



**ORGANIZACION DE LOS ESTADOS AMERICANOS
ORGANIZATION OF AMERICAN STATES**

**Comisión Interamericana de Telecomunicaciones
Inter-American Telecommunication Commission**

**XI MEETING OF PERMANENT CONSULTATIVE
COMMITTEE I: TELECOMMUNICATIONS
March 24 to 28, 2007
Mendoza, Argentina**

**OEA/Ser.L/XVII.4.1
CCP.I-TEL/doc. 1213/07 rev.1
5 November 2007
Original: Spanish**

FINAL REPORT

(Item on the Agenda: 5)

(Document submitted by the Drafting Group)

TABLE OF CONTENTS

I.	AGENDA	4
II.	AUTHORITIES OF THE MEETING.....	4
III.	RESOLUTIONS	5
PCC.I/RES. 115 (XI-07)	5
	<i>CREATION OF A TECHNICAL NOTEBOOK ON PRACTICAL CASES OF INTERNET PROTOCOL TELEVISION (IPTV) SERVICES.....</i>	<i>5</i>
PCC.I/RES. 116 (XI-07)	6
	<i>STANDARDS COORDINATION DOCUMENT (CSD) FOR IETF RFC 3761 “THE E.164 TO UNIFORM RESOURCE IDENTIFIERS (URI) DYNAMIC DELEGATION DISCOVERY SYSTEM (DDDS) APPLICATION (ENUM)”</i>	<i>6</i>
PCC.I/RES. 117 (XI-07)	6
	<i>CREATION OF A TECHNICAL NOTEBOOK ON POWER LINE COMMUNICATION (PLC) TECHNOLOGY</i>	<i>6</i>
PCC.I/RES. 118 (XI-07)	6
	<i>SEMINAR ON BRIDGING THE STANDARDIZATION DIVIDE.....</i>	<i>6</i>
PCC.I/RES. 119 (XI-07)	6
	<i>CREATION OF A TECHNICAL NOTEBOOK ON CRITICAL TELECOMMUNICATION INFRASTRUCTURE PROTECTION</i>	<i>6</i>
PCC.I/RES. 120 (XI-07)	6
	<i>REVIEW OF THE EXISTING INTERNATIONAL TELECOMMUNICATIONS REGULATIONS.....</i>	<i>6</i>
PCC.I/RES. 121 (XI-07)	6
	<i>CREATION OF A TECHNICAL NOTEBOOK ON CONVERGENCE</i>	<i>6</i>
PCC.I/RES. 122 (XI-07)	6
	<i>CREATION OF A TECHNICAL NOTEBOOK ON PRACTICAL CASES OF APPLICATION AND USE OF REGULATORY ACCOUNTING</i>	<i>6</i>
PCC.I/RES. 123 (XI-07)	6
	<i>REGIONAL PREPARATORY MEETING FOR THE WORLD TELECOMMUNICATION STANDARDIZATION ASSEMBLY 2008</i>	<i>6</i>
PCC.I/RES. 124 (XI-07)	6
	<i>TECHNICAL NOTEBOOK OF ELECTRONIC NUMBERING (ENUM).....</i>	<i>6</i>
PCC.I/RES. 125 (XI-07)	6
	<i>CREATION OF A TECHNICAL NOTEBOOK ON THE OPERATION AND EXPERIENCES REGARDING THE INTRODUCTION OF NEW SERVICES IN A ENVIRONMENT OF CONVERGENCE</i>	<i>6</i>
PCC.I/RES. 126 (XI-07)	6
	<i>CREATION OF A TECHNICAL NOTEBOOK ON FRAUD IN THE PROVISION OF TELECOMMUNICATION SERVICES</i>	<i>6</i>

PCC.I/RES. 127 (XI-07)	6
<i>QUESTIONNAIRE ON UNIVERSAL ACCESS AND SERVICE DEVELOPMENT AND THE RELATED FUNDS FOR SUCH AIM</i>	6
PCC.I/RES. 128 (XI-07)	6
<i>STRUCTURE AND TERMS OF REFERENCE OF THE WORKING GROUPS OF PCC.I</i>	6
PCC.I/RES. 129 (XI-07)	6
<i>AGENDA, VENUE AND DATE FOR THE XII MEETING OF PCC.I</i>	6
IV. DECISIONS	6
V. LIST OF BASIC DOCUMENTS	6

FINAL REPORT

XI MEETING OF THE PERMANENT CONSULTATIVE COMMITTEE I (PCC.I)

The XI Meeting of the Permanent Consultative Committee I: Telecommunications was held in Mendoza, Argentina, September 25 to 28, 2007.

I. AGENDA¹

1. Approval of the agenda and schedule of activities.
2. Establishment of the Drafting Group for the final report.
3. Report and meeting of the Working Groups:
 - 3.1 Working Group on Technology (WGT)
 - 3.2 Working Group on Policy and Regulatory Considerations (WGPRC)
 - 3.3 Working Group on Network Operation and Service Provisioning (WGNOSP)
 - 3.4 Working Group on Development (WGD)
4. Agenda, venue and date for the XII Meeting of PCC.I.
5. Approval of the Final Report.
6. Other Business.

II. AUTHORITIES OF THE MEETING

Chair: Mr. Carlos Lisandro Salas (Argentina)

Alternate Chair: Mr. Sergio Scarabino (Argentina)

Executive Secretary: Mr. Clovis Baptista (OAS)

Drafting Group:

Chair: Mrs. Maria Florencia Forciniti (Argentina)

Members: Mr. Santiago Reyes Borda (Canada)
Mr. Víctor Martínez Sanchez (Paraguay)
Mr. Alan Thomas (United States of America)

¹ Documento CCP.I-TEL/doc. 1076/07 rev.1.

III. RESOLUTIONS

PCC.I/RES. 115 (XI-07) ²

CREATION OF A TECHNICAL NOTEBOOK ON PRACTICAL CASES OF INTERNET PROTOCOL TELEVISION (IPTV) SERVICES

The XI Meeting of Permanent Consultative Committee I: Telecommunications,

RECOGNIZING:

- a) That IPTV is producing major changes in the way in which video and multimedia digital services are provided, promoting the development of communications, and providing new tools that bring us ever closer to other communities in the world;
- b) That IPTV is becoming part of the development of communications, which are essential for individual and community growth;
- c) That advanced services and new technologies are essential tools for the Region's social and economic development, and
- d) That advanced services are in constant evolution and accordingly, we must continue to keep models of practical cases for consultation by the countries of the Region,

CONSIDERING:

That PCC.I is in a position to make a major contribution by making available technological models adopted by countries, providing updated information, and facilitating exchange and focused discussion,

RESOLVES:

1. To create and maintain a Technical Notebook on Practical Cases of IPTV Services in order to make available updated information that can facilitate consultation and discussion by countries of the Region. The table of contents of said Technical Notebook is included in the annex hereto.
2. To designate Mr. Jorge Zavleón, from the Administration of Argentina, as Rapporteur for this Technical Notebook. Mr. Zavleón will coordinate contributions presented and all aspects related to technologies, schematic models, and design.

INVITES:

The members of PCC.I to participate in and contribute to the creation of the Technical Notebook on practical cases of IPTV in the Region.

² CCP.I-TEL/doc. 1128/07 rev.1

ANNEX TO RESOLUTION PCC.I/RES. 115 (XI-07)

TECHNICAL NOTEBOOK

PRACTICAL CASES OF INTERNET PROTOCOL TELEVISION (IPTV) SERVICES

Table of Contents (to include among others)

1. Introduction
2. Practical cases of IPTV technology implementation
 - 2.1 Today's market
 - 2.2 Objective
 - 2.3 Technologies to be implemented
 - 2.4 Design architecture
 - 2.5 Standards utilized
 - 2.6 Analysis of traffic
 - 2.7 Services to be provided
3. Service projection
4. Experiences of countries of the Americas region
5. Conclusions and recommendations.

PCC.I/RES. 116 (XI-07) ³

**STANDARDS COORDINATION DOCUMENT (CSD) FOR IETF RFC 3761
“THE E.164 TO UNIFORM RESOURCE IDENTIFIERS (URI) DYNAMIC DELEGATION
DISCOVERY SYSTEM (DDDS) APPLICATION (ENUM)”**

The XI Meeting of the Permanent Consultative Committee I: Telecommunications,

CONSIDERING:

- a) The rapid developments towards the convergence of telecommunications and the Internet;
- b) That there is a need to acknowledge standards relating to the convergence of existing networks in a way that maintains interoperability across the Region, and that best serve the current and future needs of the users of these networks throughout the Region;
- c) That the Next Generation Network (NGN) effort at the ITU-T makes use of multiple broadband, QoS-enabled transport technologies and in which service-related functions are independent from underlying transport-related technologies;
- d) That there is consensus that new forms of communication are fundamentally transforming the way in which people, communities, businesses and governments interact with each other;
- e) That there will be a change from predominantly circuit-switched to packet-based information transport, and
- f) That this change will provide the end user with the ability to more efficiently receive multimedia services, including e-mails, file transfers, messaging and distribution services,

RECOGNIZING:

- a) That Internet Protocol (IP) has now evolved beyond data-only networks to encompass an integrated, converged world of voice and data communication;
- b) That there is a need for a smooth transition to Next Generation Networks (NGN);
- c) That the Internet Engineering Task Force (IETF) is the preeminent body for globally accepted standards for Internet protocols, and has developed ENUM as one of the protocols to allow the communication and interconnection of distinctly different networks;
- d) That the ITU plays an administrative role in validating a country's e164.arpa ENUM delegation to ensure that only the government or a country's designated Number Administration can authorize its country code be placed in the ENUM TLD;
- e) That ENUM contains validation and verification components that maintain privacy and security of end user and network operator data;

³ CCP.I-TEL/doc. 1158/07

f) That ENUM is the protocol used for mapping ITU-T Recommendation E.164 telephone numbers into the Domain Name System (DNS), and that will be used to enable convergence;

g) That this draft Resolution was circulated to Member States through the CITEL Secretariat for consultation and no comments were received,

RESOLVES:

1. To endorse IETF RFC 3761, “The E.164 to Uniform Resource Identifiers (URI) Dynamic Delegation Discovery System (DDDS) Application (ENUM)”, with no deletions, additions or modifications; and,

2. That the Rapporteur Group on Standards Coordination continue to monitor the IETF ENUM developments and determine their applicability for the Americas as this work evolves.

ANNEX TO RESOLUTION PCC.I/RES. 116 (XI-07)

STANDARDS COORDINATION DOCUMENT (CSD) FOR IETF RFC 3761 “THE E.164 TO UNIFORM RESOURCE IDENTIFIERS (URI) DYNAMIC DELEGATION DISCOVERY SYSTEM (DDDS) APPLICATION (ENUM)”

Executive Summary

The Working Group on Technology has addressed IP based technologies as part of its studies of standards for Next Generation Networks (NGN), Services, Signaling, and Operations as they relate to the service access needs of the Americas. Part of this work has included the monitoring of the work of the Internet Engineering Task Force (IETF).

The ENUM protocol developed by the Internet Engineering Task Force (IETF) unifies traditional telephony and next-generation IP networks, and provides a critical framework for mapping and processing diverse network addresses. ENUM maps the E.164 telephone number — the most basic and commonly-used communications address — into a Universal Resource Identifier (URI) that can be used across many different devices and IP based applications (voice, fax, mobile, e-mail, text messaging, location-based services and the Internet).

