ITU-T

The Leader in VoIP Recommendations

ITU-T Study Group 9 is responsible for ITU-T Recommendations on integrated broadband cable networks and television and sound transmission, including cable modems and delivery of video, voice, and high-speed data.

Main Recommendations

J.160 Architectural framework for the delivery of time-critical services over cable television networks using cable modems
J.161 Audio codec requirements for the provision of bidirectional audio service over cable television networks using cable modems
J.162 Network call signalling protocol for the delivery of time-critical services over cable television networks using cable modems
J.163 Dynamic quality of service for the provision of real-time services over cable television networks using cable modems
J.164 Event message requirements for the support of real-time services over cable television networks using cable modems
J.165 IPCablecom Internet signalling transport protocol (ISTP)
J.166 IPCablecom Management Information Base (MIB) framework
J.167 Media terminal adapter (MTA) device provisioning requirements for the delivery of real-time services over cable television networks using cable modems
J.168 IPCablecom Media Terminal Adapter (MTA) MIB requirements
J.169 IPCablecom network call signalling (NCS) MIB requirements
J.170 IPCablecom security specification
J.171 IPCablecom Trunking Gateway Control Protocol (TGCP)
J.172 IPCablecom management event mechanism
J.173 IPCablecom embedded MTA primary line support
J.174 IPCablecom interdomain quality of service
J.175 Audio server protocol
J.176 IPCablecom management event mechanism MIB
J.177 IPCablecom CMS subscriber provisioning specification
J.178 IPCablecom CMS to CMS signalling
J.179 IPCablecom support for multimedia

Related Recommendations

J.112 Transmission systems for Interactive cable television services
J.122 Second-generation transmission systems for interactive cable television services – IP cable modems
Y.1001 IP Framework – A framework for convergence of telecommunications network and IP network technologies
Y.1540 Internet protocol data communication service – IP packet transfer and availability performance parameters

VoIP for Cable means

Voice communication services over Internet Protocol

- VoIP uses packet-switched networks running Internet Protocol (IP) to deliver telephony services rather than traditional circuit switching.

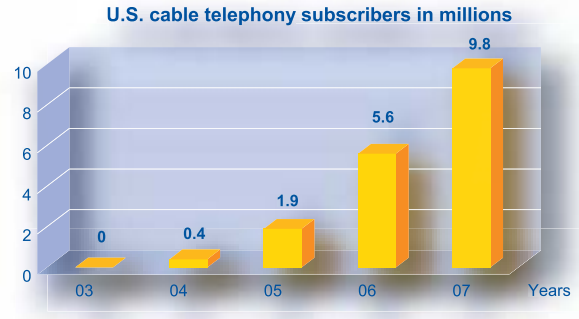
Leveraging the existing cable system architecture

- VoIP services can be transported over an existing cable modem network infrastructure resulting in affordable, reliable service.

Sophisticated technology to ensure:

- Quality of Service (QoS)
- Secure communications
- Product interoperability
- Advanced features and services
- Low-cost solutions

VoIP Subscribers



Source: 2004, Kagan World Media estimates.

What is IPCablecom?

IPCablecom is a project on time-critical interactive services over cable television networks using the IP protocol, in particular Voice and Video over IP.

The IPCablecom recommendations enable the delivery of IP-based multimedia services, including voice communications, over the J.112 or J.122 cable high-speed data access network.

For more information about IPCablecom, please check the ITU-T Study Group 9 website at:

www.itu.int/itudoc/itu-t/com9/ipcable/

VoIP over Cable TV Networks

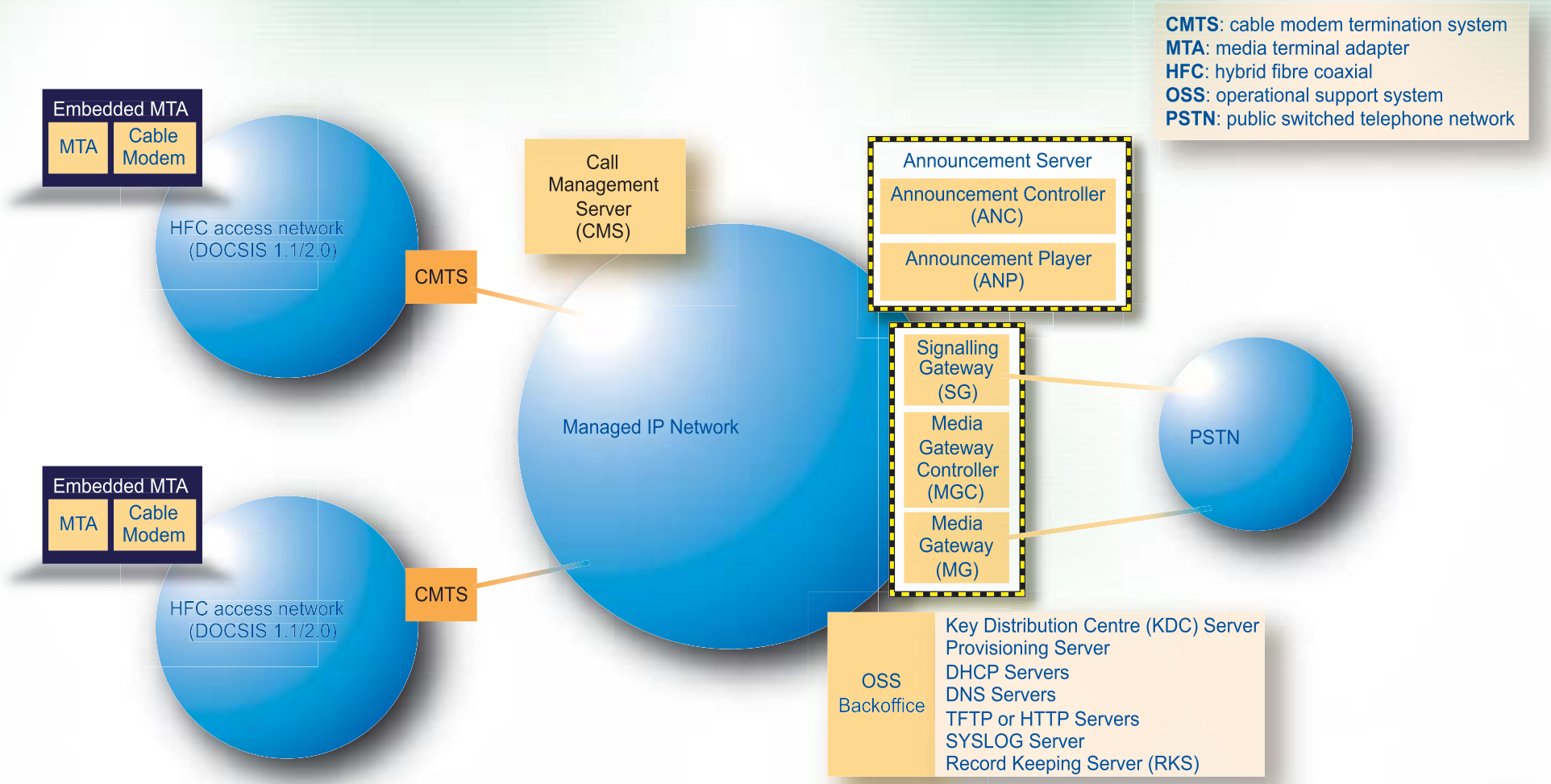
Voice over Internet Protocol

Delivery of voice services over cable TV networks

ITU-T

03.2005 tsbpromo@itu.int

VoIP Architecture



Source: ITU-T Rec J.160

Voice over IP services are carried over networks being built according to IPCablecom Recommendations and accessed by cable modem systems. These cable modem systems conform to Recommendation J.112 "transmission systems for interactive cable television services", or to its second-generation counterpart Recommendation J.122. The IPCablecom architecture, as specified in Recommendation J.160, consists of three interconnected networks: the HFC access network, the managed IP network and the PSTN. IPCablecom defines a distributed communication system architecture and the functional components and protocol interfaces required to interwork with other communication networks.

For more information, see the ITU-T Study Group 9 website at: **www.itu.int/ITU-T/studygroups/com09**