (6312 kbit/s basic frame structure): Does not apply.

4.3G.704, Table 4a/G.704. Assignment of frame bits numbered from 1 to 8 - Note 1): Applies except as it refers to use in the national area.

4.4G.704, Table 4a/G.704. Assignment of frame bits numbered from 1 to 8 - Note 4 iii): The clarification does not apply for national use.

4.5 G.704, section 2.4 (8448 kbit/s basic frame structure): Does not apply.

4.6G.704, section 3 (Characteristics of the frame structure that carries channels at different binary speeds in the 1544 kbit/s interface): Does not apply.

4.7G.704, section 4 (Characteristics of the frame structure that carries channels at different binary speeds in the 6312 kbit/s interface): Does not apply.

4.8G.704, section 6 (Characteristics of the frame structure that carries channels at different binary speeds in the 8448 kbit/s interface): Does not apply.

4.9G.704, ANNEX A (Examples of VCR implementation using routing registers).



The following points do not apply:

A.1 VCR-6 procedure for the 1544 kbit/s interface.

A.2 VCR-5 procedures for the 6312 kbit/s interface.

## ANNEX 4

### RECOMMENDATIONS FOR THE SUPPLEMENTARY SERVICES SUPPORTED IN INTERNATIONAL CONNECTIONS THROUGH ISDN FOR CITEL MEMBER COUNTRIES

#### 1. INTRODUCTION

ITU-T Recommendation Q.767 (2/91) [adopted in Annex 1 of PCC.1 Resolution 94/95 as a coordinated standards document for the International Signaling Interface to support ISDN] defines the supplementary services that are backed by the ISUP.

#### 2. SUPPLEMENTARY SERVICES

Within CITEL, the following supplementary services are recognized to be of interest for support by the ISUP in end-to-end international connections:

- Calling Line Identity Presentation (CLIP)/Presentation de la identificación de la línea llamante (PILL).
- Calling Line Identity Restriction (CLIR)/Restricción de la identificación de la línea llamante (RILL).
- Connected Line Identity Presentation (COLP)/Presentation de la identificación de la línea conectada (PILC).
- Connected Line Identity Restriction (COLR)/Restricción de la identificación de la línea conectada (RILC).
- Closed User Group (CUG)/Grupo Cerrado de Usuarios (GCU).
- User to User Services 1 implicit (UUS 1)/Señalización de Usuario a Usuario, servicio 1 (SUU 1).

The following supplementary services are implicitly supported as part of the basic procedures given in the recommendation.

- Subaddressing (SUB)/Subdireccionamiento (SUBD).
- Terminal Portability (TP)/Portabilidad del Terminal (PT).

#### 3 - EXCEPTIONS: None

### PCC.I/RES.20(III-95)

#### SIGNALLING SYSTEM NO.7 (SS No. 7)

The Third Meeting of the Permanent Consultative Committee I:Public Telecommunication Services,

#### CONSIDERING THAT:

Common Channel Signalling System No.7 (SS No.7) has been identified as a technical priority for CITEL as stated in COM/CITEL Resolution RES.8(II-94), which mandates PCC.I to provide Coordinated Standards Document by Mid-95;

The Work Plan of the WGSC defines the SS No.7 studies in a number of phases, the first of which is to study the MESSAGE TRANSFER PART (MTP) and the ISDN USER PART (ISUP) to be used for the International Connection across the Countries of the Region;

A number of administrations and Operating Companies of CITELE countries are in the process of or have expressed interest in introduction of SS No.7 in their Country of Network; and

SS No.7 is required for the introduction of other technologies such as IN, ISDN, etc.,

**TAKING INTO ACCOUNT THAT:**

Substantial amount of work has already been done by CITELE member Countries on the MTP and ISUP protocol areas (see for example Document WGSC-C016-E and references therein);

The ITU-T has already addressed the need to seek a common set of messages, parameters and procedures in the definition of ISUP to facilitate its deployment and minimize interworking complexities at International Boundaries; and

That the acceptance of adopted recommendations included in this resolution is Voluntary,

**RESOLVES:**

To endorse the attached Coordinated Standards Document (Doc. No. WSGC-D 014-E), that includes ISUP and MTP protocols of SS No.7.

