
British Standard Guide to
**Construction and use of 12.7 mm (0.5 in) wide
magnetic tape cartridges for data interchange,
recording at 1 491 data bytes per millimetre
(37 871 data bytes per inch), on 18 tracks**

[ISO title: Information processing — Data interchange on 12,7 mm (0.5 in) wide magnetic tape cartridges — 18 tracks, 1 491 data bytes per millimetre (37 871 data bytes per inch)]

Guide pour la construction et l'utilisation de cartouches de bandes magnétiques
de 12,7 mm de large (0,5 inch), 18 pistes, 1491 caractères par mm (37 871 caractères
par inch) pour échanges d'informations

Richtlinie für die Herstellung und Anwendung von Magnetbandkassetten 12,7 mm (0,5 in)
für den Datenaustausch, 18 Spuren, 1491 Bytes je Millimeter (37 871 Bytes je Inch)

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Amendment No. 1
published and effective from 28 June 1991
to BS 7062 : 1988

**Guide to construction and use of 12.7 mm (0.5 in) wide
magnetic tape cartridges for data interchange,
recording at 1491 data bytes per millimetre
(37 871 data bytes per inch), on 18 tracks**

Revised text

AMD 6362
June 1991

National foreword

Delete paragraph 1 and substitute the following.

'This British Standard, prepared under the direction of the Information Systems Technology Standards Policy Committee, is identical with ISO 9661 : 1988 'Information processing – Data interchange on 12,7 mm (0.5 in) wide magnetic tape cartridges – 18 tracks, 1 491 data bytes per millimetre (37 871 data bytes per inch)', together with Technical Corrigendum No.1 to ISO 9661 :1988 issued on 1 December 1990, published by the International Organization for Standardization (ISO).'

AMD 6362
June 1991

Clause 4.3.1.3 Block-ID bytes

Delete the formula and substitute the following.

$$1 \leq \left[62,5 \left(\frac{\sqrt{625 + R_0^2 - R^2}}{R} - \frac{25}{R_0} \right) \right] \leq 91$$

Amendment No. 2
published and effective from 31 January 1992
to BS 7062 : 1988

**Guide to construction and use of 12.7 mm (0.5 in) wide
magnetic tape cartridges for data interchange,
recording at 1 491 data bytes per millimetre
(37 871 data bytes per inch), on 18 tracks**

NOTE. The European Committee for Standardization (CEN) has accepted ISO 9661 : 1988 as a European Standard, designated as EN 29661 : 1991 and this amendment effects the implementation of EN 29661 : 1991 as a British Standard.

Revised text

AMD 6861
January 1992

Front and back covers

In the top right hand corner of the front cover and twice on the back cover, immediately above 'ISO 9661 : 1988' insert 'EN 29661 : 1991'.

AMD 6861
January 1992

Front cover

Below the German title insert the following.

'This European Standard EN 29661 : 1991 has the status of a British Standard'

AMD 6861
January 1992

National foreword

Between paragraphs 1 and 2 insert the following.

'ISO 9661 : 1988 was accepted as a European Standard by the European Committee for Standardization (CEN) in March 1991. This European Standard is designated EN 29661 : 1991 and is entitled 'Information processing – Data interchange on 12.7 mm (0.5 in) magnetic tape cartridges – 18 tracks, 1 491 data bytes per millimetre (37 871 data bytes per inch)'.

AMD 6861
January 1992

New EN title page and foreword page

Insert the attached new EN title page and foreword page immediately before page 1 of BS 7062 : 1988.

UDC 681.327.636

Descriptors: Data processing, information interchange, magnetic recording, magnetic tapes, cassettes for magnetic tapes, specifications, physical properties, magnetic properties, dimensions

English version

Information processing – Data interchange on 12.7 mm (0.5 in) magnetic tape cartridges – 18 tracks, 1 491 data bytes per millimetre (37 871 data bytes per inch)

(ISO 9661 – 1st edition, 1988)

Traitement de l'information – Echange d'information sur cartouche de bande magnétique de 12,7 mm de large (0,5 in) – 18 pistes, 1 491 caractères par millimètre (37 871 caractères par inch) (ISO 9661 – 1ère édition, 1988)

Informationsverarbeitung – Datenaustausch auf Magnetbandkassette 12,7 mm (0,5 in), 18 Spuren, 1491 Datenbytes/mm (37 871 Datenbytes/in) (ISO 9661–1. Ausgabe, 1988)

This European Standard was approved by CEN on 13 March 1991 and is identical to the ISO standard as referred to.

