



**Integrated broadband cable
telecommunication networks (CABLE);
Sixth generation transmission systems for interactive cable
television services - IP cable modem;
Part 5: Converged Cable Access Platform (CCAP)
operations support system interface; DOCSIS® 4.0
[ANSI/SCTE 262-4 2020]**

Reference

DES/CABLE-0029-5

Keywordsaccess, broadband, CABLE, DOCSIS,
endorsement, IP, IPCable**ETSI**650 Route des Lucioles
F-06921 Sophia Antipolis Cedex - FRANCE

Tel.: +33 4 92 94 42 00 Fax: +33 4 93 65 47 16

Siret N° 348 623 562 00017 - APE 7112B
Association à but non lucratif enregistrée à la
Sous-Préfecture de Grasse (06) N° w061004871

Important notice

The present document can be downloaded from:

<http://www.etsi.org/standards-search>

The present document may be made available in electronic versions and/or in print. The content of any electronic and/or print versions of the present document shall not be modified without the prior written authorization of ETSI. In case of any existing or perceived difference in contents between such versions and/or in print, the prevailing version of an ETSI deliverable is the one made publicly available in PDF format at www.etsi.org/deliver.

Users of the present document should be aware that the document may be subject to revision or change of status.

Information on the current status of this and other ETSI documents is available at

<https://portal.etsi.org/TB/ETSIDeliverableStatus.aspx>

If you find errors in the present document, please send your comment to one of the following services:

<https://standards-portal.etsi.org/People/CommitteeSupportStaff.aspx>

If you find a security vulnerability in the present document, please report it through our

Coordinated Vulnerability Disclosure Program:

<https://www.etsi.org/standards/coordinated-vulnerability-disclosure>

Notice of disclaimer & limitation of liability

The information provided in the present deliverable is directed solely to professionals who have the appropriate degree of experience to understand and interpret its content in accordance with generally accepted engineering or other professional standard and applicable regulations.

No recommendation as to products and services or vendors is made or should be implied.

No representation or warranty is made that this deliverable is technically accurate or sufficient or conforms to any law and/or governmental rule and/or regulation and further, no representation or warranty is made of merchantability or fitness for any particular purpose or against infringement of intellectual property rights.

In no event shall ETSI be held liable for loss of profits or any other incidental or consequential damages.

Any software contained in this deliverable is provided "AS IS" with no warranties, express or implied, including but not limited to, the warranties of merchantability, fitness for a particular purpose and non-infringement of intellectual property rights and ETSI shall not be held liable in any event for any damages whatsoever (including, without limitation, damages for loss of profits, business interruption, loss of information, or any other pecuniary loss) arising out of or related to the use of or inability to use the software.

Copyright Notification

No part may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm except as authorized by written permission of ETSI.

The content of the PDF version shall not be modified without the written authorization of ETSI.

The copyright and the foregoing restriction extend to reproduction in all media.

© ETSI 2022.
All rights reserved.

Contents

Intellectual Property Rights	4
Foreword.....	4
Modal verbs terminology.....	4
1 Scope	5
2 References	5
2.1 Normative references	5
2.2 Informative references.....	5
3 Definition of terms, symbols and abbreviations.....	6
3.1 Terms.....	6
3.2 Symbols.....	6
3.3 Abbreviations	6
Endorsement notice	6
History	7

i T E h S T A N D A R D P R E
(s t a n d a r d s . i t e h)

<https://standards.iteh.ai/catalog/standards/si/81ba649e10/et-s5i--ve1s--12-013>

Intellectual Property Rights

Essential patents

IPRs essential or potentially essential to normative deliverables may have been declared to ETSI. The declarations pertaining to these essential IPRs, if any, are publicly available for **ETSI members and non-members**, and can be found in ETSI SR 000 314: "*Intellectual Property Rights (IPRs); Essential, or potentially Essential, IPRs notified to ETSI in respect of ETSI standards*", which is available from the ETSI Secretariat. Latest updates are available on the ETSI Web server (<https://ipr.etsi.org/>).

Pursuant to the ETSI Directives including the ETSI IPR Policy, no investigation regarding the essentiality of IPRs, including IPR searches, has been carried out by ETSI. No guarantee can be given as to the existence of other IPRs not referenced in ETSI SR 000 314 (or the updates on the ETSI Web server) which are, or may be, or may become, essential to the present document.

