

**Digital audio – Interface for non-linear
PCM encoded audio bitstreams
applying IEC 60958 Part 6: Non-linear
PCM bitstreams according to the MPEG-
2 AAC and MPEG-4 AAC audio formats**

Digital audio – Interface for non-linear PCM encoded audio bitstreams applying IEC 60958 Part 6: Non-linear PCM bitstreams according to the MPEG-2 AAC and MPEG-4 AAC audio formats

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 61937-6:2006 sisaldab Euroopa standardi EN 61937-6:2006 ingliskeelset teksti. Käesolev dokument on jõustatud 22.09.2006 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN 61937-6:2006 consists of the English text of the European standard EN 61937-6:2006. This document is endorsed on 22.09.2006 with the notification being published in the official publication of the Estonian national standardisation organisation. The standard is available from Estonian standardisation organisation.
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Käsitlusala: This part of IEC 61937 specifies the method for IEC 60958 to convey non-linear PCM bitstreams encoded in accordance with the MPEG-2 AAC (Advanced Audio Coding) and MPEG-4 AAC formats.	Scope: This part of IEC 61937 specifies the method for IEC 60958 to convey non-linear PCM bitstreams encoded in accordance with the MPEG-2 AAC (Advanced Audio Coding) and MPEG-4 AAC formats.
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ICS 33.160.60, 35.040

Võtmesõnad: interfaces (data processing), properti, radio equipment, radio receivers, radiocommunications, receivers, signal transmission, sound reproduction, sound transmission, specification (approval), specifications, television broadcasting

English version

**Digital audio –
Interface for non-linear PCM encoded audio bitstreams
applying IEC 60958
Part 6: Non-linear PCM bitstreams according to the MPEG-2 AAC
and MPEG-4 AAC audio formats
(IEC 61937-6:2006)**

Audionumérique –
Interface pour les flux de bits audio
à codage MIC non linéaire,
conformément à la CEI 60958
Partie 6: Flux de bits MIC non linéaire
selon les formats MPEG-2 AAC
et MPEG-4 AAC
(CEI 61937-6:2006)

Digitalton –
Schnittstelle für nichtlinear-PCM-codierte
Audio-Bitströme unter Verwendung
von IEC 60958
Teil 6: Nichtlineare PCM-Bitströme
nach MPEG-2 AAC- und MPEG-4 AAC-
Audio-Formaten
(IEC 61937-6:2006)

This European Standard was approved by CENELEC on 2006-07-01. 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.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

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

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

The text of the International Standard IEC 61937-6:2006, prepared by IEC TC 100, Audio, video and multimedia systems and equipment, was submitted to the formal vote and was approved by CENELEC as EN 61937-6 on 2006-07-01 without any modification.

This European Standard supersedes EN 61937-6:2002.

It includes the following significant technical changes with respect to EN 61937-6:2002:

- a) addition of data-type for MPEG2 AAC low sampling frequency;
- b) additon of data-type for MPEG-4 AAC.

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) 2007-07-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2009-07-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61937-6:2006 was approved by CENELEC as a European Standard without any modification.

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>	<u>EN/HD</u>	<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	- ¹⁾	Digital audio - Interface for non-linear PCM encoded audio bitstreams applying IEC 60958 Part 1: General	EN 61937-1	2003 ²⁾
IEC 61937-2	- ¹⁾	Digital audio - Interface for non-linear PCM encoded audio bitstreams applying IEC 60958 Part 2: Burst-info	EN 61937-2	2003 ²⁾
ISO/IEC 13818-7	2004	Information technology - Generic coding of moving pictures and associated audio information Part 7: Advanced Audio Coding (AAC)	-	-
ISO/IEC 14496-3 + A1	2001 2003	Information technology - Coding of audio-visual objects Part 3: Audio	-	-

¹⁾ Undated reference.

²⁾ Valid edition at date of issue.

INTERNATIONAL STANDARD

IEC
61937-6

Second edition
2006-01

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

**Part 6:
Non-linear PCM bitstreams according
to the MPEG-2 AAC and MPEG-4 AAC
audio formats**



Reference number
IEC 61937-6:2006(E)

Publication numbering

As from 1 January 1997 all IEC publications are issued with a designation in the 60000 series. For example, IEC 34-1 is now referred to as IEC 60034-1.

Consolidated editions

The IEC is now publishing consolidated versions of its publications. For example, edition numbers 1.0, 1.1 and 1.2 refer, respectively, to the base publication, the base publication incorporating amendment 1 and the base publication incorporating amendments 1 and 2.

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INTERNATIONAL STANDARD

IEC
61937-6

Second edition
2006-01

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

**Part 6:
Non-linear PCM bitstreams according
to the MPEG-2 AAC and MPEG-4 AAC
audio formats**

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**DIGITAL AUDIO –
INTERFACE FOR NON-LINEAR PCM ENCODED
AUDIO BITSTREAMS APPLYING IEC 60958 –****Part 6: Non-linear PCM bitstreams according to
the MPEG-2 AAC and MPEG-4 AAC formats**

FOREWORD

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International Standard IEC 61937-6 has been prepared by technical area 4: Digital systems interfaces, of IEC technical committee 100: Audio, video and multimedia systems and equipment.

This second edition of IEC 61937-6 cancels and replaces the first edition published in 2002. This edition contains the following significant technical changes with respect to the previous edition:

- a) addition of data-type for MPEG2 AAC low sampling frequency;
- b) addition of data-type for MPEG-4 AAC.

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

CDV	Report on voting
100/942/CDV	100/1043A/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.

IEC 61937 consists of the following parts under the general title *Digital audio – Interface for non-linear PCM encoded audio bitstreams applying IEC 60958*:

- Part 1: General
- Part 2: Burst-info
- Part 3: Non-linear bitstreams according to the AC-3 format
- Part 4: Non-linear PCM bitstreams according to the MPEG audio formats
- Part 5: Non-linear PCM bitstreams according to the DTS (Digital Theater Systems) format(s)
- Part 6: Non-linear PCM bitstreams according to the MPEG-2 AAC and MPEG-4 AAC formats
- Part 7: Non-linear PCM bitstreams according to the ATRAC, ATRAC2/3 and ATRAC-X formats

The committee has decided that the contents of this publication will remain unchanged until the maintenance result 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 document may be issued at a later date.

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

Part 6: Non-linear PCM bitstreams according to the MPEG-2 AAC and MPEG-4 AAC formats

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-2 AAC (Advanced Audio Coding) and MPEG-4 AAC formats.

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*

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 – Part 1: General*

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

ISO/IEC 13818-7:2004, *Information technology – Generic coding of moving pictures and associated audio information – Part 7: Advanced Audio Coding (AAC)*

ISO/IEC 14496-3:2001, *Information technology – Coding of audio-visual objects – Part 3: Audio*
Amendment 1 (2003)

3 Terms, definitions, abbreviations and presentation convention

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

3.1 Terms and definitions

3.1.1

subdata-type

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

3.1.2

LC profile

low complexity profile identified in ISO/IEC 13818-7