International Telecommunication Union

ITU-T

TELECOMMUNICATION
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SERIES J: CABLE NETWORKS AND TRANSMISSION OF TELEVISION, SOUND PROGRAMME AND OTHER MULTIMEDIA SIGNALS

IPCablecom

IPCablecom2 IP Multimedia Subsystem (IMS): Delta Recommendations overview

ITU-T Recommendation J.366.0

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IPCablecom2 IP Multimedia Subsystem (IMS): Delta Recommendations overview

Summary

This Recommendation is an overview document introducing the family of IMS delta Recommendations that adapt the wireless industries IMS initiative to the needs of the cable industry. A delta Recommendation references another document and then shows only the changes necessary to adapt the other document to the current needs.

Source

ITU-T Recommendation J.366.0 was approved on 29 November 2006 by ITU-T Study Group 9 (2005-2008) under the ITU-T Recommendation A.8 procedure.

FOREWORD

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The World Telecommunication Standardization Assembly (WTSA), which meets every four years, establishes the topics for study by the ITU-T study groups which, in turn, produce Recommendations on these topics.

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1 Scope

This Recommendation is an overview document introducing the family of IMS delta Recommendations that adapt the wireless industries IMS initiative to the needs of the cable industry. A delta Recommendation references another document and then shows only the changes necessary to adapt the other document to the current needs.

It is an important objective of this work that interoperability between IPCablecom 2.0 and 3GPP IMS is provided. IPCablecom 2.0 is based upon 3GPP IMS, but includes additional functionality necessary to meet the requirements of cable operators. Recognizing developing converged solutions for wireless, wireline, and cable, it is expected that further development of IPCablecom 2.0 will continue to monitor and contribute to IMS developments in 3GPP, with the aim of alignment of 3GPP IMS and IPCablecom 2.0.

2 References

2.1 Normative references

None.

2.2 Informative references

– ITU-T Recommendation J.360 (2006), *IPCablecom2 Architecture Framework – Main document.*

– 3GPP TS 23.002, *Network architecture*.

3 Definitions

This Recommendation does not define any terms.

4 Abbreviations and acronyms

This Recommendation uses the following abbreviations and acronyms.

3GPP Third Generation Partnership Project

GSM Global System for Mobile Communications

IMS IP Multimedia Subsystem

SIP Session Initiation Protocol

TS Technical Specification

5 Introduction

Interworking with other networks, particularly wireless networks, and reducing development cost are two of the main factors driving the choice of technologies for IPCablecom2. With these objectives in mind, it was agreed to base IPCablecom2 on Release 6 (the latest available at the time work started) of the IP Multimedia Subsystem (IMS) as defined by the 3rd Generation Partnership Project (3GPP). 3GPP is a collaboration agreement between various standards bodies. The scope of

3GPP is to produce Technical Specifications and Technical Reports for GSM and 3rd Generation (3G) Mobile System networks.

The scope of 3GPP includes development of a SIP-based IP-communications architecture for mobile networks. The resulting architecture, dubbed the IP Multimedia Subsystem, defines how various protocols (e.g., SIP and DIAMETER) can be used in a system-level architecture to provide SIP-based communication services.

While many of the functional entities and reference points defined in the IMS have broad applicability in other industries, Release 6 of the IMS is a wireless-centric architecture, designed to meet the business and operational needs of the wireless industry. Therefore, it does not meet all of the needs of the cable industry. IPCablecom2 enhances the IMS to support the unique technology requirements of the cable industry, and also addresses cable operator business and operating requirements.

3GPP is developing newer releases of the IMS specifications. Future updates to IPCablecom2 will align with these newer releases as necessary.

Refer to 3GPP TS 23.002 (Network architecture) for additional information on the 3GPP IMS architecture and to ITU-T Rec. J.360 for additional information on IPCablecom2.

Since the changes to the 3GPP specifications are relatively minor, the 3GPP specifications have been referenced with only the changes needed by the cable industry shown: hence the use of delta Recommendations.

6 Recommendations

IMS Delta Recommendations	Document Name
J.366.0	IPCablecom2 IP Multimedia Subsystem (IMS): Delta Recommendations overview
J.366.1	IPCablecom2 IP Multimedia Subsystem (IMS): Organization of subscriber data (3GPP TS 23.008)
J.366.2	IPCablecom2 IP Multimedia Subsystem (IMS): Session handling – IM call model – Stage 2 specification (3GPP TS 23.218)
J.366.3	IPCablecom2 IP Multimedia Subsystem (IMS): Stage 2 specification (3GPP TS 23.228)
J.366.4	IPCablecom2 IP Multimedia Subsystem (IMS): Session Initiation Protocol (SIP) and Session Description Protocol (SDP) – Stage 3 specification (3GPP TS 24.229)
J.366.5	IPCablecom2 IP Multimedia Subsystem (IMS): Cx and Dx interfaces – Signalling flows and message contents (3GPP TS 29.228)
J.366.6	IPCablecom2 IP Multimedia Subsystem (IMS): Cx and Dx interfaces based on the Diameter protocol – Protocol details (3GPP TS 29.229)
J.366.7	IPCablecom2 IP Multimedia Subsystem (IMS): Access security for IP-based services (3GPP TS 33.203)
J.366.8	IPCablecom2 IP Multimedia Subsystem (IMS): Network domain security specification (3GPP TS 33.210)
J.366.9	IPCablecom2 IP Multimedia Subsystem (IMS): Generic authentication architecture specification (3GPP TS 33.220)

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