

INTERNATIONAL STANDARD

ISO
15706

First edition
2002-11-15

AMENDMENT 1
2008-08-01

Information and documentation — International Standard Audiovisual Number (ISAN) —

AMENDMENT 1: Alternate encodings and editorial changes

*Information et documentation — Numéro international normalisé
d'œuvre audiovisuelle (ISAN) —*

AMENDEMENT 1: Autres encodages et changements rédactionnels



Reference number
ISO 15706:2002/Amd.1:2008(E)

© ISO 2008

PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.



COPYRIGHT PROTECTED DOCUMENT

© ISO 2008

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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

Amendment 1 to ISO 15706:2002 was prepared by Technical Committee ISO/TC 46, *Information and documentation*, Subcommittee SC 9, *Identification and description*.

This amendment corrects the title to ISO 15706:2002 to reflect the splitting of ISO 15706 into parts, of which ISO 15706:2002 has been retained as Part 1 to the ISO 15706 series. It also clarifies the encoding of ISAN as a 64-bit number for the unique identification of audiovisual works and provides binary and XML encoding specifications for ISAN. It also clarifies that the terms registrant and registration agency as used in this part of ISO 15706 apply solely to the registration of audiovisual works. Equivalent concepts for the registration of versions of audiovisual works are covered in ISO 15706-2.

Other editorial changes are included to update the Normative references clause and the Bibliography and to provide the proper name and address of the registration authority for this part of ISO 15706.

Information and documentation — International Standard Audiovisual Number (ISAN) —

AMENDMENT 1: Alternate encodings and editorial changes

Page i and page 1, Title

ISO 15706 now constitutes two parts with ISO 15706:2002 becoming ISO 15706-1. Correct the title to read:

"Information and documentation — International Standard Audiovisual Number (ISAN) — Part 1: Audiovisual work identifier"

Page iii, Contents

Include the following new annexes in the list of contents:

Annex E (normative) Binary encoding of ISAN for audiovisual works

Annex F (normative) XML encoding of ISAN for audiovisual works

Page iv, Foreword

Replace the following paragraphs:

"ISO 15706 was prepared by Technical Committee ISO/TC 46, *Information and documentation*, Subcommittee SC 9, *Identification and description*.

Annexes A, B and C form a normative part of this International Standard. Annex D is for information only."

with

"ISO 15706-1 was prepared by Technical Committee ISO/TC 46, *Information and documentation*, Subcommittee SC 9, *Identification and description*.

ISO 15706 consists of the following parts, under the general title *Information and documentation — International Standard Audiovisual Number (ISAN)*:

— *Part 1: Audiovisual work identifier*

— *Part 2: Version identifier"*

Entire text

Replace all references to "International ISAN Agency" with "ISAN International Agency".

Replace all references to ISO 15706:2002 as "this International Standard" with "this part of ISO 15706".

Page 1, Clause 2

Update the normative reference, ISO 7064:1983, and replace it with the newer edition as follows:

"ISO/IEC 7064:2003, *Information technology — Security techniques — Check character systems"*

ISO 15706:2002/Amd.1:2008(E)

Add the following two normative references:

"XML Schema Part 1: Structures. W3C Recommendation, 28 October 2004

XML Schema Part 2: Datatypes. W3C Recommendation, 28 October 2004"

Page 1, 3.2

After the definition of check character (3.2), replace the reference to ISO 7064:1983 with ISO/IEC 7064:2003.

Page 2, 3.4

Add the following note after the definition of registrant (3.4):

"NOTE The term registrant as used in this part of ISO 15706 denotes an ISAN registrant for audiovisual works only. ISO 15706-2 deals with registrants for versions of audiovisual works."

Page 2, 3.5

Add the following note after the definition of registration agency (3.5):

"NOTE The term registration agency as used in this part of ISO 15706 denotes an ISAN registration agency for audiovisual works. It does not include registration agencies for versions of audiovisual works."