1. INTRODUCTION

This document is based on discussions that have taken place at the Permanent Consultative Committee I: Telecommunications. In 2003, a Rapporteur Group on Communications Network Management and Operations was formed (PCC.I/RES. 18 (II-03)), with several Rapporteur Groups established within the Working Group on Standards Coordination. Three of the Rapporteur groups (Fixed and Mobile Services and Network Signaling, Transport Infrastructure, and Communications Network Management and Operations) contained terms of reference related to the consideration of protocol standards required for interconnectivity and interoperability of existing and future communications networks (wireline and wireless) across the Region; ultimately this was to result in the emergence of a single, seamless network, and help identify and evaluate technical issues relating to the standards required to support interconnectivity and interoperability of existing and future transport networks across the Region.

Ultimately, this was to result in the emergence of an end-to-end optical network. This work was to draw primarily on the work of existing standards-setting bodies, including the ITU-T, and other fora as appropriate.

As part of the Standards Coordination work plan, it was established at the III PCC.I Meeting (2003) doc.184/03 rev.2 that PCC.I would consider the adoption of a Standards Coordination Document (CSD) on telephone number mapping (ENUM).

Also, during the PCC.I Number Portability Workshop, September 20, 2005, Washington D.C., the use of the ENUM protocol was presented and discussed as one of the enablers that will facilitate the implementation and management of number portability in a converged communications environment (CCP.I-TEL/doc. 0723/07). At the X PCC.I Meeting (2007) in Buenos Aires, a review of the ENUM standard was presented (CCP.I-TEL/doc. 0995/07). This document described the motivation for creating the ENUM mapping, the content of the standard, and the advantages of using ENUM for Next Generation Networks.

2. BACKGROUND

The ENUM protocol, published in the Internet Engineering Task Force (IETF) standard document RFC 3761, is used for mapping ITU-T Recommendation E.164 telephone numbers into the Domain Name System (DNS).

The ENUM protocol uses what are called naming authority pointer (NAPTR) DNS resource records to identify the available methods or services for contacting a specific network node identified through a Recommendation E.164 number. The ENUM protocol defines and uses a specific type of NAPTR service with the mnemonic "E2U" (E.164 to URI Resolution).

The result of an ENUM query can be one or more Uniform Resource Identifiers (URIs) with their order of processing and preference indicated by values in the naming authority pointer (NAPTR) records. These URIs are then used to reference resources or services associated with the E.164 number. Possible examples of resources or services include fax number, mobile number, e-mail address, GPS coordinates, phone redirection services, unified messaging services, voice mail, and public key for asymmetric encryption applications.

3. CONCLUSION

The Working Group on Technology recommends that PCC.I endorse IETF RFC 3761, "The E.164 to Uniform Resource Identifiers (URI) Dynamic Delegation Discovery System (DDDS) Application (ENUM)".

4. FUTURE WORK

The Rapporteur Group on Standards Coordination will continue to monitor activities associated with IETF RFC 3761 on ENUM.

5. RESOURCE DOCUMENTS

[1] "ENUM" Resolution 49, World Telecommunication Standardization Assembly (WTSA) October 2004, Florianopolis, Brazil.

- [2] “The E.164 to Uniform Resource Identifiers (URI) Dynamic Delegation Discovery System (DDDS) Application (ENUM)” IETF RFC 3761.
- [3] “Final Report and Addendum 1, Rapporteur Groups Mandates, Terms of Reference and Work Plans”. II Permanent Consultative Committee I: Telecommunications Standardization, April 7 to 10, 2003, Ciudad de Guatemala, Guatemala.
- [4] “Final Report – Structure and Terms of Reference of the Working Groups of PCC.I” PCC.I/RES.104 (IX-06). IX Meeting of Permanent Consultative Committee I: Telecommunications, September 12 to 15, 2006, Buenos Aires, Argentina.
- [5] “Final Report” doc. CCP.I-TEL/doc. 184/03 rev.2. III Meeting of Permanent Consultative Committee I: Telecommunications Standardization, April 7 to 10, 2003, Ciudad de Guatemala, Guatemala.
- [6] “Creation of a Technical Notebook on Next Generation Network Standards” PCC.I/RES.17 (II-03) III Meeting of Permanent Consultative Committee I: Telecommunications Standardization, April 7 to 10, 2003, Ciudad de Guatemala, Guatemala.
- [7] “Numbering” Electronic Bulletin Number 32 CITELE – February 2007.
- [8] “Final Report” VI Permanent Consultative Committee I: Telecommunications Standardization, April 11 to 14, 2005, Tegucigalpa, Honduras.
- [9] “Standardizing Number Portability as Networks Converge” Document CCP.I-TEL/doc. 723/05, Number Portability Workshop, VII Meeting of the Permanent Consultative Committee I, 20 September 2005, Washington DC., United States of America.
- [10] “ENUM”, Document CCP.I-TEL/doc. 0995/07. X Meeting of the Permanent Consultative Committee I (2007), Buenos Aires, Argentina.

PCC.I/RES. 117 (XI-07) ⁴

CREATION OF A TECHNICAL NOTEBOOK ON POWER LINE COMMUNICATION (PLC) TECHNOLOGY

The XI Meeting of the Permanent Consultative Committee I: Telecommunications,

RECOGNIZING:

- a) That the Power Line Communication (PLC) technology is producing important changes in the way digital services are provided, stimulating the progress of communications by offering new tools that bring us more and more close to other communities of the world;

⁴ CCP.I-TEL/doc. 1169/07 rev.2

- b) That the PLC technology is now implicated in progress of communications, critical for the development of people and communities;
- c) That advanced services and new technologies are an essential tool in the social and financial development of the Region;
- d) That advanced services and new technologies are constantly evolving and it is therefore necessary to maintain study case models to serve the countries of the Region,

CONSIDERING:

That the PCC.I is capable of performing an important contribution, providing models adopted by the countries for their technologies, supplying updated information and easing the exchange and localized debate,

RESOLVES:

- 1. To create and maintain a Technical Notebook on Power Line Communication (PLC) Technology in order to provide updated information that will ease both the consultation of the countries of the Region and the debate. The Table of Contents of this Technical Notebook is described in the Annex to this Resolution.
- 2. To designate Mrs. Josefina Cano, of the Administration of Canada, as Coordinator of the Technical Notebook on PLC Technology Case Studies, who will have as terms of reference the coordination of the contributions presented and everything regarding technologies, schematic models and design.
- 3. To request Administrations to provide information to this Technical Notebook.

INVITES:

Members of the PCC.I to participate and contribute in the development of this Technical Notebook.

ANNEX TO RESOLUTION PCC.I/RES.117 (XI-07)

TECHNICAL NOTEBOOK

POWER LINE COMMUNICATION (PLC) TECHNOLOGY

Table of Contents (to include among others)

- 1. Introduction
- 2. Case studies of PLC technology implementation
 - 2.1 Background
 - 2.2 Current market
 - 2.3 Objective
 - 2.4 Technologies to implement

- 2.5 Design architecture
 - 2.6 Standards used
 - 2.7 Network statistics
 - 2.8 Quality of service
 - 2.9 Advantages and disadvantages
 - 2.10 Traffic analysis
 - 2.11 Services to provide
- 3. Technology projection
 - 4. Experiences in the countries of the Americas region
 - 5. Conclusions and recommendations.

PCC.I/RES. 118 (XI-07) ⁵

SEMINAR ON BRIDGING THE STANDARDIZATION DIVIDE

The XI Meeting of the Permanent Consultative Committee I: Telecommunications,

RECOGNIZING:

- a) That Telecommunication standardization has evolved as a result of the interconnection challenges between and among operators and the subsequent proliferation of equipment by manufacturers;
- b) That new technologies and convergence in information and communication technologies (ICT) have created major standardization challenges for all stakeholders, particularly in fields such as NGN, multimedia, Voice over IP (VoIP), IPTV, and so on;
- c) That in addition to the standardization implications of these new “disruptive technologies”, regulation and technical developmental issues must also be taken into account,

FURTHER RECOGNIZING:

- a) That the Strategic Plan for the International Telecommunication Union for the period 2008-2011 commissions the ITU-T to provide support and assistance to the members, particularly developing countries, regarding standardization, information and communication network infrastructure and applications, especially aiming at reducing the digital divide, providing training, as well as producing the relevant educational materials for capacity building;
- b) That the World Telecommunication Standardization Assembly adopted Resolutions 44, 53, 54, as well as Resolution 17, in order to help reduce the gap between developing and developed countries regarding standardization;

⁵ CCP.I-TEL/doc. 1210/07

c) That the CITEL PCC.I standards coordination process has focused its efforts to reduce the standardization divide through information sharing in workshops on technologies and standards, the archived material in the NGN Technical Notebook, the creation of Standards Coordination Documents (CSD) and PCC.I approval of resolutions endorsing standards for the Americas region,

NOTING:

That the International Telecommunication Union's Telecommunication Standardization Sector (ITU-T) is the preminent body for globally accepted standards for telecommunications,

RESOLVES:

To instruct PCC.I Working Group Chairs to ensure that proper account is taken of the material presented in the Seminar on Bridging the Standardization Divide when developing their work projects and that the appropriate aspects are addressed in their on-going Work Plans.

PCC.I/RES. 119 (XI-07) ⁶

**CREATION OF A TECHNICAL NOTEBOOK ON CRITICAL TELECOMMUNICATION
INFRASTRUCTURE PROTECTION**

The XI Meeting of Permanent Consultative Committee I: Telecommunications,

CONSIDERING:

- a) That the telecommunication infrastructures (critical infrastructures) could be damaged, destroyed, or disturbed by terrorist acts, natural disasters, thoughtlessness, accidents, piracy, criminal activities and ill intentioned behaviors;
- b) The fast technological evolution and the resulting offer of advanced services;
- c) The high dependence of all society sectors on the telecommunication infrastructure;
- d) The critical infrastructures interdependence, which nowadays means that a disturbance in one infrastructure normally affects other infrastructures,

RECOGNIZING:

- a) That the society and the companies have become critically dependent on telecommunications and that the amount of business performed through that infrastructure is really huge;
- b) That the maintenance of the critical telecommunications infrastructure is carried out by private companies;

⁶ CCP.I-TEL/doc.1097/07 rev.2

- c) The need for protecting the telecommunications infrastructure, due to the rapid increase of its use by final users, industries, governments, and even by other infrastructures;
- d) That the effective protection of the critical infrastructures demands worldwide communication, coordination and cooperation among all the interested parties,

RESOLVES:

1. To create a Technical Notebook on Critical Telecommunication Infrastructure Protection to share strategies, best practices, frameworks, experiences and policies, as a living document, with on-going updates to be a reference for the CITEL Members States.
2. To approve the structure included in Annex to this Resolution for the Technical Notebook on Critical Telecommunication Infrastructure Protection.
3. To designate the Administration of Brazil as coordinator of this Technical Notebook.

INVITES:

The Rapporteur Group on Cybersecurity and Critical Infrastructure of the PCC.I Working Group on Policy and Regulatory Considerations:

1. To work together with the CITEL Members States to collect and organize the information on Critical Telecommunication Infrastructure Protection, and
2. To develop the Technical Notebook on Critical Telecommunication Infrastructure Protection, so as to :
 - i. Consolidate the information on the issue already submitted to CCP.I.;
 - ii. identify recommendations of the ITU and other pertinent organizations, and
 - iii. assess and recommend new issues in this Technical Notebook.

