
Skupni krmilni vmesnik za digitalne avdio in video izdelke, vključene v omrežje - 5-2. del: Prenos po omrežjih - Signalizacija (IEC 62379-5-2:2014)

Common control interface for networked digital audio and video products -- Part 5-2: Transmission over networks - Signalling (IEC 62379-5-2:2014)

Gemeinsame Steuerschnittstelle für netzwerkbetriebene digitale Audio- und Videogeräte - Teil 5-2: Übertragung über Netzwerke - Signalisierung (IEC 62379-5-2:2014)

Interface de contrôle commune pour produits audio et vidéo numériques en réseau - Partie 5-2: Transmission sur les réseaux - Signalisation (TA4) (CEI 62379-5-2:2014)

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Common control interface for networked digital audio and video
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(TA4)
(IEC 62379-5-2:2014)

Interface de contrôle commune pour produits audio et vidéo
numériques en réseau - Partie 5-2: Transmission sur les
réseaux - Signalisation (TA4)
(CEI 62379-5-2:2014)

Gemeinsame Steuerschnittstelle für netzwerkbetriebene
digitale Audio- und Videogeräte - Teil 5-2: Übertragung über
Netzwerke - Signalisierung
(IEC 62379-5-2:2014)

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European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Foreword

The text of document 100/2050/CDV, future edition 1 of IEC 62379-5-2, prepared by IEC/TC 100, "Audio, video and multimedia systems and equipment" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62379-5-2:2014.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2015-01-11
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2017-04-11

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Endorsement notice

The text of the International Standard IEC 62379-5-2:2014 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 60958-4	NOTE	Harmonised as EN 60958-4.
IEC 61883 (Series)	NOTE	Harmonised as EN 61883 (Series).
IEC 61937 (Series)	NOTE	Harmonised as EN 61937 (Series).

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE 1 When an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here:

www.cenelec.eu

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60958	-	Digital audio interface	EN 60958	-
IEC 62365	2009	Digital audio - Digital input-output interfacing - Transmission of digital audio over asynchronous transfer mode (ATM) networks	EN 62365	2009
IEC 62379	series	Common control interface for networked digital audio and video products	EN 62379	series
IEC 62379-2	2008	Common control interface for networked digital audio and video products -- Part 2: Audio	EN 62379-2	2009
IEC 62379-5-1	-	Common control interface for networked digital audio and video products -- Part 5-1: Transmission over networks - General	EN 62379-5-1	-
AES53	-	AES standard for digital audio - Digital input-output interfacing - Sample-accurate timing in AES47	-	-
ITU-T recommendation Q.850	-	Usage of cause and location in the Digital Subscriber Signalling System No. 1 and the Signalling System No. 7 ISDN user part	-	-

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INTERNATIONAL STANDARD

**Common control interface for networked digital audio and video products –
Part 5-2: Transmission over networks – Signalling**

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**COMMON CONTROL INTERFACE FOR NETWORKED
DIGITAL AUDIO AND VIDEO PRODUCTS –**
**Part 5-2: Transmission over networks –
Signalling**

FOREWORD

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International Standard IEC 62379-5-2 has been prepared by technical area 4: Digital system interfaces and protocols of IEC technical committee 100: Audio, video and multimedia systems and equipment.

The text of this standard is based on the following documents:

CDV	Report on voting
100/2050/CDV	100/2158/RVC

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

A list of all parts in the IEC 62379 series, published under the general title *Common control interface for networked digital audio and video products*, can be found on the IEC website.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

A bilingual version of this publication may be issued at a later date.

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INTRODUCTION

IEC 62379 specifies the Common Control Interface, a protocol for managing networked audiovisual equipment. The following parts exist or are planned:

- 1 General
- 2 Audio
- 3 Video
- 4 Data
- 5 Transmission over networks
- 6 Packet transfer service
- 7 Measurement

IEC 62379-1:2007 specifies aspects which are common to all equipment, and it includes an introduction to the Common Control Interface.

IEC 62379-2:2008, IEC 62379-3 (under consideration) and IEC 62379-4 (under consideration) specify control of internal functions specific to equipment carrying particular types of live media. IEC 62379-4 refers to time-critical data such as commands to automation equipment, but not to packet data such as the control messages themselves.

IEC 62379-5 specifies control of transmission of these media over each individual network technology. It includes network specific management interfaces along with network specific control elements that integrate into the control framework.

IEC 62379-5-1 specifies management of aspects which are common to all network technologies. IEC 62379-5-3 onwards specify management of aspects which are particular to individual networking technologies.

IEC 62379-5-2 (this standard) specifies protocols which can be used between networking equipment to enable the setting up of calls which are routed across different networking technologies.

IEC 62379-6 specifies carriage of control and status messages and non-audiovisual data over transports that do not support audio and video, such as RS232 serial links, with (as for IEC 62379-5) a separate subpart for each technology.

IEC 62379-7 specifies aspects that are specific to the measurement of the service experienced by audio and video streams and in particular to the requirements of EBU ECN-IPM Measurements Group.

COMMON CONTROL INTERFACE FOR NETWORKED DIGITAL AUDIO AND VIDEO PRODUCTS –

Part 5-2: Transmission over networks – Signalling

1 Scope

This part of IEC 62379 specifies protocols which can be used between networking equipment to enable the setting up of calls which are routed across different networking technologies.

It also specifies encapsulation of digital media within those calls.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60958 (all parts), *Digital audio interface*.

IEC 62365:2009, *Digital audio – Digital input-output interfacing – Transmission of digital audio over asynchronous transfer mode (ATM) networks*.

IEC 62379 (all parts), *Common control interface for networked digital audio and video products*.

IEC 62379-1, *Common control interface for networked digital audio and video products – Part 1: General*.

IEC 62379-2:2008, *Common control interface for networked digital audio and video products – Part 2: Audio*.

IEC 62379-5-1, *Common control interface for networked digital audio and video products – Part 5-1: Transmission over networks – General*¹.

ITU-T Recommendation Q.850, *Usage of cause and location in the digital subscriber signalling system No. 1 and the signalling system No.7 ISDN used part*.

AES53, *AES standard for digital audio – Digital input-output interfacing – Sample-accurate timing in AES47* (Audio Engineering Society, New York, NY, USA).

3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 62379-1 and the following apply.

¹ To be published.

3.1**adjacent**

<of two network elements> such that data can be sent from one to the other without passing through any other network element

3.2**asynchronous flow**

flow consisting of data units for which the time of arrival at the destination is less important

3.3**asynchronous service**

best-effort point-to-point service carrying asynchronous flows

3.4**call identifier**

first 12 octets of a flow identifier

Note 1 to entry: See 4.3.

3.5**connectionless data unit**

data unit which is not part of a flow

3.6**data unit**

sequence of one or more octets which is conveyed across the network as a single unit

3.7**end equipment**

equipment that is connected to the network and produces or consumes data units

3.8**extended unique identifier****EUI-64**

64-bit globally unique identifier, the first 24 or 36 bits of which are an organizationally unique identifier (OUI) administered by the Institute of Electrical and Electronics Engineers (IEEE)

Note 1 to entry: The extended unique identifier contains 64 bit.

3.9**flow**

sequence of data units

3.10**information element****IE**

element of a message, in tag-length-value format

3.11**link**

means by which data units are conveyed between adjacent network elements

3.12**network delay**

time from submission of a data unit to the network by the sender to its delivery to the recipient