Page 2, 4.1

Replace 4.1 with the following:

4.1 An ISAN for an audiovisual work shall consist of a 64-bit number which when presented in human-readable form (i.e. a form meant primarily to be read or written by a person, in contrast to a form primarily meant to be used by data processing equipment) shall be represented as 16 hexadecimal digits using Arabic numerals 0 to 9 and letters A to F of the Latin alphabet. An ISAN for an audiovisual work shall be divided into two segments consisting of a 12 digit root segment followed by a 4 digit segment for the identification of episodes or parts of a serial audiovisual work (see A.11). A check character (see Annex B) shall be appended whenever an ISAN is presented in human-readable form.

EXAMPLE ISAN RRRR-RRRR-RRRR-EEEE-X

Additional encodings of ISAN are specified in Annexes E and F."

Page 2, 4.2, Example

Replace the example in 4.2 with the following:

"EXAMPLE

ISAN 2B1A-FF17-3E20-0000-S"

Page 2, 4.3, Example

Replace the example in 4.3 with the following:

"EXAMPLE

ISAN 0123-1230-3210-2310-J"

Page 3, 6.4, Examples

Replace the examples in 6.4 with the following:

"EXAMPLES

ISAN 1881 66C7 3420 6541 Y

ISAN 1181-66C7-3420-6541-Y"

Page 3, 6.5

Replace 6.5 with the following:

6.5 The characters A to F appearing in an ISAN and A to Z appearing in its check digit should be displayed in upper-case letters when the ISAN is presented in human-readable form. However, the lower-case and upper-case forms of these characters shall be treated as equivalent."

Page 6, Annex B

Replace B.2 with the following:

B.2 The check character for an ISAN shall be one alphanumeric character using Arabic numerals 0 to 9 and letters A to Z of the Latin alphabet. The check character shall be calculated over the 16 hexadecimal digits of the ISAN according to a MOD 37, 36 system specified in accordance with ISO/IEC 7064."

Replace the examples in B.3 with the following:

"EXAMPLES

ISAN 153C-7365-B36F-844C-7

ISAN 083A-3317-3E20-0000-Z

ISAN 231A-FF17-3E20-6541-8"

Replace B.4 with the following:

B.4 Validation of an ISAN being entered into or retrieved from a database or other machine-readable format by a human shall require the correct check character for that ISAN to be verified or presented."

Page 7, Footnote 2 to C.2.1

Replace the footnote text with the following:

"2) ISAN International Agency, 30, rue de Saint Jean, CH-1203 Geneva, Switzerland. Tel. +41 22 545 10 00. Fax: +41 22 545 10 40. E-mail: info@isan.org. Web: www.isan.org."

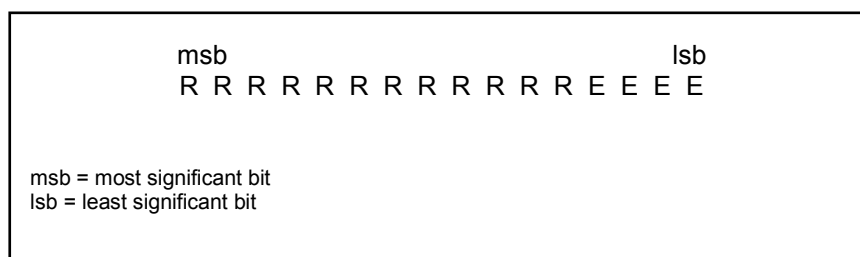
Add new Annexes E and F before the Bibliography:

Annex E (normative)

Binary encoding of ISAN for audiovisual works

The human-readable form of an ISAN for an audiovisual work consists of 16 hexadecimal digits as defined in Clause 4. When represented in a binary, machine-readable form, it shall be encoded as 64 binary bits with the leading letters, "ISAN", and trailing check digit that are used in the human-readable form omitted. The 64 bits are encoded and transmitted as an unsigned integer, most significant bit first (*uimsbf*, as used in ISO/IEC 13818-1). This is illustrated in Figure E.1 below.

