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STANDARDS

Data Standards Subcommittee

AMERICAN NATIONAL STANDARD

ANSI/SCTE 259-05 2020

HDV SIP Specification

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1. Introduction

1.1. Executive Summary

The present document provides the SCTE endorsement of CableLabs specification: PKT-SP-HDV-SIP-C01-170530.

1.2. Scope

This document specifies the requirements for implementing HD Voice services on the PacketCable infrastructure. It focuses on the functional specification of PacketCable client devices that extend the standard telephony functions to include:

a) DECT-based cordless telephony interface;
b) Support for wideband voice; and
c) Interactions between the DECT cordless handsets and analog phones.

This specification introduces two types of the HD Voice client devices. One is an embedded device that integrates a DECT base station, a PacketCable client, and a DOCSIS cable modem; the other is a stand-alone device that integrates the first two elements but not a cable modem, and is connected to the PacketCable network via an external cable modem or router. The embedded device type is similar to an E-DVA, with the exception that it supports a DECT telephony interface in addition to analog telephony interfaces.

A substantial portion of the document is devoted to the requirements on the mapping between the signaling protocol on the DECT air interface and the PacketCable SIP signaling protocol on the network side. Special considerations are given to ensure that the user experience with the existing PacketCable feature set be preserved with the HD Voice client devices.

One general goal underpinning the development of this specification is to maximize the reuse of the existing PacketCable and DECT specifications and to minimize the changes to these specifications. In particular, no change is made to the PacketCable signaling protocol on the network side in order to support the HD Voice services, thus allowing the PacketCable infrastructure to be used as is. In addition, no major change is introduced to the DECT air interface signaling protocol. Rather, the document is mainly concerned with how to employ the existing DECT signaling scheme to realize the existing telephony features and how to bridge the signaling protocols on the air interface and the PacketCable network.

The scope of this specification is limited to the requirements that impact the device's interoperability and the user's basic feature interactions. No attempt is made to specify the device's internal hardware and software architectures, the actual user interface, and supplementary functionality such as answer machine, phone book, etc. These areas, though important for a final product, are construed as either vendor-specific or operator-specific.

2. Normative References

The following documents contain provisions, which, through reference in this text, constitute provisions of this document. At the time of Subcommittee approval, the editions indicated were valid. All documents are subject to revision; and while parties to any agreement based on this document are encouraged to investigate the possibility of applying the most recent editions of the documents listed below, they are reminded that newer editions of those documents might not be compatible with the referenced version.

2.1. SCTE References

- No normative references are applicable.

2.2. Standards from Other Organizations

[1] HDV SIP Specification, PKT-SP-HDV-SIP-C01-170530, May 30, 2017, Cable Television Laboratories, Inc. www.cablelabs.com

2.3. Published Materials

- No normative references are applicable.

3. Informative References

The following documents might provide valuable information to the reader but are not required when complying with this document.

3.1. SCTE References

- No informative references are applicable.

3.2. Standards from Other Organizations

- No informative references are applicable.

3.3. Published Materials

- No informative references are applicable.

4. Compliance Notation

shall	This word or the adjective "***required***" means that the item is an absolute requirement of this document.
shall not	This phrase means that the item is an absolute prohibition of this document.
forbidden	This word means the value specified shall never be used.
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 weighted before choosing a different course.
should not	This phrase means that there may exist valid reasons in particular circumstances when the listed behavior is acceptable or even useful, but the full implications should be understood and the case carefully weighed before implementing any behavior 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.
deprecated	Use is permissible for legacy purposes only. Deprecated features may be removed from future versions of this document. Implementations should avoid use of deprecated features.

5. Abbreviations and Definitions

5.1. Abbreviations

For the purposes of the present document, the abbreviations given in CableLabs specification: PKT-SP-HDV-SIP-C01-170530 [1] apply.

5.2. Definitions

For the purposes of the present document, the abbreviations given in CableLabs specification: PKT-SP-HDV-SIP-C01-170530 [1] apply.

6. Endorsement Notice

All elements of CableLabs specification: PKT-SP-HDV-SIP-C01-170530 [1] ***shall*** apply without modifications.