ANNEX TO RESOLUTION PCC.I/RES. 119 (XI-07)

TECHNICAL NOTEBOOK

**CRITICAL TELECOMMUNICATION
INFRASTRUCTURE PROTECTION**

Table of Contents (to include among others)

- 1 Introduction
 - 1.1 Motivation
 - 1.2 Discussion about the needs
 - 1.3 Study constraints

2	Critical Infrastructure Protection Strategies
2.1	Country A
2.2	Country B
...	
3	Critical Telecommunication Infrastructure Protection Issues
4	Conclusions
5	Acronyms
6	References

PCC.I/RES. 120 (XI-07) ⁷

REVIEW OF THE EXISTING INTERNATIONAL TELECOMMUNICATIONS REGULATIONS

The XI Meeting of the Permanent Consultative Committee I: Telecommunications,

CONSIDERING:

- a) That the Plenipotentiary Conference 2006 (PP-06) adopted Resolution 146, “Review of the International Telecommunications Regulations (ITRs);
- b) That the ITU membership resolved *inter alia*;

“that a review of the ITRs should be carried out

that ITU-T should undertake a review of the existing ITRs, engaging with other sectors as may be required, with the ITU-T as the focal point”,

RECOGNIZING:

- a) That the TSB Director established an Expert Group to undertake the review of the existing ITRs;
- b) That the terms of reference for the Expert Group includes the following term:

“the review may include the identification, to the extent practicable, of how the ITRs are currently used by Member States or Sector Members (for example, which provisions countries and operators rely on for the purpose of facilitating the exchange of international telecommunication traffic, timely payments, service provision).”,

RESOLVES:

To recommend the Expert Group:

⁷ CCP.I-TEL/doc. 1165/07 rev.2

- a) To undertake a detailed evaluation on how the ITRs are currently used by Member States and Sector Members in order to identify the current utility, specially its strengths and weaknesses, of the treaty in its existing form; and,
- b) To give particular attention to the implications of transferring technical ITR provisions to a broad and administrative structure like the Constitution and Convention of the ITU, in order to avoid unintended negative consequences.

INSTRUCTS THE EXECUTIVE SECRETARY:

To convey this Resolution to the ITU-T Director.

PCC.I/RES. 121 (XI-07) ⁸

CREATION OF A TECHNICAL NOTEBOOK ON CONVERGENCE

La XI Meeting of Permanent Consultative Committee I: Telecommunications,

RECOGNIZING:

- a) That network and service convergence is a reality our countries are facing and at the same time it demands important changes in the way services are provided to users;
- b) That services and telecommunications networks are in constant development and therefore it is necessary to put as much information as possible at disposal of the countries of the Region for consultation;
- c) That convergence must be understood as a historical opportunity to motivate competition environment in the sector for the user's benefit,

CONSIDERING:

That PCC.I is at a position where it can make an important contribution, by providing models adopted by countries in terms of technology, services provision and integration as well as their regulation, and providing updated information facilitating exchange and focused debate,

RESOLVES:

1. To create and maintain a Technical Notebook on Convergence in order to provide information that facilitates the consultation of the countries of the Region as well as promotes the debate on this issue. The draft Table of Contents of this Technical Notebook is described in the Annex.
2. To designate the Rapporteur on Convergence, as coordinator of the Technical Notebook on Convergence. He will have as terms of reference the coordination of the contributions submitted by the Administrations and Associate Members of PCC.I.

⁸ PCC.I-TEL/doc. 1175/07 rev.2

INVITES:

PCC.I Administrations and associate members to participate and contribute on the creation of the Technical Notebook on Convergence in the Region.

ANNEX TO RESOLUTION PCC.I/RES.121 (XI-07)**TECHNICAL NOTEBOOK
CONVERGENCE****TABLE OF CONTENTS**

1. Introduction
2. Convergent services
3. Policies and regulatory aspects (economic aspects, interconnection and interoperability, quality of service, consumer protection, etc.)
4. Experiences on convergence
5. Conclusions and recommendations.

PCC.I/RES. 122 (XI-07) ⁹**CREATION OF A TECHNICAL NOTEBOOK ON PRACTICAL CASES OF APPLICATION
AND USE OF REGULATORY ACCOUNTING**

The XI Permanent Consultative Committee Meeting: Telecommunications.

CONSIDERING:

- a) The new mandate received by the IV CITEL Assembly, approved by CITEL RES. 55 (IV-06) Resolution;
- b) The new PCC.I structure mandates and terms of reference of the Working Groups, approved by Resolution PCC.I/RES. 104 (IX- 06),

RECOGNIZING:

⁹ CCP.I-TEL/doc. 1176/07

- a) That, for Regulatory Bodies, it is of fundamental importance to count on Economic Regulation tools so as to meet their objectives;
- b) That, among those objectives, the promotion of the Telecommunication market development, the protection of the users as well as the avoidance of anti-competitive practices and cross-subsidization;
- c) That, it is important to have relevant, homogeneous and transparent information;
- d) That, so as to meet the previous requirements, it would be extremely useful to gather information within the framework of CITEI, on the status of the Administrations related to economic regulation, specifically, to gather information on the arrangement of Regulatory Accounting systems,

BEARING IN MIND:

- a) That it is necessary to systematize the resulting information identifying the various alternatives applied to the Region, so it is useful to create a Technical Notebook on Practical Cases of Application and Use of Regulatory Accounting;
- b) Document CCP.I-TEL/doc. 1176/07;

RESOLVES:

1. To create and maintain a Technical Notebook on Practical Cases of Application and Use of Regulatory Accounting so as to provide updated information that will facilitate reference and debate to the countries of the Region.
2. To approve the Table of Contents of such Technical Notebook contained in the Annex to this Resolution.
3. To designate Argentina's Administration as the coordinator of such studies.
4. To request CITEI's Executive Secretary to distribute the Practical Notebook Table of Contents, so that the Member States can provide information on the status of Regulatory Accounting's application.
5. To present to the XII Meeting of PCC.I a progress report based on the answers to the questionnaire on Regulatory Accounting, submitted by the Administrations.

INVITES:

All PCC.I Members to participate and to provide relevant information to this Technical Notebook on Practical Cases of Application and Use of Regulatory Accounting.

ANNEX TO RESOLUTION PCC.I/RES. 122 (XI-07)

**TECHNICAL NOTEBOOK
PRACTICAL CASES OF APPLICATION AND USE OF REGULATORY ACCOUNTING**

Table of contents

1. Introduction
2. Definition
3. Objectives
4. Challenges set by the regulatory accounting
5. Status
6. Conclusions
7. References

PCC.I/RES. 123 (XI-07) ¹⁰

**REGIONAL PREPARATORY MEETING FOR THE WORLD TELECOMMUNICATION
STANDARDIZATION ASSEMBLY 2008**

The XI Meeting of Permanent Consultative Committee I: Telecommunications,

CONSIDERING:

- a) That the membership of the Standardization Sector of the International Telecommunication Union (ITU-T), especially from developing countries, has faced serious difficulties in participating and contributing effectively for the World Telecommunication Standardization Assemblies (WTSA);
- b) That the international telecommunication community has recognized in both WTSA-04 and the Plenipotentiary Conference 2006 (PP-06) the gap between developing and developed countries, and the difficulties in reaching equal participation in relevant discussions on standards brought before the Union;
- c) That regional discussions are of utmost importance to achieve global agreements and increase the opportunity of participation to all countries,

RECALLING:

- a) That article 18, No. 114 of the Constitution of the International Telecommunication Union (ITU) provides that the World Telecommunication Standardization Assemblies shall be convened every four years;
- b) That the next WTSA will take place from October 21st to 30th 2008;
- c) That Resolution 43 (Florianópolis, 2004) of the ITU Telecommunication Standardization Sector (ITU-T) considers that the consolidation of views at regional level, together with the opportunity for interregional discussions prior to the WTSA, has eased the task of reaching a consensus during the assembly, and that the coordination of preparations at regional level is consequently of great benefit to the Member States,

¹⁰ CCP.I-TEL/doc. 1098/07 rev.1

RECOGNIZING:

- a) That Resolution 123 (Rev. Antalya, 2006) of the ITU Plenipotentiary Conference instructs the Secretary-General and the Bureau Directors to work closely with each other in pursuing initiatives that assist in bridging the standardization gap between developing and developed countries;
- b) That Resolution 17 (Florianópolis, 2004) of the ITU-T highlights the multifarious difficulties encountered by the developing countries in ensuring their effective and efficient participation in the work of ITU-T, and resolves to request the Director of Telecommunication Standardization Bureau (TSB) to cooperate with the ITU regional offices, including the possibility of holding ITU-T meeting in the regions;
- c) That Resolution 44 (Florianópolis, 2004) of the ITU-T takes into account that the development of standards could benefit the telecommunication industry and both developing and developed countries, and proposes an action plan aimed at bridging the standardization gap between developed and developing countries to be implemented to the extent feasible without delay,

RESOLVES:

- 1. To request the Telecommunication Standardization Bureau (TSB) to organize the WTSA-08 Americas Preparatory Meeting in accordance with Resolution 43 (Florianópolis, 2004);
- 2. To propose that the WTSA-08 Americas Preparatory Meeting takes place from May 19th to 23rd 2008 in compliance with timeframe established in Resolution 43 (Florianópolis, 2004), i.e. not earlier than six months prior to the Assembly;

INSTRUCTS THE EXECUTIVE SECRETARY OF CITEL:

- 1. To take appropriate actions in order to consult with the Director of the Telecommunication Standardization Bureau (TSB) and the Regional Office for the Americas of the ITU on the organization of the WTSA-08 Americas regional Preparatory Meeting in accordance with *resolves* 1 and 2.
- 2. To inform all Member States the outcome of the consultation made to the TSB Director at the earliest convenience.

PCC.I/RES. 124 (XI-07) ¹¹

TECHNICAL NOTEBOOK OF ELECTRONIC NUMBERING (ENUM)

The XI Meeting of the Permanent Consultative Committee I: Telecommunication,

CONSIDERING:

- a) That Electronic Numbering (ENUM) is part of the convergence of circuit switched and packet networks;

¹¹ CCP.I-TEL/doc. 1152/07 rev.1

- b) That ENUM is defined by the Internet Engineering Task Force (IETF) and translates an E.164 number into Internet Domain Names (RFC 2916- September 2000);
- c) That ENUM allows the use of a traditional telephone number in the context of different communication media, e.g., e-mail, VoIP, and therefore could facilitate the penetration of new applications into the mass market easily;
- d) That ENUM allows to address an IP-based voice terminal from the PSTN and through the ENUM function, E.164 numbers can be used to provide calling users with a variety of addresses, including those used for phone, fax and e-mail, by which the called user can be contacted;
- e) The rapid evolution towards establishment of the standards and technologies for the Next Generation Network (NGN) which will be a fully converged IP-based global telecommunications platform providing seamless voice, data, image and video communication services over wireless, wireline, satellite, cable and optical fiber transport facilities,

TAKING INTO ACCOUNT:

- a) That the mandate of the Rapporteur Group of Numbering and Address is to identify and evaluate technical issues related to Numbering Plans for the network evolution and new services, and to meet the demand of numbering resources to support convergent networks, as well as creation of specific recommendations and Technical Notebooks;
- b) That the mandate of the Rapporteur Group of Numbering and Address includes the study and evaluate technical issues related to ENUM,

RESOLVES:

1. To create a Technical Notebook of Electronic Numbering (ENUM) to provide a source of information about technical and regulatory issues that will be available to CITEL PCC.I members for reference.
2. To designate the Rapporteur Group Numbering and Address of the Working Group on Network Operation and Service Provisioning:
 - a) To develop the scope of the Technical Notebook,
 - b) To develop a Table of Contents to organize ENUM information within the Notebook, and
 - c) To develop the Technical Notebook with relevant ENUM material by:
 - Consolidating relevant information already contributed to PCC.I, and
 - reviewing and recommending new additions to the Technical Notebook.