Trademarks

The present document may include trademarks and/or tradenames which are asserted and/or registered by their owners. ETSI claims no ownership of these except for any which are indicated as being the property of ETSI, and conveys no right to use or reproduce any trademark and/or tradename. Mention of those trademarks in the present document does not constitute an endorsement by ETSI of products, services or organizations associated with those trademarks.

DECT™, **PLUGTESTS™**, **UMTS™** and the ETSI logo are trademarks of ETSI registered for the benefit of its Members. **3GPP™** and **LTE™** are trademarks of ETSI registered for the benefit of its Members and of the 3GPP Organizational Partners. **oneM2M™** logo is a trademark of ETSI registered for the benefit of its Members and of the oneM2M Partners. **GSM®** and the GSM logo are trademarks registered and owned by the GSM Association.

Foreword

This ETSI Standard (ES) has been produced by ETSI Technical Committee Integrated broadband cable telecommunication networks (CABLE).

The present document is part 5 of a multi-part deliverable. Full details of the entire series can be found in part 1 [2].

DOCSIS® is a registered trade mark of Cable Television Laboratories, Inc., and is used in the present document with permission.

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).

"**must**" and "**must not**" are **NOT** allowed in ETSI deliverables except when used in direct citation.

1 Scope

The present document provides the ETSI endorsement of ANSI/SCTE standard ANSI/SCTE 262-4 [1].

ANSI/SCTE 262-4 [1] is part of a series of standards that defines the sixth generation of high-speed data-over-cable systems and is based on a set of specifications commonly referred to as DOCSIS 4.0 specifications. This generation of the DOCSIS specifications builds upon the previous generations of DOCSIS specifications (commonly referred to as the DOCSIS 3.1 and earlier specifications), leveraging the existing Media Access Control (MAC) and Physical (PHY) layers with the addition of appropriate updates to the MAC and management layer to support new PHY functionality. It includes backward compatibility for the existing PHY layers in order to enable a seamless migration to the new technology.

ANSI/SCTE 262-4 [1] defines the requirements necessary for the configuration, fault management and performance management of Cable Modem Termination Systems (CMTS) and the Converged Cable Access Platform (CCAP) system. The intent of the standard is to define a common, cross-vendor set of functionality for the configuration and management of CMTSs and CCAPs.

The present document defines a standard configuration information model for the configuration of the CCAP. The present document also defines the SNMP management requirements for a CCAP. These SNMP requirements include both protocol conformance and management object definitions, based largely upon existing industry standard management objects found in DOCSIS CMTSs and universal EQAMs. In addition, The present document defines the standard event messaging requirements of a CCAP system.

ANSI/SCTE 262-4 [1] corresponds to the CableLabs specification CM-SP-CCAP-OSSIV4.0-I02-200311 [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/>.

NOTE: While any hyperlinks included in this clause were valid at the time of publication, ETSI cannot guarantee their long term validity.

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

- [1] ANSI/SCTE 262-4 2020: "DOCSIS 4.0 Part 4: CCAP Operations Support System Interface Specification".
- [2] ETSI ES 203 811-1: "Integrated broadband cable telecommunication networks (CABLE); Sixth generation transmission systems for interactive cable television services - IP cable modem; Part 1: General; DOCSIS® 4.0".

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.

NOTE: While any hyperlinks included in this clause were valid at the time of publication, ETSI cannot guarantee their long term validity.

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 4.0 CCAP Operations Support System Interface Specification", CM-SP-CCAP-OSSIV4.0-I02-200311.

3 Definition of terms, symbols and abbreviations

3.1 Terms

For the purposes of the present document, the terms given in ANSI/SCTE 262-4 [1] apply.

3.2 Symbols

For the purposes of the present document, the symbols given in ANSI/SCTE 262-4 [1] apply.

3.3 Abbreviations

For the purposes of the present document, the abbreviations given in ANSI/SCTE 262-4 [1] apply.

Endorsement notice

All elements of ANSI/SCTE 262-4 [1] shall apply without modifications.

ETSI
STANDARD PRE
standards.it
ETSI ES 203 811-5 V1.1.1 (2022-09)
https://standards.iteh.ai/catalog/standards/si/81ba649e10/et-si--ve1s--12-013