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Integrated broadband cable telecommunication networks (CABLE); Fourth generation transmission systems for interactive cable television services - IP cable modems; Part 3: MAC and upper layer protocols interface; DOCSIS® 3.1 [ANSI/SCTE 220-2 2016]

Reference
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Foreword

This final draft ETSI Standard (ES) has been produced by ETSI Technical Committee Integrated broadband cable telecommunication networks (CABLE), and is now submitted for the ETSI standards Membership Approval Procedure.

The present document is part 3 of a multi-part deliverable covering the fourth generation transmission systems for interactive cable television services - IP cable modems. Full details of the entire series can be found in part 1 [2].

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Modal verbs terminology

In the present document "**shall**", "**shall not**", "**should**", "**should not**", "**may**", "**need not**", "**will**", "**will not**", "**can**" and "**cannot**" are to be interpreted as described in clause 3.2 of the ETSI Drafting Rules (Verbal forms for the expression of provisions).

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1 Scope

The present document provides the ETSI endorsement of ANSI/SCTE Standard 220-2 [1].

ANSI/SCTE Standard 220-2 is part of a series of specifications that defines the fourth generation of high-speed data-over-cable systems, commonly referred to as the DOCSIS 3.1 specifications. The standard was developed for the benefit of the cable industry, and includes contributions by operators and vendors from North and South America, Europe and Asia.

This generation of the DOCSIS specifications builds upon the previous generations of DOCSIS specifications (commonly referred to as the DOCSIS 3.0 and earlier specifications), leveraging the existing Media Access Control (MAC) and Physical (PHY) layers, but with the addition of a new PHY layer designed to improve spectral efficiency and provide better scaling for larger bandwidths (and appropriate updates to the MAC and management layers to support the new PHY layer). It includes backward compatibility for the existing PHY layers in order to enable a seamless migration to the new technology.

ANSI/SCTE Standard 220-2 defines the interface for the MAC and upper layer protocols, and corresponds to the CableLabs specification [i.1].

2 References

2.1 Normative references

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the referenced document (including any amendments) applies.

Referenced documents which are not found to be publicly available in the expected location might be found at https://docbox.etsi.org/Reference/.

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The following referenced documents are necessary for the application of the present document.

[1] ANSI/SCTE 220-2 (2016): "DOCSIS 3.1 Part 2: MAC and Upper Layer Protocols Interface".

[2] ETSI ES 203 311-1: "Integrated broadband cable telecommunication networks (CABLE); Fourth generation transmission systems for interactive cable television services - IP cable modems; Part 1: General; DOCSIS® 3.1".

2.2 Informative references

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the referenced document (including any amendments) applies.

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The following referenced documents are not necessary for the application of the present document but they assist the user with regard to a particular subject area.

[i.1] Cable Television Laboratories, Inc.: "DOCSIS 3.1 MAC and Upper Layer Protocols Interface Specification", CM-SP-MULPIv3.1-I08-151210.

3 Definition of terms, symbols and abbreviations

3.1 Terms

For the purposes of the present document, the terms given in ANSI/SCTE 220-2 [1] apply.

3.2 Symbols

Void.

3.3 Abbreviations

For the purposes of the present document, the abbreviations given in ANSI/SCTE 220-2 [1] apply.

Endorsement notice

All elements of ANSI/SCTE 220-2 [1] shall apply without modifications.

Annex A (informative): Change History

Date	Version	Information about changes
2019	1.1.1	First publication of the document after approval by ETSI TC CABLE

History

Document history			
V1.1.1	March 2019	Membership Approval Procedure	MV 20190513: 2019-03-14 to 2019-05-13