PCC.I/RES. 125 (XI-07) ¹²

¹² CCP.I-TEL/doc. 1164/07 rev.1

CREATION OF A TECHNICAL NOTEBOOK ON THE OPERATION AND EXPERIENCES REGARDING THE INTRODUCTION OF NEW SERVICES IN A ENVIRONMENT OF CONVERGENCE

The XI Meeting of Permanent Consultative Committee I: Telecommunications,

RECOGNIZING:

- a) That the convergence of services is allowing the provision of a wide range of additional services to incumbent telecommunication services;
- b) That service providers are in an ongoing search of strategies for the deployment and broadcast of their network capacities allowing the installment and successful provisioning of the new services;
- c) That the sharing of the experience on the installment and successful provisioning of new services may become into a virtuous circle for the creation and inclusion of non-incumbent services in the use of new capacities developed in the networks owing to convergence;
- d) That telecommunications services in an environment of convergence are in ongoing evolution and hence, it is important to study practical cases to be used as further reference by countries of the Region,

CONSIDERING:

That PCC.I is at a good position where it can make an important contribution by providing successful strategies and experiences in the effective deployment of new services including updated information, facilitating information exchange and focused debate,

RESOLVES:

- 1. To create and maintain a Technical Notebook on the operation and experiences regarding the introduction of new services in an environment of convergence so as to provide updated information facilitating the queries of the countries of the Region and the debate on successful strategies and experiences in the effective deployment of new services. The draft Table of Contents of this Technical Notebook is described in the Annex of this Resolution.
- 2. To appoint the Rapporteur of the Group on the New services Impact as Coordinator of this Technical Notebook, who will be responsible for the coordination of the contributions submitted by the Administrations and PCC.I Associate Members.

INVITES:

- 1. PCC.I Members to participate and contribute in the creation of this Technical Notebook.
- 2. Other PCC.I Working Groups to contribute to the development of this document.

ANNEX TO THE RESOLUTION PCC.I/RES. 125 (XI-07)

TECHNICAL NOTEBOOK
THE OPERATION AND EXPERIENCES REGARDING THE INTRODUCTION OF
NEW SERVICES IN A ENVIRONMENT OF CONVERGENCE
Table of Contents (to be included among others)

1. Introduction
2. Cases on operation and experiences regarding the introduction of new services in an environment of convergence for the following parties:
 - a. Users: Impact on education, experiences in complaints or usual problems as regards the use of the new services and technologies.
 - b. Technology vendors: Speed of development.
 - c. Commerce.
 - d. Service operators: Impact On the economy, improvement of Quality of Service (QoS). Efficiency in the Operation and Maintenance.
 - e. Bodies responsible for generating policies and the monitoring of the sector: social inclusion, such as services for physically handicapped, etc.
3. Conclusions y recommendations.

PCC.I/RES. 126 (XI-07) ¹³

**CREATION OF A TECHNICAL NOTEBOOK ON FRAUD IN THE PROVISION OF
TELECOMMUNICATION SERVICES**

The XI Meeting of the Permanent Consultative Committee I: Telecommunications,

RECOGNIZING:

- a) The impact of fraud on the provision of services in the Region;
- b) That Member States, operators and users are victims of fraud-perpetrators;
- c) That the losses for Member States restrict their investment on projects towards universal service provision;
- d) That companies' corporate image, operational performance and quality of service are affected;
- e) That through the tasks developed, an imperative need has been identified for the different players in the Region's sector to work jointly with the aim of sharing experiences, identifying best practices and, in general, sharing the "know how" among themselves,

CONSIDERING:

¹³ PCC.I-TEL/doc. 1212/07

That within the tasks of the PCC.I there is a mandate to create and spread recommendations to the Region's sector, and that regarding the specific case of fraud, this will be of great help as a consultation tool and a contribution to the telecommunications sector in the Region,

RESOLVES:

1. To create and maintain a Technical Notebook on Fraud in the provision of Telecommunications in the Region, with a table of contents including at least the following items:
 - Documents on the subject issued by CITELE in the latter years.
 - Fraud typologies.
 - Impacts of fraud.
 - Technological tools to minimize the impact of fraud.
 - Regulatory, legal and administrative tools to tackle fraud.
 - Questionnaires on fraud sent to the Region, responses and analysis.
 - Bodies conducting research on fraud.
 - Workshops on fraud control, presentations and conclusions.
 - Documents on fraud cases experienced by sector players in the Region.
 - Recommendations issued to the sector.
2. To appoint the Rapporteur of the Group on Fraud Control in Telecommunication Services, Mr. Giovanni Mancilla Gaona (Telefonica Colombia), to be the Coordinator of the Technical Notebook. He will have as terms of reference the coordination of submitted contributions and to organize information.
3. To present the evolution of the organization of the Technical Notebook during the next meeting of the PCC.I, to be known by the Region. It should include information on workshops conducted as well as other relevant information.

INVITES:

PCC.I Members to participate and contribute with documents for this Technical Notebook.

PCC.I/RES. 127 (XI-07) ¹⁴

**QUESTIONNAIRE ON UNIVERSAL ACCESS AND SERVICE DEVELOPMENT AND THE
RELATED FUNDS FOR SUCH AIM**

The XI Meeting of Permanent Consultative Meeting I: Telecommunications,

CONSIDERING:

- a) That it is convenient to have updated information to allow the identification of recommendations in the countries of the Region of regulatory policies and actions for an efficient implementation of universal access, access to people with disabilities, access in rural areas, etc;
- b) That there are works and research on universal access and service done by other organisms that are an excellent and unavoidable reference for the achievement of the aims pursued by the PCC.I,

¹⁴ PCC.I-TEL/doc. 1209/07

RESOLVES:

1. To request Member States Administrations to submit their contributions to enrich the questionnaire on universal access and service development and the related funds for such aim, up to one month before the XII PCC.I Meeting;
2. To instruct the reception of contributions of the Administrations to the Administration of Ecuador so as to submit a draft decision in the XII PCC.I Meeting, in coordination with the Working Group on Development chair and the respective rapporteur group

TO INSTRUCT THE EXECUTIVE SECRETARY:

The submission of the questionnaire in the Annex to the Member States Administrations, that are requested to send their contributions to Mr. Pablo Lopez (plopez@conatel.gov.ec) and/or Mr. Marco Trujillo (mtrujillo@conatel.gov.ec).

ANNEX TO THE RESOLUTION PCC.I /RES. 127 (XI-07)

QUESTIONNAIRE ON ACCESS AND UNIVERSAL SERVICE DEVELOPMENT AND THE RELATED FUNDS FOR SUCH AIM

SECTION ONE. ON UNIVERSAL SERVICE.

1. Does your country have any specific regulation on universal service? If affirmative, please include a brief overview.
2. How is universal service defined in your legislation?
3. Describe the services included in the scope of universal service. In case of any particular aspect regarding its provisioning, please mention.
4. Which are the policies, plans or established programs for the deployment of universal service? What would be its application framework?
5. Under what conditions does an operator provide universal service?
6. Mention the main achievements obtained after universal service implementation.
7. Is there any body in charge of management, monitoring and/or control of this universal service implementation? What legal base supports it? If there is any specific regulation, please describe its main characteristics.
8. Do service providers have any financial obligations (contributions, rates, tariffs) so as to obtain funds from the State in order to implement universal service? Which are these obligations? Please include regulatory reference when existing.

SECTION TWO. ON UNIVERSAL ACCESS

9. ¿Does your country's regulation include any specific norm on universal access? If affirmative, please include a brief description of it.
10. How is universal access defined in your legislation?
11. Describe the services included in the scope of universal access. In case of any particular aspect regarding its provisioning, please mention.
12. Which are the policies, plans or established programs for the implementation of universal access? What would be its application framework?
13. Under what conditions does an operator provide universal access?
14. Mention the main achievements obtained after universal access implementation.
15. Is there any body in charge of management, monitoring and/or control the implementation of universal access deployment? What legal base supports it? If there is any specific regulation, please describe its main characteristics.
16. Do service providers have any financial obligations (contributions, rates, tariffs) so as to obtain funds from the State in order to implement universal access? Which are these obligations? Please include regulatory reference when existing.

PCC.I/RES. 128 (XI-07) ¹⁵

STRUCTURE AND TERMS OF REFERENCE OF THE WORKING GROUPS OF PCC.I

The XI Meeting of the Permanent Consultative Committee I: Telecommunications,

CONSIDERING:

- a) The new mandate received from the IV Assembly, approved by Resolution CITEL RES. 55 (IV-06);
- b) The new structure of PCC.I and the mandates and terms of reference of the Working Groups approved by Resolution CCP.I/RES. 91 (VIII-06),

RESOLVES:

1. To approve the structure, mandate and Terms of Reference for the Working Groups of PCC.I as indicated below.
2. To derogate Resolution PCC.I/RES.104 (IX-06).

¹⁵ CCP.I-TEL/doc. 1214/07

ANNEX TO RESOLUTION PCC.I/RES. 128 (XI-07)

1. WORKING GROUP ON TECHNOLOGY ¹⁶

1.1 Rapporteur Group on Standards Coordination

Mandate:

To focus on the study of standards that are necessary for the smooth transition to Next Generation Networks (NGN). To address issues relating to the convergence of existing networks in a way that maintains interoperability across the Region. To make specific recommendations (Standards Coordination Documents, Technical Notebooks, etc.) that best serve the current and future needs of the users of these networks throughout the Region.

Terms of Reference:

- a) Identify and evaluate technical issues related to the service, architecture and protocol standards required for the interconnectivity and interoperability of existing and future communications networks (wireline and wireless) across the Region that will ultimately result in the emergence of a single, seamless network.
- b) Draw primarily on the work of existing standards-setting bodies, including the ITU-T, IETF, and other fora as appropriate.
- c) Recommend endorsement of standards that deal with, but are not limited to, the following topics:
 - Multimedia service definition and architectures;
 - Signalling requirements and protocols (converged networks);
 - IP-based services (Voice over IP, Video over IP, etc.);
 - Emergency services;
 - Network aspects of IMT-2000 and beyond (wireless Internet, harmonization and convergence, network control, mobility, roaming, etc.);
 - Interworking between traditional telecommunication networks and evolving networks;
 - Metropolitan and Long haul optical transport networks;
 - Access network transport (LANs, xDSL, Ethernet, cable modem, fiber, Wireless LANs, etc.);
 - Terminals (PC, TV, PDA, phone, codecs, etc.);
 - Management of communications services, networks and equipment;
 - Communications system security (lawful intercept, privacy, fraud prevention, cyber crime, sabotage, etc.);
 - Numbering, Naming and Addressing (ENUM);
 - Performance and QoS;
- d) Develop Technical Notebooks that best serve the current and future needs of the users of telecommunications networks throughout the Region;
- e) Identify, on a timely and ongoing basis, obstacles that could prevent full interoperability of networks throughout the Americas and to report on these to the Working Group on Technology;

¹⁶ CCP.I-TEL/doc. 938/06 rev.1

- f) Establish liaisons with other standards bodies and industry fora as necessary to progress the work.

