SLOVENSKI STANDARD
SIST EN 62071-3:2007

01-januar-2007

Digitalni videokasetni snemalni sistem z zapisovanjem s poševnimi sledmi na magnetnem traku, širokem 6,35 mm, in komprimiranjem – Format D-7 – 3. del: Podatkovno-tokovni format (IEC 62071-3:2005)

Helical-scan compressed digital video cassette system using 6,35 mm magnetic tape - Format D-7 -- Part 3: Data stream format (IEC 62071-3:2005)

Videokassettensystem mit komprimierter digitaler Schrägspuraufzeichnung auf Magnetband 6,35 mm - Format D-7 -- Teil 3: Datenstromformat (IEC 62071-3:2005)

Systeme de magnétoscope numérique a cassette a balayage hélicoidal a signal compressé utilisant une bande magnétique de 6,35 mm - Format D-7 -- Partie 3: Format du flux de données (IEC 62071-3:2005)

Ta slovenski standard je istoveten z: **EN 62071-3:2006**

ICS:

33.160.40	Video sistemi	Video systems

SIST EN 62071-3:2007 **en,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 62071-3

July 2006

ICS 33.160.40

English version

Helical-scan compressed digital video cassette system using 6,35 mm magnetic tape - Format D-7 Part 3: Data stream format (IEC 62071-3:2005)

Système de magnétoscope numérique à cassette à balayage hélicoïdal à signal compressé utilisant une bande magnétique de 6,35 mm - Format D-7
Partie 3: Format du flux de données
(CEI 62071-3:2005)

Videokassettensystem mit komprimierter digitaler Schrägspuraufzeichnung auf Magnetband 6,35 mm - Format D-7
Teil 3: Datenstromformat
(IEC 62071-3:2005)

This European Standard was approved by CENELEC on 2006-06-01. 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.

This European Standard exists in two official versions (English and German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

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

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

Ref. No. EN 62071-3:2006 E

Foreword

The text of the International Standard IEC 62071-3:2005, 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 62071-3 on 2006-06-01 without any modification.

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)	2007-06-01
– latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2009-06-01

Endorsement notice

The text of the International Standard IEC 62071-3:2005 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.

Publication	Year	Title	EN/HD	Year
SMPTE 305M	2005	Television – Serial Data Transport Interface	-	-
SMPTE 314M	2004	Television – Data Structure for DV-Based Audio, Data and Compressed Video – 25 and 50 Mb/s	-	-
SMPTE 322M	2004	Television – Format for Transmission of DV Compressed Video, Audio and Data Over a Serial Data Transport Interface	-	-

INTERNATIONAL STANDARD

IEC 62071-3

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Helical-scan compressed digital video cassette system using 6,35 mm magnetic tape – Format D-7 –

Part 3: Data stream format

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

HELICAL-SCAN COMPRESSED DIGITAL VIDEO CASSETTE SYSTEM USING 6,35 mm MAGNETIC TAPE – FORMAT D-7 –

Part 3: Data stream format

FOREWORD

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International Standard IEC 62041-3 has been prepared by technical area 6: Higher data rate storage media, data structures and equipment 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
100/902/CDV	100/986/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 62071 consists of the following parts, under the general title *Helical-scan compressed digital video cassette system using 6,35 mm magnetic tape – Format D-7:*

Part 1: VTR specifications

Part 2: Compression format

Part 3: Data stream format

This part 3 describes the specifications for transmission of DV-based compressed video and audio data stream over 270Mb/s and 360 Mb/s serial digital interface.

Part 1 describes the VTR specifications which are tape, magnetization, helical recording, modulation method and basic system data for video compressed data.

Part 2 describes the specifications for encoding process and data format for 525i and 625i systems.

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

HELICAL-SCAN COMPRESSED DIGITAL VIDEO CASSETTE SYSTEM USING 6,35 mm MAGNETIC TAPE – FORMAT D-7

Part 3: Data stream format

1 Scope

This part of IEC 62071 defines the format of the data stream for the synchronous exchange of DV-based audio, data, and compressed video (whose data structure is defined in SMPTE 314M) over the interface defined in SMPTE 305M. It covers the transmission of audio, subcode data and compressed video packets associated with DV-based 25 and 50 Mb/s data structures including faster-than-real-time transmission for 525/60 SDTI and 625/50 SDTI systems.

This standard does not include the data stream of a DV-compressed structure as defined in SMPTE 322M.

Space within SMPTE 305M not used by a data stream conforming to this standard may be used for the transmission of data other than those representing DV-based audio, data and compressed video.

In this standard, the 60 Hz system refers to the field frequency 59,94 Hz system and the 50 Hz system refers to the field frequency 50,0 Hz system.

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.

SMPTE 305M: 2005, *Television – Serial Data Transport Interface*

SMPTE 314M: 1999, *Television – Data Structure for DV-Based Audio, Data and Compressed Video – 25 and 50 Mb/s*

SMPTE 322M: 2004, *Television – Format for Transmission of DV Compressed Video, Audio and Data Over a Serial Data Transport Interface*

3 Abbreviations and acronyms

DIF:	Digital interface
DVF:	DIF valid flag
ECC:	Error correction code
FF:	Field/frame frequency flag
FSNF:	Frame sequence number flag
SDI:	Serial digital interface
SDTI:	Serial data transport interface
ST:	Signal type
STVF:	Signal type of video frame
TRF:	Transmission rate flag
TT:	Transmission type

4 Identification within the serial data transport interface (SDTI)

4.1 SDTI header packet data

The header packet data words of the serial data transport interface (SDTI) associated with this data stream format shall conform to SMPTE 305M. When the SDTI interface is transporting a data stream conforming to this standard, the block type word within the SDTI header packet shall have the value 173_h for transported data contained in fixed-size blocks when ECC (error correction code) is used and the value

233_h when ECC is not used.

4.2 Payload

The payload is composed of consecutive fixed-size blocks (see Figure 1). The SDTI data type word shall identify the data type of this payload with the value 221_h.

5 Stream block format

The stream block format is shown in Figure 1. The length of each stream block is 170 words, including a secondary header, two DIF (digital interface) block IDs, two DIF block data (of stream data) and an ECC block. The secondary header contains reserved data words, signal type words, and a transmission type word. The complete word structure of the stream block for a compressed video data stream is defined below:

Reserved data	:	3 words
Signal type	:	2 words
Transmission type	:	1 word
DIF block ID	:	3 words
DIF block data	:	77 words
DIF block ID	:	3 words
DIF block data	:	77 words
ECC	:	4 words