PCC.I/RES.1 (I-02)[1]

Intelligent Networks Capability Set 4

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

CONSIDERING THAT:

a) Resolutions contained in PCC.I/RES.27 (V-96), PCC.I/RES.65(X-99), and PCC.I/doc.1220 on Intelligent Networks were accepted at the fifth and tenth and fourteenth meetings of PCC.I (Public Telecommunications Services) respectively,

b) The First and Second Summit of the Americas in 1994 and 1998 respectively identified Intelligent Networks as a continued priority for the region of the Americas,

c) IN provides a functional architecture for many advanced capabilities (e.g., Number Portability) and must interwork with Wireless and Data Networks.

d) Intelligent Networks and advanced service applications have become more widely deployed throughout the Americas,

RECOGNIZING THAT:

a) Interest in the application of IN and advanced capabilities continues to grow within the region of the Americas,

b) The services supported by an IN promote the harmonization and interoperability of networks and administrations within the Region,

c) Guidance from PCC.I Members and Associate Members have supported continued IN evolution through international standards,

d) The ITU-T approved the IN Capability Set - 4 (Q.124x) series of recommendations in 2001.

RESOLVES THAT:

PCC.I endorse the ITU-T Intelligent Network Capability Set 4 (2001), Q.124x series of Recommendations.

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[1] CCP-TEL/doc.28/02 rev.1

RECOMMENDS THAT:

a) The Working Group on Standards Coordination continue to monitor and determine the applicability for the Americas of the ITU-T IN recommendations.

b) The Working Group on Standards Coordination evaluate options to facilitate inter-networking of IN based services between Member States.

c) The Working Group on Standards Coordination continue the service needs of the Americas and provide implementation options based on the ITU-T IN recommendations and other evolving standards for services and applications.

ANNEX

Intelligent Network
Coordinated Standards Document

1. EXECUTIVE SUMMARY

The Next Generation Networks (NGN) Rapporteur Group has continued to study Intelligent Networks as they relate to the needs of the Americas. This is a continuation of the work begun in the IN Rapporteur Group, which monitored the IN work of the ITU-T and regional standards bodies. The NGN Rapporteur Group recommends that PCC.I endorse the ITU-T IN Capability Set 4 (IN CS-4) series of Recommendations (Q.124x) for the region of the Americas.

In September 1996 the IN Rapporteur Group concluded the first phase of work on IN standards recommendations. PCC.I approved resolution PCC.I/RES.27(V-96) that recommends the ITU-T IN Capability Set 1 (IN CS-1) Recommendations (Q.121x) and appropriate subsets for use in the Americas. The Resolution and Coordinated Standards Document (CSD) (PCC.I / RES. 65 (X-99)) endorses the use of ITU-T IN Capability Set 2 (1997) Recommendations (Q.122x). The latest Resolution and Coordinated Standards Document (CSD) (PCC.I /1220)) endorses the use of ITU-T IN Capability Set 3 (2000) Recommendations (Q.123x). This endorsement came after review of the Americas IN plans and requirements, an evaluation of applicable IN standards, and an evaluation of service implementation examples.

It is important to understand that the IN architecture has evolved through the various Capability Sets. This fact was acknowledged by the ITU-T when Capability Sets (CS) were defined for the study of IN. Since the PCC.I endorsement of ITU-T IN CS-2 and IN CS-3, work has progressed in the area of IN. The ITU-T IN Capability Set 4 Recommendations (Q.124x series) were approved in May 2001 and are now ready for deployment. Intelligent Network Capability Set-4 (IN CS-4) is the fourth standardized stage of the Intelligent Network (IN) as an architectural concept for the creation and provision of services, including telecommunication services, service management services and service creation services.

2. GUIDE TO DOCUMENT

This document is based on the previous Resolutions and annexed CSDs for Intelligent Networks, PCC.I/RES.27 (V-96), PCC.I/RES.65 (X-99), and PCC.I/1220. The reader is referred to those documents for a more complete understanding of the activities of the IN Rapporteur Group.

Section 3 of this document describes the contributions and discussions leading up to this fourth Resolution and CSD for IN. Section 4 presents the conclusions and Section 5 suggests future work to be addressed by the group.

3. BACKGROUND

Prior to the completion of ITU-T Capability Set 3 (IN CS-3), the ITU-T had started the work on IN Capability Set 4 (IN CS-4). This work was driven by contributions from Study Group participants and the activities of regional bodies such as Committee T1 in the United States and ETSI in Europe. The goal was to continue to meet the needs of regulators, network operators, service providers and customers by evolving the recommendations so as to support new services and capabilities.