1.2 Rapporteur Group on Network Infrastructure

Mandate:

To focus on the study of network infrastructure required to support secure, high-performance, network based delivery of personalized services (voice, data and multimedia) to end users – regardless of time and place. To address issues relating to the convergence of existing networks in a way that maintains interoperability across the Region. To make specific recommendations (Technical Notebooks, etc.) that best serve the current and future needs of the users of these networks throughout the Region.

Terms of Reference:

- a) Develop frameworks, architectures and scenarios to foster the enhanced understanding of new networks and related technologies in the region of the Americas - how they interrelate, and how they contribute to network and service convergence and evolution.
- b) Investigate, report on, and raise awareness of new network technologies, such as Next Generation Networks, Wide Area Ethernet, Broadband Access, and their application among the Member States of the Region.
- c) Develop Technical Notebooks and related guidelines that best serve the current and future needs of the users of telecommunications networks throughout the Region.
- d) Identify, on a timely and ongoing basis, obstacles that could prevent full interoperability of networks throughout the Americas and to report on these to the Working Group on Technology.
- e) Establish liaisons with other industry fora as necessary to progress the work.

1.3 Rapporteur Group on Advanced Services

Mandate:

To focus on the study of the development of next generation services, especially supported by IP and their impact in the Americas region; as well as providing information on these services to the countries of the Region. To promote projects geared towards facilitating the delivery of personalized services (voice, data and multimedia) to end users – regardless of time and place. To make specific recommendations (Technical Notebooks, etc.) that best serve the current and future needs of the users of these networks throughout the Region.

Terms of Reference:

- a) Develop studies on the development of next generation services in the region of the Americas.
- b) Investigate the impact on the implementation of new telecommunication services, particularly those supported by IP, such as IP Telephony, IPTV, Location, Push/Pull, Presence, Multimedia, and Emergency Communications Services - as well as providing information about these services to the countries of the Region.

- c) Develop Technical Notebooks and related guidelines that best serve the current and future needs of the users of telecommunications services throughout the Region.
- d) Identify, on a timely and ongoing basis, obstacles that could prevent full interoperability of services throughout the Americas and to report on these to the Working Group on Technology.
- e) Establish liaisons with other industry fora as necessary to progress the work.

2. WORKING GROUP ON POLICY AND REGULATORY CONSIDERATIONS¹⁷

2.1 Rapporteur Group on issues relative to Internet resources

Mandate:

To focus on the analysis of government policies and experiences in management of ccTLD and IP address blocks, including a comparative analysis of these experiences in order to identify “Best Practices” in the countries of the Region.

Terms of reference:

- a) Continue working with Member States and Associate States in collection of information on Internet resources, namely: ccTLD and IP address block management, including the activities of other competent organizations.
- b) Analyze regional policies on IP address block management.
- c) Follow up ICANN activities, especially the organization’s reform process.
- d) Follow up the tasks of the UN General Secretary Group for Internet Governance, in coordination with the Rapporteur Group on Telecommunications Economic Aspects.

2.2 Rapporteur Group on Telecommunications Economic Aspects

Mandate:

To develop studies on the economic aspects and tariff principles of the telecommunications systems, and to examine the need for new or adapted charging and accounting mechanisms for the provision of such services in the Region.

Terms of reference:

- a) Identify, analyze and evaluate cost models for the different telecommunication services, prioritizing the experience in the Region and the needs of member countries, with an ongoing evaluation of the impact of new technologies.

¹⁷ CCP.I-TEL/doc. 896/06 rev.2

- b) Identify, analyze and evaluate the economic aspects relative to new generation network-based services in the countries of the Region, considering their impact on the sector growth, their costs and potential savings.
- c) Study the economic aspects relative to tariffs such as rates, access charges, etc., considering the impact on new generation networks.
- d) Identify, analyze and evaluate the different factors relative to the activities in telecommunications, their impact on economic growth and income distribution.
- e) Study economic aspects associated with Internet in the Americas (International Internet Connectivity and Traffic Flow Methodologies).
- f) Study competitiveness in the telecommunications market, including the effects of anti competition practices and regulatory measures to prevent them.
- g) Take into account the activities of ITU-T Study Group 3, so that contributions from the region of the Americas can be submitted.
- h) Update the information included in the document called “CITEL Guidelines and Practices for Interconnection Regulation”

2.3 Rapporteur Group on Cybersecurity & Critical Infrastructure

Mandate:

To study the security aspects related to communication network development, its role in supporting other critical infrastructures, the role of the private sector in securing the communication network, and domestic and regional approaches required in the Americas region on this matter. Assessing the current work undertaken in the OAS, ITU, and other fora on issues pertaining to the security and critical infrastructure of communication networks across the Region. This issue should cover, but not be limited to:

- a) Developing domestic and regional approaches to network security, deployment strategies, information exchange, and outreach to the public and the private sector.
- b) Reviewing the various frameworks and guidelines on network and cyber security and their applicability within the Americas region.
- c) Fostering dialogue regarding the work of the ITU (i.e. Study Group 17) and other relevant fora on network and cyber security.

Terms of Reference:

- a) Develop domestic and regional approaches to network security, deployment strategies, information exchange, and outreach to the public and the private sector:
 - Collect regional best practices for network communication and infrastructure protection, taking into account ongoing activity in the ITU-D sector (question 22/1).
 - Review the various frameworks and guidelines on network and cyber security and their applicability within the Americas region.

- b) Foster cooperation among Member States on aspects related to network security:
 - Help Administrations to encourage network and service providers to implement technical standards for secure networks.
- c) Identify and evaluate implementation and policy issues relating to standards required for security of existing and future communications networks (wireline and wireless) across the Region. This task will draw primarily on the work of ITU-T (especially the security Study Questions of SG 17. Other existing standards-setting bodies, including the IETF, and Regional SDOs will also be considered, as appropriate.
- d) Identify, on a timely and ongoing basis, obstacles to implementation of security measures in the networks of the Region.
- e) Establish liaisons with other standards bodies and industry fora as necessary to advance work on the OAS mandates.

2.4 Rapporteur Group on Mutual Recognition Agreements and Conformity Assessment Procedures

Mandate:

To encourage the implementation of the Inter-American MRA and to study the conformity assessment requirements of telecommunication equipment in the different Member States.

Terms of Reference:

- a) Work towards the implementation of the Inter-American MRA.
- b) Hold a workshop on a yearly basis to provide information and training to members which are planning to implement the MRA and to hold forums and seminars on conformity assessment (i.e. certification processes) to promote information and capacity building of human resources in the Region.
- c) Cooperate with other regional groups especially the APEC TEL group in the implementation of the MRA.
- d) Complete the Yellow Book on Telecommunication Equipment Conformity Assessment Processes in the Americas.
- e) Study the requirements of the Conformity Assessment processes for telecommunication equipment in the different Member States.

2.5 Rapporteur Group on Convergence

Mandate:

To exchange information and experiences on convergence from the viewpoint of regulatory and telecommunication policies, aiming to issue reports, proposals and guidelines that facilitate adjustment of regulatory frameworks and the establishment of new policies in accordance with convergence tendencies.

Terms of reference:

- a) Collect regulatory, policies and market information on service provision and networks within a framework of convergence in CITEL member countries.
- b) Study and analyze international best practices relative to convergence from a regulatory and policy viewpoint, as well as from the perspective of its impact on the consumer and the industry.
- c) Identify potential domestic barriers to the implementation and development of convergence and interconnection.
- d) Provide proposals and guidelines regarding the adequacy of regulatory frameworks and the establishment of policies that foster the development of convergence and user protection.

2.6 Rapporteur Group for the Preparation of WTSA and WCIT

Mandate:

To coordinate the regional preparations for the World Telecommunication Standardization Assembly (WTSA) and the World Conference on International Communications (WCIT) by the ITU.

Terms of reference:

- a) Identify issues that are relevant to the Region in connection with the activities in the Telecommunication Standardization sector of the ITU (ITU-T); discuss possible solutions and elaborate proposals to address those issues.
- b) Coordinate common Inter-American proposals for submittal before the WTSA by CITEL.
- c) Define regional actions, based on the results on International Telecommunications Regulations of the Plenipotentiary Conference of 2006.

3. WORKING GROUP ON NETWORK OPERATION AND SERVICE PROVISIONING (GNOSP)¹⁸

3.1 Rapporteur Group on the Impact of New Services

Mandate:

To study and recommend strategies and best practices for the appropriate deployment and provisioning of telecommunication services in a convergent environment.

Terms of reference:

- a) Study different service provisioning modalities in a convergent environment and their impact on the sector players.

¹⁸ CCP.I-TEL/doc. 933/06 rev.1

- b) Study the feasibility of implementing convergent services in the Region.
- c) Identify strategies and experiences to be a reference for the appropriate implementation of service provisioning in a convergence environment.
- d) Promote the exchange of experiences related to the provisioning of new ICT based services.

Activities:

- a) Review CITELE information in connection with new services and convergent environments.
- b) Submit a study of service provisioning practices in convergent environments, based on data collected from a questionnaire answered by member administrations and associate members.
- c) Create a Technical Notebook on strategies and experiences related to the introduction of new services and services into a convergence environment.
- d) Compile information documents regarding this issue and initiatives proposed by other bodies related to the sector (ITU, APEC, OECD, others).

3.2 Rapporteur Group on Interconnection and Interoperability of Networks

Mandate:

To study interconnection and interoperability issues to be faced by operators in the Region as a result of the evolution towards convergent networks.

Terms of reference:

- a) Recommend transparent interconnection and interoperability framework agreements among operators with a view to convergent networks.
- b) Recommend regional dimensioning models for convergent networks which provide levels of service compliant with ITU's international standards.
- c) Foster network development initiatives that would guarantee the quality of services provided at Inter-American level, such as deployment of redundant networks, supervision of compliance with standards related to packet loss rate, delays, etc.

Activities:

- a) Accomplish transparent interconnection and interoperability among different operators with a view to convergent networks.
 - Interoperability among VoIP operators:
 - Confidentiality of information shared among operators
 - Exchange of information. Type of information, formats, contents, etc.
 - Quality of service
 - ENUM
 - Emergency Services

- Emergency response
 - Exchange of information among Legacy Networks and Convergent Networks.
- b) Recommend regional dimensioning models for convergent networks which provide levels of service compliant with ITU's international standards.
- Convergent networks dimensioning models:
 - Level of Service
 - Dimensioning algorithms
- c) Foster network development initiatives that would guarantee the quality of services provided at Inter-American level, such as deployment of redundant networks, supervision of compliance with standards related to packet loss rate, delays, etc.
- Transport redundancy to ensure the reliability of the services provided:
 - Bandwidth projection for the countries in the Region.

3.3 Rapporteur Group on Fraud Control in Telecommunication Services

Mandate: Study and recommend strategies and best practices to detect and reduce fraud in the area of telecommunications.

Terms of reference:

- a) Study the different methods of perpetrating fraud and unauthorized accesses to the networks used in the provision of telecommunication services.
- b) Define strategies and best practices to increase network security in order to minimize the impact of fraud and unauthorized accesses.
- c) Promote dialogue and regional exchange of information on fraud in telecommunications and unauthorized accesses.

