

I n t e r n a t i o n a l T e l e c o m m u n i c a t i o n U n i o n

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

J.173

(11/2005)

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

IPCablecom

IPCablecom embedded MTA primary line support

ITU-T Recommendation J.173



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ITU-T Recommendation J.173

IPCablecom embedded MTA primary line support

Summary

This Recommendation defines the embedded MTA (E-MTA) requirements for the analogue interface and for powering of the E-MTA. An embedded MTA is a Cable Modem (CM) integrated with an IPCablecom Media Terminal Adapter (MTA).

The purpose of this Recommendation is to define a set of requirements that will enable a service that is sufficiently reliable to meet a consumer expectation of essentially constant availability, including, availability during power failure at the customer's premises, and (assuming the service is used to connect to the PSTN), access to emergency services.

Source

ITU-T Recommendation J.173 was approved on 29 November 2005 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.

The approval of ITU-T Recommendations is covered by the procedure laid down in WTSA Resolution 1.

In some areas of information technology which fall within ITU-T's purview, the necessary standards are prepared on a collaborative basis with ISO and IEC.

NOTE

In this Recommendation, the expression "Administration" is used for conciseness to indicate both a telecommunication administration and a recognized operating agency.

Compliance with this Recommendation is voluntary. However, the Recommendation may contain certain mandatory provisions (to ensure e.g. interoperability or applicability) and compliance with the Recommendation is achieved when all of these mandatory provisions are met. The words "shall" or some other obligatory language such as "must" and the negative equivalents are used to express requirements. The use of such words does not suggest that compliance with the Recommendation is required of any party.

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As of the date of approval of this Recommendation, ITU had not received notice of intellectual property, protected by patents, which may be required to implement this Recommendation. However, implementors are cautioned that this may not represent the latest information and are therefore strongly urged to consult the TSB patent database.

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1 Scope

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The purpose of this Recommendation is to define a set of requirements that will enable a service that is sufficiently reliable to meet a consumer expectation of essentially constant availability, including, availability during power failure at the customer's premises, and (assuming the service is used to connect to the PSTN), access to emergency services.

2 References

2.1 Normative references

The following ITU-T Recommendations and other references contain provisions which, through reference in this text, constitute provisions of this Recommendation. At the time of publication, the editions indicated were valid. All Recommendations and other references are subject to revision; users of this Recommendation are therefore encouraged to investigate the possibility of applying the most recent edition of the Recommendations and other references listed below. A list of the currently valid ITU-T Recommendations is regularly published. The reference to a document within this Recommendation does not give it, as a stand-alone document, the status of a Recommendation.

- ITU-T Recommendation J.161 (2001), *Audio codec requirements for the provision of bidirectional audio service over cable television networks using cable modems*.
- ITU-T Recommendation J.162 (2005), *Network call signalling protocol for the delivery of time-critical services over cable television networks using cable modems*.
- ITU-T Recommendation J.172 (2005), *IPCablecom management event mechanism*.

2.2 Informative references

- ITU-T Recommendation J.160 (2005), *Architectural framework for the delivery of time-critical services over cable television networks using cable modems*.

3 Terms and definitions

This Recommendation defines the following terms:

3.1 E-MTA: Term used in this Recommendation generically representing the CM and MTA combination. This could be an embedded MTA or a stand-alone MTA.

3.2 Media Terminal Adapter (MTA): An MTA is an IPCablecom client that can be attached to a CM (stand-alone) or integrated with a CM (embedded) that supports POTS.

4 Abbreviations, acronyms and conventions

4.1 Abbreviations and acronyms

This Recommendation uses the following abbreviations and acronyms:

A/D	Analog to Digital converter
AN	Access Node
CM	Cable Modem
CMS	Call Management Server
CPE	Customer Premises Equipment
E-MTA	Embedded MTA
HFC	Hybrid Fibre Coax
MTA	Media Terminal Adapter
NCS	Network Call Signalling (the IPCablecom MGCP profile used for controlling calls)
POTS	Plain Old Telephone Service
PSTN	Public Switched Telephone Network
SNMP	Simple Network Management Protocol
UPS	Uninterruptible Power Supply

4.2 Conventions

If this Recommendation is implemented, the key words "MUST" and "SHALL" as well as "REQUIRED" are to be interpreted as indicating a mandatory aspect of this Recommendation.

The key words indicating a certain level of significance of a particular requirement that are used throughout this Recommendation are summarized as follows:

"MUST"	This word or the adjective "REQUIRED" means that the item is an absolute requirement of this Recommendation.
"MUST NOT"	This phrase means that the item is an absolute prohibition of this Recommendation.
"SHOULD"	This word or the adjective "RECOMMENDED" means that there may exist valid reasons in particular circumstances to ignore this item, but the full implications should be understood and the case carefully weighed before choosing a different course.
"SHOULD NOT"	This phrase means that there may exist valid reasons in particular circumstances when the listed behaviour is acceptable or even useful, but the full implications should be understood and the case carefully weighed before implementing any behaviour described with this label.
"MAY"	This word or the adjective "OPTIONAL" means that this item is truly optional. One vendor may choose to include the item because a particular marketplace requires it or because it enhances the product, for example; another vendor may omit the same item.