Figure E.1 — Binary encoding of ISAN for audiovisual works



Annex F (normative)

XML encoding of ISAN for audiovisual works

F.1 XML encoding

The human-readable form of an ISAN for an audiovisual work consists of 16 hexadecimal digits as defined in Clause 4. When represented in XML documents it should be encoded according to the schema defined in F.2. The leading letters "ISAN" are omitted from the XML representation of an ISAN.

EXAMPLE 1 <ISAN root="rrrr-rrrr-rrrr" episodeOrPart="eeee" check1="x"/>

EXAMPLE 2 <ISAN root="rrrr-rrrr-rrrr" episodeOrPart="eeee"/>

EXAMPLE 3 <ISAN root="rrrr-rrrr-rrrr"/>

where "rrrr-rrrr-rrrr" is the root value and "eeee" is the episode or part value and "x" is the check character.

NOTE Example 3 does not fully define an ISAN but can be used in special circumstances where only the root component of the ISAN is known.

All attributes are required unless the XML encoding is to be used solely between machines.

If the *check1* attribute is present in the XML encoding, then the *episodeOrPart* attribute shall be present. For example, the following form is not permitted:

```
<ISAN root="rrrr-rrrr-rrrr" check1="x"/>
```

F.2 ISAN element XML schema

The following schema defines the XML encoding for ISAN for audiovisual works. When an ISAN for an audiovisual work is represented in XML documents, it should be encoded as shown below in conformance with the W3C specifications for XML schema.

```
<?xml version="1.0"?>
<xsd:schema xmlns:xsd="http://www.w3.org/2001/XMLSchema"
  targetNamespace="http://www.isan.org/ISAN"
  xmlns="http://www.isan.org/ISAN">

  <xsd:simpleType name="rootType">
    <xsd:restriction base="xsd:string">
      <xsd:pattern value="[dA-Fa-f]{4}-[dA-Fa-f]{4}-[dA-Fa-f]{4}"/>
    </xsd:restriction>
  </xsd:simpleType>

  <xsd:simpleType name="episodeOrPartType">
    <xsd:restriction base="xsd:string">
      <xsd:pattern value="[dA-Fa-f]{4}"/>
    </xsd:restriction>
  </xsd:simpleType>
```

```
</xsd:restriction>
</xsd:simpleType>

<xsd:simpleType name="checkType">
  <xsd:restriction base="xsd:string">
    <xsd:pattern value="[dA-Za-z]{1}"/>
  </xsd:restriction>
</xsd:simpleType>

<xsd:attributeGroup name="isanGroup">
  <xsd:attribute name="root" type="rootType" use="required"/>
  <xsd:attribute name="episodeOrPart" type="episodeOrPartType" use="optional"/>
  <xsd:attribute name="check1" type="checkType" use="optional"/>
</xsd:attributeGroup>

<xsd:complexType name="isanType">
  <xsd:attributeGroup ref="isanGroup"/>
</xsd:complexType>

<xsd:element name="ISAN" type="isanType"/>

</xsd:schema>
```

.....

Page 12, Bibliography

Update Reference [4] and delete Footnote 3):

- [4] ISO/TR 21449, *Content Delivery and Rights Management: Functional requirements for identifiers and descriptors for use in the music, film, video, sound recording and publishing industries*

Correct the titles of References [5] and [6]:

- [5] ISO/IEC 13818-1, *Information technology — Generic coding of moving pictures and associated audio information: Systems — Part 1*
- [6] ISO/IEC 13818-2, *Information technology — Generic coding of moving pictures and associated audio information: Video — Part 2*

Add the following references:

- [8] ISO 15706-2, *Information and documentation — International Standard Audiovisual Number (ISAN) — Part 2: Version identifier*
- [9] Internet Engineering Task Force. RFC 4246, *International Standard Audiovisual Number (ISAN) URN Definition*. February 2006. Available from <http://www.ietf.org/rfc/rfc4246.txt>

ICS 01.140.20

Price based on 7 pages