Activities:

Review and carry out the outstanding tasks necessary to fulfill the mandate related to the following issues:

- a) Review the tasks performed by the previous Rapporteur Group, identify issues that need to be followed up and changes to be introduced to fully comply with the requirements of the new PCC.I authorities.
- b) Continue with the work done by the previous Rapporteur, in terms of continuing with the current action plan, particularly the questionnaire, which must be sent before September 29.
- c) Review CITEL's background information regarding fraud and unauthorized access to telecommunication networks.
- d) Study and identify the different methods of perpetrating fraud and unauthorized access to telecommunication services in Member States.

- e) Bring together international best practices to minimize the impact of fraud and unauthorized access to telecommunication networks and services.
- f) Foster cooperation between Member States on aspects related to fraud control and access security to telecommunication networks.
- g) Invite Member States to develop joint strategies for the fight against fraud and unauthorized access to telecommunications.
- h) Establish liaisons with organizations specializing in preventing fraud and network security in telecommunications.
- i) Create a Technical Notebook on strategies and best practices for Fraud Control and access security to telecommunication networks.
- j) Identify tasks to be performed with the other groups, define the methodology for participation and work scope with those groups.
- k) Identify Study Groups dealing with the issue at the ITU, study the scope thereof, the resolutions passed by them, establish methodologies to exchange information, and set scenarios for mutual cooperation aimed at attracting the best practices and knowledge developed by this global organization to the Americas.

3.4 Rapporteur Group on Numbering and Addressing

Mandate:

To identify and evaluate technical issues related to Numbering Plans for the network evolution and new services, and to meet the demand of numbering resources to support convergent networks, as well as creation of specific recommendations and Technical Notebooks.

Terms of Reference:

- a) Identify and evaluate technical issues related to Numbering Plans for the network evolution and new services.
- b) Identify Recommendations of the ITU and other bodies and fora as appropriate.
- c) Establish liaisons with other standard bodies and industry fora as necessary to advance the work.
- d) Develop studies on the impact of new services on convergent networks.
- e) Study topics related to services, numbering systems and addressing.
- f) Elaborate best practices guidelines of Numbering Plans.
- g) Study and evaluate technical issues related to portability.
- h) Study and evaluate technical issues related to ENUM.

4. WORKING GROUP ON DEVELOPMENT¹⁹

4. Strategic objectives for the 2006-2010 period

- a) To facilitate, promote, and encourage telecommunication development and universalization in the countries of the Region, supporting their growth and taking into consideration possible deployment of modern technologies in developing countries.
- b) To take into account the Quito Action Plan mainly regarding “the Agenda of Connectivity for the Americas”, coordinating efforts with the corresponding COM/CITEL group, towards achieving real connectivity of the countries in our Region, both in physical networks as well as in services and platforms.
- c) To review and consider the decisions made by the countries at the Summit on the Information Society in Tunis, especially the issues referring to access to Information Society. Also consider the topics worked upon and studied in other international and regional forums regarding the use of ICT in order to join efforts and provide more efficient solutions.
- d) To achieve a genuine technology and knowledge transfer among the countries of our Region, especially between the most developed and the ones with the best telecommunication technology research development capacity and developing countries, mainly in areas concerning Human Resources and cooperation on research and development projects.
- e) To spread and encourage the mass use of Information and Communication Technologies by promoting their knowledge and development, thus narrowing the Digital Gap. To foster the Information and Knowledge Society, fight Digital Exclusion and achieve the development of national, regional and world proprietary services in our countries so that each of them can participate with their own identity in the Regional and World Information Society.
- f) To raise awareness among the Member States and make the necessary efforts to integrate each country of our Region, vulnerable groups, those with different capacities and cultures and the indigenous communities in order to contribute to the development of those groups by means of the ICT, as an overall part of the Telecommunication development in our countries.
- g) To put forward studies, recommendations and initiatives to make Broadband access a reality in our countries, together with objective e).
- h) To develop strategies to diminish the vulnerability of telecommunication infrastructures to natural disasters and encourage the use of all kinds of communication means that may improve access to communication in case of disaster, taking into account that telecommunication infrastructure provides the necessary means and links to prevent and mitigate the impact of catastrophes as well as enhance aid operations. They are even more necessary for people who live in extreme poverty conditions and/or have no access to basic communication facilities where they could be warned about imminent catastrophes.

- i) To recognize the importance of the gender perspective and the need to improve women’s equal access to ICT benefits and to ensure these can become a fundamental tool to empower women and to

¹⁹ CCP.I-TEL/doc. 902/06 rev.3

promote gender equality. The policies, programs and projects must ensure that the differences and inequalities in ICT access and use are identified and dealt with in a comprehensive way.

Should there be any subjects of interest, work can be done together with ITU so as not to duplicate efforts.

4.2 Specific objectives for the 2006-2010 period

- a) To identify and develop Human Resources training actions, in coordination with the Coordination Center for the Development on Human Resources of COM/CITEL based on the needs of the Member States, taking into account the different training methodologies so as to fit the realities of the different countries and achieve greater training efficiency. Foster exchange of experiences.
- b) To identify and propose studies and projects, frameworks and joint ventures both among Administrations and among Associate Members, aiming to collaborate with the Working Group on Connectivity of COM/CITEL.
- c) To study and disseminate the most efficient alternatives (technological, regulatory, etc.) to bring telecommunication services to remote or out-of-reach places, to populations or regions with almost no access to telecommunication. To direct efforts to achieve a real penetration of telecommunication services, especially in countries with lower penetration.

4.3 Main activities to be developed by WGD in the 2006-2010 period

- a) Working together with the Coordination Center for the Development on Human Resources of COM/CITEL, to identify the telecommunication training needs of the human resources of the Member States, and based on this, establish action plans for training divided into three big blocks: Operation, Middle Management and Managerial levels, each level receiving technical, economic, regulatory and general administrative training.
- b) To study, jointly with the corresponding COM/CITEL group, the different realities in the Region regarding connectivity, identifying the service and network connectivity status in the convergent reality, mainly reporting the issues concerning data network connectivity, especially those based on Internet Protocol. To make suggestions to enhance connectivity throughout the Region.
- c) In order to identify the most efficient technologies to provide telecommunication services, consider solutions via satellite, IP services, wireless solutions, etc. Furthermore, new indicators should be identified or the ones regarding penetration of telecommunication services should be enhanced, since many times they do not properly reflect reality.
- d) Identify and recommend the adoption of regulatory actions and policies for efficient deployment of universal access, access by people with disabilities, access in rural areas, etc., in member countries.
- e) Identify and recommend the adoption of technologies, regulatory actions and policies aiming to enable a better and more efficient access to Broadband, both for wired and wireless services, pursuant to the objectives of the WSIS.

- f) Analyze and recommend actions aiming to propose solutions to the gender equality issue and to include diversity realities and cultural identity, as well as language diversity and local content of the different countries in the Region.

4.4 Structure

4.4.1 Rapporteur Group for developing ICT in areas and groups with unattended needs or with specific issues, which will deal with the following study questions:

- i. Indigenous peoples and communities.**
- ii. People with disabilities.**
- iii. Access to ICT in areas or towns with unattended needs.**

Mandate:

To compile, study and disseminate information on best practices and experiences of the Region as regards attention to indigenous peoples and communities, people with disabilities and areas and groups with unattended needs, with the object of establishing priorities for the actions in the scope of the activities of the Working Group on Development.

Terms of reference:

- a) Identification of the reference parameters for the successful development of ICT on each of the study questions of the Rapporteur, according to the research, recommendations and compromises made in the subject.
- b) Know the status of the implementation of said parameters through the administrations of the Region.
- c) Establish recommendations and activities in the framework of the mandate of the Working Group on Development based on the priorities that result from the status.
- d) Identify activities and recommendations for the private sector in the subject, contributing to the joint work for bridging the digital divide for these sectors.

4.4.2 Rapporteur Group on scientific and technological research and technology transfer

Mandate:

To promote issues related to technology transfer, innovation and knowledge, especially in the developing countries of the Americas, and foster cooperation in telecommunication scientific and technological research, in order to improve competitiveness of domestic economies in the global market of the telecommunications industry.

Terms of Reference:

- a) Encourage the development of strategies for scientific research, innovation, technology and knowledge transfer, within the telecommunication environment, as well as cooperation mechanisms and networks belonging to the main institutions of higher education and research in the Americas region.

- b) Promote scientific research programs and technology and knowledge transfer in the telecommunication environment that enable socio-economic development and ICT access for the citizens in the Region in order to overcome the Digital Divide.
- c) Promote national, sub-regional and regional networks for interaction and cooperation among research and technology institutions, involving them in local production systems and encouraging the creation of technology clusters or groups devoted to the telecommunication industry in the countries within the Region that develop innovation activities for the production of high added value goods and services.
- d) Encourage the interrelation and participation of the scientific and academic community, the public and private sectors and research centers and networks, for the promotion, communication, development and application of ICT, as well as education and training of professionals using, among others, CITEL Regional Training Centers and the ITU Center of Excellence for the Americas region.
- e) Cooperate, within the telecommunication environment, with the efforts facilitating a better integration between research and innovation, on issues regarding the environment, for example, issues related to non-ionizing electromagnetic radiation, waste and recycled telecommunication equipment, battery disposal, etc. and promote the creation of Science and Technology forums for Sustainable Development (STFSD) and its active inclusion in the agenda of the governments of the Region.

4.4.3 Rapporteur Group on the use of Telecommunications for Disaster Relief and Prevention

Mandate:

To work with the International Telecommunication Union (ITU) on the development of Recommendations regarding prior, during and post occurrence of predictable Natural Disasters Contingency Plans, as well as for during and post occurrence of unpredictable ones likewise the broadcasting of said Recommendations.

Terms of Reference

- a) To support the efforts made by the ITU worldwide, as regards the Administrations' design and implementation of Recommendations prior, during and post occurrence of a Natural Disaster.
- b) To create a Technical Notebook including strategies, actions and contingency plans, to be used in the Region prior, during and post occurrence of a Natural Disaster.
- c) To identify Study Groups that manage the subject in international bodies such as Red Cross, World Health Organization, Pan-American Health Organization, and NASA among others.

4.4.4 Question: General updated information on projects and initiatives related to ICT

Prepare a Technical Notebook or Reference Document formatted as a table identifying and describing existing projects and initiatives related to ICT, the countries and sub-regions where those projects are been implemented and their progress status for the development of Latin America and the Caribbean.

PCC.I/RES. 129 (XI-07) ²⁰

AGENDA, VENUE AND DATE FOR THE XII MEETING OF PCC.I

The XI Meeting of the Permanent Consultative Committee I: Telecommunications,

RESOLVES:

1. To hold the XII Meeting of the Permanent Consultative Committee I: Telecommunications on March 11 to 14, 2008 in El Salvador.
2. To adopt the Draft Agenda for the XII Meeting of PCC.I attached to this Resolution.

ANNEX TO RESOLUTION PCC.I/RES. 129 (XI-07)

1. Approval of the agenda and schedule of activities.
2. Establishment of the Drafting Group for the final report.
3. Report and meeting of the Working Groups:
 - 3.1 Working Group on Technology (WGT)
 - 3.2 Working Group on Policy and Regulatory Considerations (WGPRC)
 - 3.3 Working Group on Network Operation and Service Provisioning (WGNOSP)
 - 3.4 Working Group on Development (WGD)
4. Agenda, venue and date for the XIII Meeting of PCC.I.
5. Approval of the Final Report.
6. Other Business.

DETAILED DRAFT AGENDAS OF WORKING GROUPS

WORKING GROUP ON TECHNOLOGY (WGT)

1. Approval of the Agenda.
2. Report of the activities of the Working Groups since the last Meeting.
3. Allocation of Contributions to Rapporteur Groups.
4. Meeting and Report of the Rapporteur Groups.