**COORDINATED STANDARDS DOCUMENT ON  
COMMON CHANNEL SIGNALLING No. 7**

TITLE: Coordinated Standard Document on COMMON CHANNEL SIGNALING No.7 (parts ISDN User Part ISUP, and Message Transfer Part, MTP)

This Coordinated Standards Document addresses the Message Transfer Part (MTP) and ISDN User Part (ISUP) of the SS No.7 to be used at International boundaries among member Countries of the Region.

ANNEX 1 describes the ISUP portion and ANNEX 2 the MTP portion respectively.

**ANNEX 1**

**ISDN USER PART (ISUP) Recommendation for  
CITELE member Countries Gateway application**

**1. INTRODUCTION**

This Annex indicates the ITU-T Recommendations that shall apply to the ISDN User Part (ISUP) for the International Interconnection between CITELE member Countries.

In addition, it indicates the exceptions that will apply to the referred to recommendations.

**2. RECOMMENDATIONS**

The following ISUP Recommendations shall apply to the international Gateways:

- a)ITU-T Recommendation **Q.767**:Application of the ISDN User Part of the CCITT Signalling system No.7 for International ISDN Interconnections, 1990.
- b)That part of the 1993 version of ISDN User Part (recommendations **Q.761 to Q.764**) that applies to International Interconnections.

**3. EXCEPTIONS:** None

## ANNEX 2

### MESSAGE TRANSFER PART (MTP) Recommendation for CITEL Member Countries Gateway Application

#### 1. INTRODUCTION

This Annex indicates the ITU-T Recommendations that shall apply to the Message Transfer Part (MTP) for the International Interconnection between CITEL member Countries. In addition, it indicates the EXCEPTIONS that will apply to the referred recommendations.

#### 2. RECOMMENDATIONS

For International Interconnections, CITEL endorses the use of ITU-T MT Recommendations Q.701 to Q.707, 1993.

#### 3. EXCEPTIONS

The following exceptions shall apply to the mentioned Recommendations:

- Q.701, section 3.2.1: The Service Indicator shall not be used for routing purposes.
- Q.701, Section 7.2.6: This is a National option and therefore does not apply.
- Q.702, Section 2.1. and 2.2: Only the standards bit rate of 64 Kbits/S shall apply.
- Q.702, Section 5: Only Section 5.1. Signaling Data Link derived from 2048Knits/S digital path should apply.
- Q.702, Section 5.2. to 5.5: This section shall not apply.
- Q.702, Section 6.: This section does not apply.
- Q.703, Section 5.3.3: References to bit rates below 64 KBits/S do not apply.
- Q.703, Section 10: References to bit rates below 64Kbits/S do not apply.
- Q.703, Section 11.1.3: The note to this section is a National option and therefore does not apply.
- Q.703, Section 12.: Only the standards bit rate of 64Kbits/S shall apply. timer values for 4.8 Kbits/S do not apply.
- Q.704, Section 2.3.1: The Service Indicator shall not be used for routing purposes.
- Q.704, Section 2.3.5.1: National Signaling network options for handling of messages under signaling link congestion shall not apply.
- Q.704, Section 3.3.5.2: This is a National option and therefore does not apply.
- Q.704, 3.4.3: This is a National option and therefore does not apply.
- Q.704, Section 3.5.3: This is a National option and therefore does not apply.
- Q.704, Section 3.6.2.2: The reference to transfer restricted is a National option and therefore does not apply.
- Q.704, Section 3.8: National options for signaling network congestion do not apply.
- Q.704, Section 4.1.2: The reference to signaling route restricted procedures is a National option and therefore does not apply.
- Q.704, Section 4.7: This is a National option and therefore does not apply.
- Q.704, Section 6.2.3iii: The reference to transfer restricted is a national option and therefore does not apply.
- Q.704, Section 8: The reference to transfer restricted is a National option and therefore does not apply.
- Q.704, Section 11.2.4: This is a National option and therefore does not apply.

Q.q.704, Section 11.2.5: This is a National option and therefore does not apply.