CEN 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 CEN member.

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

CEN members are the national standards bodies of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CEN

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

Central Secretariat: rue de Stassart 36, B-1050 Brussels

Foreword

The Technical Board has decided to submit the International Standard

Information processing — Data interchange on 12.7 mm (0.5 in) magnetic tape cartridges — 18 tracks, 1 491 data bytes per millimetre (37 871 data bytes per inch)

to Formal Vote and the result was positive.

According to the CEN/CENELEC Common Rules, the following countries are bound to implement this standard:

Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom.

Endorsement notice

The text of the International Standard ISO 9661, edition 1, 1988, was approved by CEN as a European Standard without any modification.

However, it is to be noted that Technical Corrigendum 1 : 1990, adopted by ISO, has been incorporated in this European Standard.

Amendment No. 3
published and effective from 15 March 1994
to BS 7062 : 1988

Guide to construction and use of 12.7 mm (0.5 in)
wide magnetic tape cartridges for data interchange,
recording at 1491 data bytes per millimetre
(37 871 data bytes per inch), on 18 tracks

NOTE. The English version of European Standard EN 29661 was implemented in the United Kingdom by the publication of Amendment No. 2 to BS 7602 : 1988. This amendment implements Amendment A1 to EN 29661.

This amendment together with the European Standard EN 29661 : 1991 has the status of a British Standard.

Revised text

National foreword (as amended by Amendment No. 2)

At the end of paragraph 2, insert 'In 1993 CEN accepted ISO Technical Corrigendum 2 : 1988 as Amendment 3 : 1993.'

AMD 8150/March 1994

EN amendment title page and foreword

Insert the attached EN amendment title page (foreword on reverse).

AMD 8150/March 1994

Text of EN 29661

Amend the text of European Standard EN 29661 in accordance with the details given on the attached pages.

AMD 8150/March 1994

UDC 681.327.636

Descriptors: Data processing, information interchange, magnetic recording, magnetic tapes, cassettes for magnetic tapes, specifications, physical properties, magnetic properties, dimensions

English version

Information processing – Data interchange on 12,7 mm (0,5 in) magnetic tape cartridges – 18 tracks, 1491 data bytes per millimetre (37 871 data bytes per inch)

(ISO/IEC 9661 : 1988 Technical Corrigendum 2 : 1992)

Traitement de l'information – Echange
d'information sur cartouche de bande
magnétique de 12,7 mm de large (0,5 in) –
18 pistes, 1 491 caractères par millimètre
(37 871 caractères par inch)
(ISO/IEC 9661 : 1988 Rectificatif technique 2 :
1992)

Informationsverarbeitung – Datenaustausch auf
Magnetbandkassette 12,7 mm (0,5 in) –
18 Spuren, 1 491 Datenbytes/mm
(37 871 Datenbytes/in)
(ISO/IEC 9661 : 1988 Technical Corrigendum 2 :
1992)

This European Standard was approved by CEN on 1993-09-06. CEN 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 CEN member.

The European Standards exist in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CEN

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

Central Secretariat: rue de Stassart 36, B-1050 Brussels

Foreword

On the proposal of the CEN Central Secretariat, the Technical Board has decided to submit this draft Amendment *Information processing – Data interchange on 12.7 mm (0.5 in) magnetic tape cartridges – 18 tracks, 1491 data bytes per millimetre (37 871 data bytes per inch)* (ISO/IEC 9661 : 1988 Technical Corrigendum 2 : 1992) to the Unique Acceptance Procedure (UAP).

The result of the Unique Acceptance Procedure was positive.

For the time being, this document exists only in English.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by March 1994, and conflicting national standards shall be withdrawn at the latest by March 1994.

In accordance with the CEN/CENELEC Internal Regulations, the following countries are bound to implement this European Standard: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.