²⁰ CCP.I-TEL/doc. 1199/07

- 4.1 Meeting of the Rapporteur Group on Standards Coordination.
- 4.2 Meeting of the Rapporteur Group on Network Infrastructure.
- 4.3 Meeting of the Rapporteur Group on Advanced Services.
- 5. Other Business.
- 6. Adoption of the final report.
- 7. Conclusion of the meeting.

WORKING GROUP ON POLICY AND REGULATORY CONSIDERATIONS (WGPRC)

- 1. Approval of the Agenda.
- 2. Meeting and Report of the Rapporteur Groups.
 - 2.1. Rapporteur Group on Issues relative to Internet Resources.
 - 2.2. Rapporteur Group on Telecommunications Economic Aspects.
 - 2.3. Rapporteur Group on Cybersecurity and Critical Infrastructure.
 - 2.4. Rapporteur Group on MRA and Conformity Assessment Procedures.
 - 2.5. Rapporteur Group on Convergence.
 - 2.6. Rapporteur Group for the Preparation of WTSA and WCIT.
- 3. Other Business.
- 4. Approval of the final report.

WORKING GROUP ON NETWORK OPERATION AND SERVICE PROVISIONING (WGNOSP)

- 1. Approval of the Draft agenda and calendar.
- 2. Report and meeting of the Rapporteur Groups
 - 2.1 Rapporteur Group on Impact of New Services
 - To study the impact of new services in several aspects.
 - To present the corresponding survey so that it will be sent to the Member States and the Associate members.
 - To present a compilation of the information contributions and the initiatives done by other related organizations of the sector.
 - 2.2 Rapporteur Group on Interconnection and Interoperability of Networks
 - Preliminary report of the results of the survey on NGN operators.
 - Report of the follow-up of the discussion forum on interconnection and interoperability of networks.
 - Report of the result of the analysis of document CCP.I-TEL/doc. 1100/07 “Regulatory framework of Brazil for interconnection” so it can be included in the Technical Notebook on Interconnection and interoperability of networks.
 - 2.3 Rapporteur Group on Fraud Control in Telecommunication Services

- Planification and development of the “Third Workshop on Fraud of the Telecommunication services: technological and administrative tools to fight fraud”
- 2.4 Rapporteur Group on Numbering and Addressing
- Report of the Technical Notebook on ENUM
 - Report of the Technical Notebook on number portability with the inclusion of the models adopted by the countries of the Region.
3. Report of the meeting.
4. Other Business.

WORKING GROUP ON DEVELOPMENT (WGD)

1. Approval of the Draft Agenda and Schedule.
2. Report and Meeting of Rapporteur Groups.
3. Revision of the mandate, terms of reference and action lines or work plan for the Rapporteur Group on Emergency Telecommunications and disaster relief.
4. Analysis and conclusions of the seminar by teleconference on “Regional Dialogue on the use of telecommunications in the case of an emergency” held on October 2007.
5. Question: General updated information on projects and initiatives related to ICT: Revision and update of contributions.
6. Revision and definition of the surveys on national and international parameters on ICTs in areas and groups with unattended needs or with specific issues. Creation of fora or discussion groups on these issues.
7. Analysis of the contributions and experiences of the countries on the subjects related to scientific and technological research and technology transfer.
8. Report of the Meeting.
9. Other Business.

IV. DECISIONS

The XI Meeting of Permanent Consultative Committee I: Telecommunications,

DECIDES:

PCC.I/DEC.58 (XI-07) ²¹	<ol style="list-style-type: none"> 1. To invite the Administrations of CITEL Member States to submit their preliminary proposals and points of view to the XII Meeting of the PCC.I for the development of Common Inter-American Proposals (IAP) for the WTSA-08. 2. To recommend that, for this task, the Administrations should take into account the following documents: CCP.I-TEL/doc.1089/07 and CCP.I-TEL/doc.1099/07 that contain proposals to be taken into consideration by Administrations in their preparation for WTSA-08 and document CCP.I-TEL/doc.1121/07 which contains proposed actions and references in regard to WTSA-04 Resolutions, which will be available for consultation in the CCPI-TEL Group at CITEL Electronic Forum. 3. To instruct the CITEL Executive Secretary to implement the actions indicated in the previous paragraphs.
PCC.I/DEC.59 (XI-07) ²²	<ol style="list-style-type: none"> 1. To acknowledge the creation of the ITU-T Expert Group to review the International Telecommunication Regulations (ITRs), as informed in the Addendum to TSB Circular 146. 2. To appoint the CITEL nominee for the post of Vice-Chairman of the Expert Group for the Americas region the Administration of Brazil. 3. To request the Executive Secretary to inform the Director of the TSB of this appointment.
PCC.I/DEC.60 (XI-07) ²³	<ol style="list-style-type: none"> 1. To approve the Draft Survey to update the document “CITEL Guidelines and Practices for Interconnection Regulation in the Americas”, included in document CCP.I-TEL/doc.1084/07 rev.1. 2. To request the Administrations of the Member States to answer the survey, and to send their answers to CITEL Secretariat: citel@oas.org, December 15, 2007 at the latest. 3. To present a report containing the results obtained from the Administrations’ answers to the Draft Survey in order to update the document “Guidelines and Practices for Interconnection Regulation in the Americas” during the XII Meeting of the PCC.I. 4. To update the Document “Guidelines and Practices for Interconnection Regulation in the Americas”, once submitted the report indicated on decides 3, and the results got from the different Administrations during the XII Meeting of the PCC.I.
PCC.I/DEC.61 (XI-07) ²⁴	<ol style="list-style-type: none"> 1. To approve the final questionnaire on Regulatory Accountancy included in the document CCP.I-TEL/doc.1091/07 rev.3.

²¹ CCP.I-TEL/doc. 1205/07 rev.1

²² CCP.I-TEL/doc. 1215/07

²³ CCP.I-TEL/doc. 1173/07 rev.1

	<p>2. To request the Administrations of the Member States to answer and submit it to CITEL Secretariat: citel@oas.org, before 15 December, 2007.</p> <p>3. To present a report on the results to the answers obtained from the Administrations to the Questionnaire on Regulatory Accountancy to the XII Meeting of the PCC.I.</p> <p>4. To include the results obtained from the report of answers in the Technical Notebook on Regulatory Accountancy.</p> <p style="text-align: center;">ANNEX TO DECISION PCC.I/DEC.61 (XI-07)</p> <p style="text-align: center;"><u>QUESTIONNAIRE ON REGULATORY ACCOUNTING²⁵</u></p> <p>The following is a preliminary questionnaire, which aims at combining the legal, economic and accounting aspects emerging when putting into practice regulatory processes concerning the provision of telecommunication services.</p> <p>Taking into consideration that Regulatory Accounting is a system for collecting, recording and ordering data, which mainly seeks to meet information requirements strictly orientated towards regulatory purposes.</p> <p>In particular, Regulatory Accounting attempts to separate service provider's income, costs and expenses strictly related to regulated activities, linked service provision and non-regulated services.</p> <p>In general terms, Regulatory Accounting aims at the development, under common criteria, of a reliable and easy-to-handle database in order to help identifying, for instance, efficient costs for service provision, anti-competitive practices or cross-subsidies.</p> <p>Regulatory Accounting must serve as a basis for evaluating and comparing company's performance under regulations, including its financial status, so as to reduce information asymmetries, thus leading to a reduction of regulatory risks.</p> <ol style="list-style-type: none"> 1. Has a Regulatory Accounting system been officially implemented in your country? Is there any specific regulation or legal instrument providing for this obligation? Please attach. 2. Whether or not this Regulatory Accounting system has been officially implemented, do the telecommunication service companies have the obligation to submit physical, economic, accounting and financial information before the Regulatory Authority? 3. Regarding point 2, if affirmative, how often do the companies have to submit such reports? Please provide a summary of the required data
--	---

²⁴ PCC.I-TEL/doc. 1181/07

²⁵ CCP.I-TEL/doc. 1091/07 rev. 3

	<p>regarding the closure date of your financial year.</p> <p>4. Should a Regulatory Accounting system exist, which are its goals? If negative, go down to question 13.</p> <p>5. Does such Regulatory Accounting system include the principle of homogeneity regarding the criteria for account identification, assessment and allocation?</p> <p>6. In which manner does the approved Regulatory Accounting system relate with the Accounting principles generally accepted in your country?</p> <p>7. Which is the scope of the information that, under the regulatory accounting system, service providers must submit to the Regulatory Authority?</p> <ul style="list-style-type: none"> ○ Regulatory Accounting Plan and Handbook of Accounts, including criteria for account identification, registration and assessment. Do they have obligation character? If affirmative, since when is this the case? What is the framework of periodicity? ○ Methodology for allocation of income and expenditure (e.g. according to the activity from which they derive), including identification, allocation and assessment criteria. ○ Separation of Accounts according to types of services or activities (for instance, basic telephony, interconnection systems). ○ Cost Accounting. ○ Other. Please specify. <p>8. In your case, does Regulatory Accounting include any specific obligations regarding publication and/or audit of regulatory accounts?</p> <p>9. Given that Regulatory theory defines Regulatory Accounting as a tool useful to analyse several issues, does your Administration coincide with the following stated points?</p> <ul style="list-style-type: none"> ○ To fix and revise Tariffs, for example revision of current retail and wholesale Tariffs, in fixed and mobile networks. ○ To monitor and identify anticompetitive policies and practices, ○ To identify and estimate cross subsidies. ○ To assess service provider performance (including financial performance). ○ To define methods for asset appraisal. ○ To allocate different types of costs among activities. ○ To assess transactions with related companies. ○ To compute methods for amortization applied. <p>10. Regarding the former point and according to the Regulatory practises in the sector your country, is there any other issue in which</p>
--	---

	<p>Regulatory Accounting may or may not make a contribution?</p> <p>11. From the point of view of regulatory practices, how would you evaluate the results or outcome derived from the application of Regulatory Accounting in your country?</p> <p>12. Is there any Cost Model being currently developed or implemented in your country? If affirmative, please specify:</p> <ul style="list-style-type: none"> ○ Which one? ○ What is its application? ○ Is it applied to Tariff Revision? If affirmative, can Tariff Revision be applied to Retail Tariffs? To Wholesale Tariffs? ○ Can this Cost Model be applied to Retail and Wholesale Tariffs? ○ Has this Cost Model yielded Tariff results so far? Are these results being applied in Tariff definition? In what way? <p>13. In the event that a Regulatory Accounting system is non-existent or that it is considered unnecessary to have one, how do you think the Regulatory Authority could actually obtain the information to be applied in the analysis of this kind of issues within the telecommunications market?</p> <p>14. Do you believe that the implementation of basic but common guidelines at a regional level in relation to the use of a Regulatory Accounting system should be promoted?</p>
<p>PCC.I/DEC.62 (XI-07) 26</p>	<p>1. To approve the realization of a Survey on implementation plans of the IPv6 protocol according to the format in the Annex to this decision, taking into account that the implementation of this protocol is a subject of special importance as it involves not only the CITEL Administrations but also the society and the private sector.</p> <p>2. To use the existent Discussion Group “DOMINAME” in the Electronic Forum of CITEL. This will serve both as a receptor channel and as a future permanent consultation channel on the implementation of said protocol IPV6 and its status of progress in the Region..</p> <p>3. To instruct the Executive Secretary of CITEL to distribute the survey to the Administrations of the Member States of CITEL inviting them to send their answers to the Secretariat by e-mail (citel@oas.org) or to upload it to the discusión Group “DOMINAME” of the Electronic Forum of CITEL.</p> <p style="text-align: center;">ANNEX TO DECISION PCC.I/DEC.62 (XI-07)</p> <p style="text-align: center;">SURVEY</p> <p>Administration:</p>