Key features identified for IN CS-4 include enhancements to IN CS-2 and IN CS-3 capabilities, multiple points of control, feature interaction, IN-ISDN interworking (including supplementary services), number portability, support for operator services (e.g., prepaid, freephone), support for mobility (e.g., Virtual Home Environment), interworking with private networks, and support for IP networks. In particular, IN CS-4 support for IP networks includes many aspects of interworking between IP network services/applications and Intelligent Network services/ features. This includes full support for accessing IN from a SIP Proxy for implementing services that do not require explicit handling of the call configuration, full support for inter-working IN with Call Servers, based on the H.248 architecture for all types of services, and minimal support for accessing IN from H.323 Gatekeepers/SIP Proxy Server for implementing services that do not require explicit handling of the call configuration.

The NGN Rapporteur Group monitored and discussed these activities (as the IN Rapporteur Group had done in previous years). While IN was beginning to emerge within the region, keeping abreast of international standards was an agreed upon priority. Active participants directed the group towards an endorsement of the ITU-T IN CS-4 Recommendations. This now will allow network operators and service providers to provide new and enhanced services supported by IN CS-4.

4. CONCLUSIONS

The NGN Rapporteur Group recommends the endorsement of the ITU-T IN CS-4 series of Recommendations, Q.124x, by the Members of CITEL PCC.I. Furthermore, the group recommends that Q.124x be accepted with no deletions, additions or modifications to the normative references listed here:

- ITU-T Recommendation Q.1241 (07/01) - Introduction to Intelligent Network Capability Set 4
- ITU-T Recommendation Q.1244 (07/01) - Intelligent Network Capability Set 4 Distributed Functional Plane
- ITU-T Recommendation Q.1248 (07/01) - Intelligent Network Interface Specifications for Capability Set-4

5. FUTURE WORK

It is likely that IN CS-4 will be the final Capability Set. Extensions to IN and other advanced service applications are being developed independently. The NGN Rapporteur Group will continue to monitor the work of ITU-T Study Group 11, Committee T1, ETSI, and other groups for evolving standards related to advanced services and applications. The results of their work that has benefit for CITEL member states will be incorporated as appropriate.

6. RESOURCE DOCUMENTS

[1] “Resolution - Intelligent Networks” PCC.I Res/27(V-96), Lima, Peru, 9 – 13 September 1996.

[2] “Introduction to Wireless IN (WIN)” PCC.I-379/97, Asuncion, Paraguay, 28 July 1997.

[3] “Proposed 1998 Work Plan” PCC.I-435/97rev1, Foz do Iguacu, Brazil, 13 October, 1997.

[4] “Discussion: An Overview of IN Standards Activities” PCC.I-436/97, Foz do Iguacu, 13 October 1997.

[5] “Discussion: ITU-T IN CS-2/IN CS-3 Capabilities and Services” PC.I-437/97, Foz do Iguacu, 13 October 1997.

[6] “IN Related Questionnaire” Attached to the Report of PCC.I, Foz do Iguacu, 117 October 1997.

[7] “Proposed Work Plan for the IN Rapporteur Group” PCC.I-doc.560/98, Cartagena de Indias, Colombia, 29 June 1998.

[8] “IN CS-2 Overview” PCC.I-doc.672/98, Cartagena de Indias, 29 June 1998.

[9] “Report of the Activities of the IN Rapporteur Group” PCC.I-doc.721/98, Cartagena de Indias, 3 July 1998.

[10] "Resolution Intelligent Networks Capability Set -2" (PCC.I/RES 65 (X-99), Cartagena de Indias, 2 July, 1999.

[11] "IN CS-3 Overview" PCC.I/doc.1151/00- Lima, Peru, 3 November, 2000

[12] "Report of the IN Rapporteur Group" PCC.I/doc.1178/00, Lima, Peru, 3 November, 2000.

[13] "Draft Resolution Intelligent Networks Capability Set -3" PCC.I/doc.1220, Natal, Brazil, April 2001.

[14] "IN CS-4 Overview" PCC.I/doc.1258, Natal, Brazil, April 2001.

[15] "Report of the IN Rapporteur Group PCC.I/doc. 1295/01, Natal, Brazil, April 2001.