INTERNATIONAL STANDARD ISO 9661 : 1988
TECHNICAL CORRIGENDUM 2

Published 1992-03-01

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION · МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ · ORGANISATION INTERNATIONALE DE NORMALISATION

**Information processing — Data interchange on 12,7 mm
(0.5 in) wide magnetic tape cartridges — 18 tracks,
1 491 data bytes per millimetre (37 871 data bytes per inch)**

TECHNICAL CORRIGENDUM 2

*Traitement de l'information — Échange d'information sur cartouche de bande magnétique de 12,7 mm de large (0,5 in) —
18 pistes, 1 491 caractères par millimètre (37 871 caractères par inch)*

RECTIFICATIF TECHNIQUE 2

Technical corrigendum 2 to International Standard ISO 9661 : 1988 was prepared by Joint Technical Committee ISO/IEC JTC 1,
Information technology.

Contents

Item 3.1, insert "and" between "dimensional" and "mechanical".

Contents

Delete item 4.3.1.3.

Renumber item 4.3.3.5 as 4.3.3.6 and insert new item as follows:

"4.3.3.5 Summary of requirements for Residual Frames 24"

UDC 681.327.636

Ref. No. ISO 9661 : 1988/Cor.2 : 1992 (E)

Descriptors: data processing, information interchange, data recording devices, magnetic tapes, cassettes for magnetic tapes, specifications.

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Printed in Switzerland

Subclause 3.1

In the sentence beginning "Figure 13 shows the same", replace "figure 11" with "figure 12".

Second paragraph, last sentence, replace "represented in third angle projection" with "presented. Third angle projection is used".

Subclauses 4.3.1.1 and 4.3.1.1.1

Replace the text beginning with "Data Bytes are" in 4.3.1.1 and ending with "of the 8-bit Code (ISO 4873)" in 4.3.1.1.1 with the following (note the renumbering):

"Data bytes comprise User bytes and Block-ID bytes.

4.3.1.1.1 User bytes

User bytes are 8-bit bytes available for the recording of the information to be interchanged and/or stored.

4.3.1.1.1.1 Coded representation of character in user bytes

Characters shall be represented by means of the ISO 7-bit coded character set (ISO/IEC 646) and, where required, by its 7-bit extensions (ISO 2022) or by means of the ISO rules for 8-bit codes (ISO/IEC 4873)."

Subclauses 4.3.1.1.1 and 4.3.1.1.2

place the note in 4.3.1.1.1 and all of 4.3.1.1.2 with the following text (note the renumbering):

NOTE — If each character has a coded representation consisting of one single 7-bit or 8-bit byte, the number of characters is equal to the number of user bytes. Code extension techniques allow multiple-byte representation. In this case the number of characters is equal to the number of user bytes divided by the number of bytes of the coded representation of a single character.

4.3.1.1.2 Representation of binary data in user bytes

When the coding method requires it, the coded representations to be recorded in user bytes shall be regarded as an ordered sequence of bit positions, each containing a bit, which can be either a ZERO or a ONE.

The binary weights, bit designations and bit positions shall be given in 4.3.1.1.1 b)."

Subclauses 4.3.1.2 and 4.3.1.3

Renumber subclause 4.3.1.3 as 4.3.1.1.2 and move subclause 4.3.1.2 so as to follow new subclause 4.3.1.1.2.

Subclause 4.3.1.3, line 2, replace "last data byte" with "last user byte".

Subclause 4.3.3

Replace the first sentence with the following:

"A Data Block shall contain at least 5 and at most 32 772 Data bytes."

Subclause 4.3.3.2

First line, add the words "(see figure 20)" after "shall consist of".

Figures 20 and 21, renumber figure 20 as figure 21 and vice versa. Swap the positions of the figures.
Second paragraph, add the words “(see figure 21)” after “in clusters as follows”.

Subclause 4.3.3.3

Replace the whole subclause with the following:

“4.3.3.3 Residual Frame 1

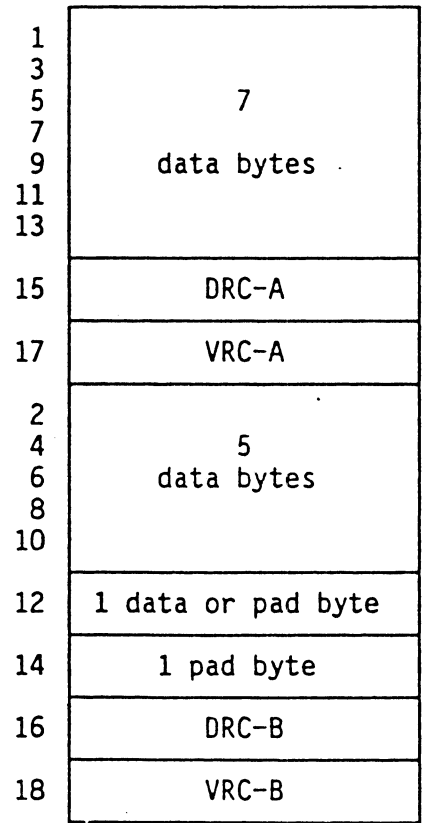
If after the last Data Frame of the last Data cluster 12 or 13 data bytes remain to be recorded, there shall be a Residual Frame 1. If the number of remaining data bytes is less than 12 there shall be no Residual Frame 1.

The structure of the Residual Frame 1 shall be

- 12 or 13 data bytes;
- 1 or 2 pad bytes, depending on the number of remaining data bytes;
- in tracks 15 and 17 the DRC-A and the VRC-A, respectively;
- in tracks 16 and 18 the DRC-B and the VRC-B, respectively.”

Figure 22

Replace the figure with the following:



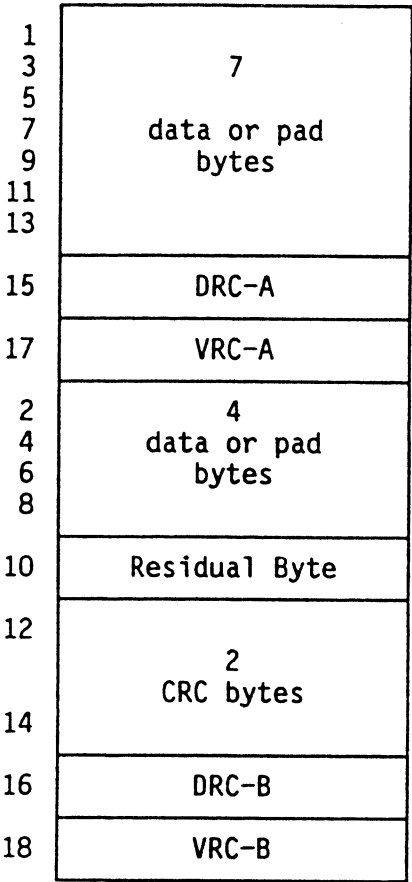
Subclause 4.3.3.4

Replace the first paragraph with the following:

“If there is no Residual Frame 1, i.e. if there are eleven or less remaining data bytes, these data bytes followed by sufficient pad bytes to total 11 bytes shall be recorded in odd tracks 1 to 13 and even tracks 2 to 8.”

Figure 23

Replace the figure with the following:



Clause 4.3.3.4.2

Second paragraph beginning "The CRC", replace with the following:

"The CRC is computed over the user bytes, the Block-ID bytes, the pad bytes and the residual bytes. It does not include the ECC bytes."

Subclause 4.3.3.5

Renumber subclause 4.3.3.5 as 4.3.3.6 and insert a new subclause 4.3.3.5 as follows:

"4.3.3.5 Summary of requirements for Residual Frames

Table 5 summarizes the requirements for Residual Frame 1 and Residual Frame 2."

Insert a new table 5 as follows:

Table 5 - Requirements for Residual Frames

Number of Data bytes remaining after the last complete Date Frame		Residual Frame 1			Residual Frame 2				
User bytes	Block ID Bytes	User bytes	Block ID bytes	Pad bytes	User bytes	Block ID bytes	Pad bytes	Residual byte	CRC bytes
0	0	No Residual Frame 1			0	0	11	1	2
0	1				0	1	10	1	2
0	2				0	2	9	1	2
0	3				0	3	8	1	2
0	4				0	4	7	1	2
1	4				1	4	6	1	2
2	4				2	4	5	1	2
3	4				3	4	4	1	2
4	4				4	4	3	1	2
5	4				5	4	2	1	2
6	4				6	4	1	1	2
7	4				7	4	0	1	2
8	4	8	4	2	0	0	11	1	2
9	4	9	4	1	0	0	11	1	2

Subclause 4.3.5

Last sentence, replace "lowest" with "highest".

Subclause 4.4.4.1

Add the following sentence at the end of 4.4.4.1:

"A defective area is an area on the tape where the requirements of 2.1.19 are not met."

