

### SLOVENSKI STANDARD SIST EN 61937-10:2011

01-september-2011

Digitalni avdio - Vmesnik za nelinearne PCM kodirane bitne tokove po IEC 60958 - 10. del: Nelinearni PCM bitni tokovi v skladu s formatom brezizgubnega kodiranja zvoka (ALS) za MPEG-4 (IEC 61937-10:2011)

Digital audio - Interface for non-linear PCM encoded audio bitstreams applying IEC 60958 -- Part 10: Non-linear PCM bitstreams according to the MPEG-4 Audio Lossless Coding (ALS) format (IEC 61937-10:2011)

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Digitalton - Schnittstelle für nichtlinear-PCM-codierte Audio-Bitströme unter Verwendung von IEC 60958 - Teil 10: Nichtlineare PCM-Bitströme entsprechend dem Format MPEG-4-ALS (verlustfreie Audiodatenkompression) (IEC 61937-10:2011)

SIST EN 61937-10:2011

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Audionumérique - Interface pour les flux de bits audio à codage MIC non linéaire conformément à la CEI 60958 - Partie 10: Flux de bits à codage MIC nonlinéaire selon le format MPEG-4 Audio sans perte (Audio Lossless Coding - ALS) (CEI 61937-10:2011)

Ta slovenski standard je istoveten z: EN 61937-10:2011

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33.160.30 Avdio sistemi Audio systems

35.200 Vmesniška in povezovalna Interface and interconnection

oprema equipment

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EN 61937-10

NORME EUROPÉENNE EUROPÄISCHE NORM

June 2011

ICS 33.160.30; 35.240.99

**English version** 

### Digital audio -

Interface for non-linear PCM encoded audio bitstreams applying IEC 60958 -

Part 10: Non-linear PCM bitstreams according to the MPEG-4 Audio Lossless Coding (ALS) format

(IEC 61937-10:2011)

Audionumérique -

Interface pour les flux de bits audio à codage MIC non linéaire conformément à la CEI 60958 -

Partie 10: Flux de bits à codage MIC nonlinéaire selon le format MPEG-4 Audio ARD sans perte (Audio Lossless Coding -

ALS) (CEI 61937-10:2011) Digitalton -

Schnittstelle für nichtlinear-PCM-codierte Audio-Bitströme unter Verwendung von IEC 60958 -

ge MIC non- Teil 10: Nichtlineare PCM-Bitströme
4 Audio App entsprechend dem Format MPEG-4-ALS
oding - (verlustfreie Audiodatenkompression)
standards.ite (IEC 61937-10:2011)

### SIST EN 61937-10:2011

This European Standard was approved by CENELEC on 2011-05-25. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

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Management Centre: Avenue Marnix 17, B - 1000 Brussels

### **Foreword**

The text of document 100/1733/CDV, future edition 1 of IEC 61937-10, prepared by technical area 4, Digital system interfaces and protocols, of IEC TC 100, Audio, video and multimedia systems and equipment, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61937-10 on 2011-05-25.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN and CENELEC shall not be held responsible for identifying any or all such patent rights.

The following dates were fixed:

 latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement

(dop) 2012-02-25

 latest date by which the national standards conflicting with the EN have to be withdrawn

(dow) 2014-05-25

Annex ZA has been added by CENELEC.

### **Endorsement notice**

The text of the International Standard IEC 61937-10:2011 was approved by CENELEC as a European Standard without any modification. (standards.iteh.ai)

In the official version, for Bibliography, the following note has to be added for the standard indicated:

SIST EN 61937-10:2011

IEC 60958-3

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### **Annex ZA** (normative)

### Normative references to international publications with their corresponding European publications

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

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

<u>Publication</u>	<u>Year</u>	<u>Title</u>	EN/HD	<u>Year</u>
IEC 60958	Series	Digital audio interface	EN 60958	Series
IEC 61937	Series	Digital audio - Interface for non-linear PCM encoded audio bitstreams applying IEC 60958	EN 61937	Series
IEC 61937-1	-	Digital audio - Interface for non-linear PCM encoded audio bitstreams applying IEC 60958 - Part 1: General	EN 61937-1	-
IEC 61937-2	- iTo	Digital audio - Interface for non-linear PCM encoded audio bitstreams applying IEC 60958 - Part 2: Burst-info	EN 61937-2	-
ISO/IEC 14496-3 + A2	2009 2010 https://sta	Information technology - Coding of audiovisual objects T Part 3: Audio 011 ndards.iteh.ai/catalog/stat	- - 85f7-	-

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Digital audio – Interface for non-linear PCM encoded audio bitstreams applying

Part 10: Non-linear PCM bitstreams according to the MPEG-4 audio lossless coding (ALS) format

SIST EN 61937-10:2011

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Audionumérique – Interface pour les flux de bits audio à codage MIC non linéaire conformément à la CEI 60958 –

Partie 10: Flux de bits à codage MIC non-linéaire selon le format MPEG-4 Audio sans perte (Audio Lossless Coding – ALS)

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### INTERNATIONAL ELECTROTECHNICAL COMMISSION

## DIGITAL AUDIO – INTERFACE FOR NON-LINEAR PCM ENCODED AUDIO BITSTREAMS APPLYING IEC 60958 –

### Part 10: Non-linear PCM bitstreams according to the MPEG-4 audio lossless coding (ALS) format

#### **FOREWORD**

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International Standard IEC 61937-10 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	
100/1733/CDV	100/1808/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.

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

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A list of all the parts in the IEC 61937 series, published under the general title *Digital audio – Interface for non-linear PCM encoded audio bitstreams applying IEC 60958* can be found on the IEC website.

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.

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## DIGITAL AUDIO – INTERFACE FOR NON-LINEAR PCM ENCODED AUDIO BITSTREAMS APPLYING IEC 60958 –

### Part 10: Non-linear PCM bitstreams according to the MPEG-4 audio lossless coding (ALS) format

### 1 Scope

This part of IEC 61937 specifies the method for IEC 60958 to convey non-linear PCM bitstreams encoded in accordance with the MPEG-4 audio lossless coding (ALS) format.

#### 2 Normative references

The following referenced documents are indispensable for the application of this document. 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 iTeh STANDARD PREVIEW

IEC 61937 (all parts), Digital audio – Interface for non-linear PCM encoded audio bitstreams applying IEC 60958

IEC 61937-1, Digital audio – Interface for non-linear PCM encoded audio bitstreams applying IEC 60958 the Parting deneral atalog standards/sist/63a0931f-1749-4d34-85f7-b3beae2c6bd7/sist-en-61937-10-2011

IEC 61937-2, Digital audio – Interface for non-linear PCM encoded audio bitstreams applying IEC 60958 – Part 2: Burst-Info

ISO/IEC 14496-3:2009, Information technology – Coding of audio-visual objects – Part 3: Audio

Amendment 2:2010, ALS Simple Profile and Transport of SAOC

### 3 Terms, definitions, abbreviations and conventions

For the purposes of this document, the following terms and definitions, abbreviations and presentation conventions apply.

### 3.1 Terms and definitions

### 3.1.1

### sub data-type

reference to the type of payload of the data-burst defined for use with the specified data-type

#### 3.1.2

### latency

delay time of an external audio decoder to decode a MPEG-4 ALS data-burst, defined as the sum of the receiving delay time and the decoding delay time

### 3.1.2

#### length code

code indicating the length of the data-burst-payload in 8-byte units according to this standard