Q.704, Section 12: Retain only the Basic Signaling Management procedures described in Section 12.2. All other Signalling Link Management procedures in this section (12.3. to 12.7.) are eliminated.

Q.704, Section 13.1: Eliminate references to restriction and transfer restricted. These are National options and therefore do not apply.

Q.704, Section 13.4: This is a National option and therefore does not apply.

Q/704, Sections 13.5.2: Transfer-restricted is a National option and therefore does not apply.

Q.704, Sections 13.7, 13.8 and 13.9: These sections describe National options and therefore do not apply.

Q.704, Section 15: Message descriptions related to:

- . Transfer restricted
- . Signalling-data-link-connection-order
- . Signaling-data-link-connection-acknowledgment
- . Signaling-route-set-congestion-test

are National options and therefore do not apply.

Q.705, Section 8.: Procedures to prevent unauthorized use of a signaling transfer point are optional and therefore do not apply.

Q.707, Section 2.2: Signaling link test shall be applied on activation/restoration. They shall not be applied periodically.

## **PCC.I/RES.21(III-95)**

### **ALTERNATIVE CALLING PROCEDURES ON THE INTERNATIONAL TELECOMMUNICATIONS NETWORK**

#### **HAVING SEEN:**

Numerals d and g of article 3 of the Statute of the Inter-American Telecommunications Commission (CITEL), about the objectives.

The resolution N° 21 of the Plenipotentiary Conference of the ITU, Kyoto - 1994: "Special Measures about Alternative Call Procedures on the International Telecommunications Network."

#### **CONSIDERING:**

The sovereign right of the Member Countries to establish rules and standards for their telecommunication services with the intent to reach the objectives for national policy;

The strategic role that the Member Countries attach to the development and quality improvement of their networks and basic telecommunication services, as an important factor for development;

The ever present importance that international telecommunication services have in the globalization of the economy and commerce, in which the information and communications are vital for strengthening of our countries position in this new environment giving them competitiveness and efficiency in their actions.

**TAKING INTO ACCOUNT** the Resolution mentioned in the HAVING SEEN paragraph above which states:

- a) the existence of some operating entities which utilize international telecommunication networks outside the scope of bilateral agreements between international telecommunication operators;

- b)that such practices adversely affect the revenue derived by some ITU Member States from their international telecommunication services;
- c)that such practices are viewed by some ITU Member States as a misuse of their telecommunication networks;
- d)that such practices infringe the national law of some Member States.

**RESOLVES:**

1. To recommend to its member States that, without prejudice to the sovereign rights of each state, they not authorize telecommunication services to other States unless the interested applicant can demonstrate that the applicant may provide such services under the other State's national regulatory system.

**IV. RECOMMENDATION**

**PCC.I/REC.1(III-95)**

**PLAN OF ACTION OF THE AD HOC WORKING GROUP ON  
VALUE ADDED SERVICES**

The Third Meeting of Permanent Consultative Committee I: Public Telecommunication Services,

**CONSIDERING:**

The importance attached to the topic of Value Added Services by the Heads of State, the directions given to CITELE by the Summit of the Americas; and

The need for CITELE to be responsive and report on the progress made to the 1996 Meeting of Senior Telecommunication Officials,

That PCC.I has established an Ad Hoc Working Group on Value Added Services and that this group needs the opportunity to organize itself and decide on its plan of action; and

That the Chairperson of PCC.I needs to report to COM/CITELE on this activity,

**TAKING INTO ACCOUNT:**

The work being carried out by other organizations, particularly the WTO negotiations on basic telecommunications,

**RECOMMENDS:**

That the Chairman of the Ad Hoc Group endeavors to hold a meeting of the group prior to COM/CITELE in order to develop a program of activities for the group;

That the Chairman coordinates the holding of the meeting with the Executive Secretary.

**INSTRUCTS:**

The Executive Secretary to determine if there exists within the 1995 budget funds that may be utilized to help support the holding of a meeting of the Ad Hoc Working Group and to work with the Chairman of the Ad Hoc Group to determine if it is possible to hold a meeting prior to COM/CITELE.