²⁶ CCP.I-TEL/doc. 1184/07 rev.1

	<p>Organization:</p> <p>Name:</p> <p>Phone number:</p> <p>E-mail:</p> <p>Please circle the correct answer</p> <p>1) Does your administration plan to implement the IPV6 Protocol in the government area? Yes No</p> <p>2) If the answer is yes, which is the estimated time of such an implementation? 3 Months 6 Months More</p> <p>3) If the answer is no, is there any plan for said implementation in the immediate future? Yes No</p> <p>4) If the answer is no, are you interested in receiving information about this kind of implementation? Yes No</p> <p>5) Do you have knowledge on IPV6 implementation in other areas (public, private or academic)? Yes No</p> <p>6) If the answer is yes, could you comment on the level of implementation in the public/private/academic sector?</p> <p>Incorporate these answers to the “DOMINAME” Discussion Group in the CITEL Electronic Forum (http://www.citel.oas.org/forum.asp).</p> <p>If you are not registered, please do so in the abovementioned website.</p>
<p>PCC.I/DEC.63 (XI-07) ²⁷</p>	<p>1. To instruct the CITEL Executive Secretary to inform the Administrations that, through the CITEL electronic forum, in the “AMARILLO” Discussion Group, they will find the last draft of the Yellow Book on conformity assessment procedures for telecommunication products in the Americas, and they will be able to make comments, suggest corrections or modifications on the drafted texts, and discuss them using the same means, until reaching a consensus among Discussion Group participants as regards the abovementioned texts. The latter activities are to be conducted within the</p>

²⁷ CCP.I-TEL/doc. 1172/07

	<p>period ranging from the XI Meeting of the PCC.I (Mendoza, September 2007) to the XII meeting.</p> <p>2. To request the Administrations of the Member States that, if they have information at national level to be added or updated on the subjects referring to the annexes A, B, C, D and E of the Yellow Book, they should submit it through the “AMARILLO” Discussion Group in the CITEL Electronic Forum.</p>
<p>PCC.I/DEC.64 (XI-07) 28</p>	<p>It is requested to CITEL Secretariat, to send the survey attached to the annex to Administrations and to send the responses to the Rapporteur of the Group on Interconnection and Interoperability of Networks two months before the start of the XII Meeting of PCC.I.</p> <p style="text-align: center;">ANNEX TO DECISION PCC.I/DEC.64 (XI-07)</p> <p style="text-align: center;">Survey on NGN Operators</p> <p>General Questions: Interconnection</p> <ol style="list-style-type: none"> 1. Interconnection between operators exists in_____ (indicate the name of the country) 2. If so, is this due to a government mandate? Or by agreement with industry? 3. Is there in the country (or within the Region) a corporation in charge of interconnection business? 4. If not, who establishes the interconnection protocols? A Regulatory Agency? The incumbent operator? Bilateral agreements? 5. The regulatory frame in your country foresees or allows the existence of the interconnection between Next Generation Networks (NGN)? 6. In the case of the previous answer were negative, which changes are anticipated to be done within the regulatory framework in order to assure the appropriate interoperability in this kind of networks? 7. Which is the specific information interchanged among interconnected operators? <ol style="list-style-type: none"> a. Prefix data? b. Information about prices and tariffs? c. Pre-order requests? d. Specifications of network and equipments and/or availability? e. Services; complementary services? f. Specifications of routing (translations)? g. Information about tariffs and collection of charges? h. Billing problems? 8. Are the interchange processes mechanized? (for example, request orders,

²⁸ CCP.I-TEL/doc. 1188/07

	<p>billing data, etc.)</p> <ul style="list-style-type: none"> • Interconnection Agreements <ol style="list-style-type: none"> 1. Do you have an published procedure to follow, to support an order or request of interconnection of another provider? 2. Is this procedure automated? 3. How do you exchange interconnection data? Is this automated? 4. If this were in a manual way, which are the delays and the problems that arise? 5. Do these delays cause lose of income? 6. Do you have plans to automate these exchanges? 7. Is the data exchange bilateral (one operator at a time)? Or do you have a multi-operator resource for interconnection data? 8. How frequently do you exchange details about the service, tariffs, and other necessary data with the providers of the service? Is this exchange automated? 9. Is there enough detailed information to support next generation networks and services? 10. What is missing? 11. How do you provide information to other operators about the access points to your network? 12. Do you use a central or a peering provider as a primary access point? • Inter-working <ol style="list-style-type: none"> 1. Do you have undesirable levels of traffic block? 2. Do you have undesirable levels of misrouted calls? 3. Do you have invalid or non desirable traffic crossing your network? 4. How effectively have you facilitated or simplified the integration of your systems with other carrier systems? 5. As regard abovementioned, which issues should the industry consider? 6. Where the numerical portability is supported, do you have a precise and automated way to identify the owner of the telephone? 7. Do you have enough information to redirect the call based on the information of the routing of each network of each operator's network? • Inter-operability among vendor equipment <ol style="list-style-type: none"> 1. Do you have a program for assuring the compatibility of networks that interconnect with yours? 2. When the inter-operability is detected, do you have a process for the Resolution of the problem? 3. Do you have automated mechanisms to distribute appropriate information to your providers? • Network security <ol style="list-style-type: none"> 1. Which methods and tools do you use for the network's security? 2. Do you consider that the IP network can be more vulnerable to the
--	--

	<p>threats of security?</p> <ol style="list-style-type: none"> 3. What improvements or new processes are necessary to face the security for phone calls and services in general over the IP network? 4. Specify some of the ones that are being considered <ul style="list-style-type: none"> • Quality of Service (QoS) Objectives <ol style="list-style-type: none"> 1. What measurements do you use to determinate your quality of service? 2. According to the given criteria, which is the quality of service? 3. Have you adjusted the quality of service for each type of service that is supported in your network? • SLA definition <ol style="list-style-type: none"> 1. Have you defined a SLA for the interconnection or the inter-operability? 2. If so, is it in use with other carriers? 3. How do you manage or execute it when SLA violations occur? • Routing Optimization <ol style="list-style-type: none"> 1. Do you have appropriate information sources to rout calls to the correct network at all times? 2. Can you route inter-carrier calls via IP without using handoff PSTN? 3. Would you consider storing your routing data on a shared data base, managed so you can control who sees the data? • Traffic Planning & Engineering <ol style="list-style-type: none"> 1. Which methodology do you use to measure the network performance? 2. Which methods do you use to test your network design? 3. How frequently do you check your network design? • Capacity Planning <ol style="list-style-type: none"> 1. Which processes or methodologies do you use to project future needs of network capacities? 2. Which processes or methodologies do you use to estimate the capacity requirements taking into account the services increase? 3. Which processes do you use to attend greater requirements of network capacity? • Operations, Administrations and Maintenance <ul style="list-style-type: none"> ○ Network Monitoring and Surveillance <ol style="list-style-type: none"> 1. Have you established processes for continuous monitoring and surveillance in the network? 2. When problems arise, do you have a well defined standard or guidelines to support Resolution methods within the limits of
--	---

	<p>established time?</p> <ol style="list-style-type: none"> Do they adjust within your SLAs? Do you have a process to monitor the use of service? <ul style="list-style-type: none"> Trouble Detection, Reporting & Resolution <ol style="list-style-type: none"> What methodologies do you use to detect and resolve fraudulent activities? Do you use a mechanized system of fines imposition to solve the problems? Do you use a process of reports that indicate the condition of the problems and resolutions for their better management? Network Attacks, e.g. DoS <ol style="list-style-type: none"> What methodology do you use to minimize the impact of the Denial of Service attack? Inter-operator Billing and Settlements <ol style="list-style-type: none"> Is the information shared in an automated way for all services? (besides PSTN) If this were manual, are there delays that cause income loss? Is there enough detail provided to tariff for type of service and destination? What specific criteria do you use in an agreement in order to establish a satisfactory fulfilment of the service level agreement (SLA)? For Next Generation Networks (NGN) and the services supported by them, what new data are required in order to fulfill an agreement or contract? What changes are required? Standards & Guidelines <ol style="list-style-type: none"> Can you provide a list of standards you are subject to or comply with? If no standards, do you follow any norms or better practices reckoned by others? Do you participate in industry's standards development? Do you have better practices you can share with others? Number Management <ol style="list-style-type: none"> How do you confirm the correct code blocks allocation? For individual telephones? What dispute Resolution process is available for your use when allocation conflicts occur? Industry User Group <ol style="list-style-type: none"> Do you participate in an industry user group? Do you work with others in order to resolve problems and develop
--	---

	<p>norms for everyone to use?</p> <p>3. Do you have better practices you can share with others?</p>
<p>PCC.I/DEC. 65 (XI-07) 29</p>	<ol style="list-style-type: none"> 1. To submit to the Administrations of the CITEL Member States the request of information presented in the Annex of this Decision together with the document PCC.I-TEL/doc.1141/07 (Draft annotated table of contents of the report on the status of information and communication technologies in the Americas). 2. To encourage the Administrations of the Member States to submit their contributions to the CITEL's Secretariat: citel@oas.org, at its latest October 17, 2007. 3. To send to COM/CITEL Chair the contributions gathered by the CITEL Secretariat 4. To mandate CITEL Executive Secretary to carry out the actions corresponding to the implementation of the previous operational items. <p style="text-align: center;">ANNEX TO DECISION PCC.I/DEC. 65 (XI-07)</p> <p>Information required for the preparation of the draft report on State of information technologies and Communication in the Americas</p> <ol style="list-style-type: none"> 1. Submit background and current situation of connectivity and projects for reducing the digital divide in the country (universal service/access). 2. Submit the plans of the telecommunications area for the next five years in your country (2007-2012). 3. Rank the main challenges faced by your government in order to improve connectivity and to reduce the digital divide within the information society, for example: <ul style="list-style-type: none"> • Lack of economic resources. • Limited investment on communication and information infrastructure (gap between urban and rural areas). • Difficult geographical conditions. • Regulatory problems. • Low levels of training for using ICTs. • Sociocultural or language aspects. • Lack of electric power. • Other. 4. Briefly explain the experiences and plans for developing the following ICT applications in your country: <ol style="list-style-type: none"> a. e-health. b. Cybersecurity. c. e-government.

²⁹ CCP.I-TEL/doc. 1181/07 cor.1

	<ul style="list-style-type: none"> d. e-learning. e. Telework. <p>5. Number of Internet users, computers and servers (hosts) in your country for the year 2006.</p>
--	---

V. LIST OF BASIC DOCUMENTS

Summary Minutes of the Inaugural Session and the First Plenary Session:

CCP.I-TEL/doc. 1161/07

Summary Minutes of the Second Plenary Session:

CCP.I-TEL/doc. 1197/07

Summary Minutes of the Third Plenary Session and Closing Session:

CCP.I-TEL/doc. 1220/07

List of Documents:

CCP.I-TEL/doc. 1074/07 rev.4

List of Participants:

CCP.I-TEL/doc. 1075/07 rev.1

Final Report for the Meeting

CCP.I-TEL/doc. 1213/07 rev.1