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

**Part 2:
Version identifier**

*Information et documentation — Numéro international normalisé
d'oeuvre audiovisuelle (ISAN) —
Partie 2: Identifiant de version*

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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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

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

This second edition cancels and replaces the first edition (ISO 15706-2:2007), of which it constitutes a minor revision.

The changes compared to the previous edition are as follows:

- the introduction has been revised to include information about Registration Agencies;
- the normative references have been updated to reflect the most current version of the standards;
- the definitions for V-ISAN Authority, V-ISAN distributed query system, and V-ISAN registration agency have been removed;
- all references to the Registration Authority have been made to be generic throughout the document;
- a link to the ISO listing of Registration Authorities on the ISO website has been added;
- V-ISAN Authority has been changed to Registration Authority throughout the document;
- [Clause 7](#) has been revised to remove references to specific Registration Authorities and Registration Agencies;
- [Annex E](#) has been revised to remove references to specific Registration Authorities and Registration Agencies.

A list of all parts in the ISO 15706 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

This document specifies the structure and basic criteria for the assignment of an identifier for versions of audiovisual works and other content derived from or directly related to an audiovisual work. It supplements the International Standard Audiovisual Number (ISAN) specified in ISO 15706-1 and provides a mechanism for identifying versions and related content of audiovisual works that have been registered in the International Standard Audiovisual Number (ISAN) system.

This document defines the version identifier component of the ISAN system, specifies the rules for assignment of the ISAN version identifier, and the basic administration and registration procedures for the ISAN version identification system.

The Registration Authority for ISO 15706 is the entity charged with oversight of the ISAN version identification system. The Registration Authority maintains a database of all version registration records (the register), issues new version identifiers upon proper request, and establishes the necessary operational procedures to keep the system functioning properly.

The Registration Authority makes version registration and information retrieval services available to those with a need to register new versions of audiovisual works or to obtain data about existing registrations. The Registration Authority provides services to applicants for new ISAN version identifiers, registrants of existing ISAN version identifiers, and other users.

The information contained in the version register is the minimum necessary to identify the versions to which specific ISAN version identifiers apply. It is often desirable to make additional information about the registered versions of audiovisual works available for access in a variety of ways. To enable the association of such additional information with a version registration, mechanisms are provided to link to entities providing access to that information. Those entities are called resolution service providers. The version register itself is not intended for complex queries (where one requests the ISAN version identifiers associated with specific complementary metadata), but that does not preclude the Registration Authority from providing such a service. ⁰²³

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

Part 2: Version identifier

1 Scope

This document establishes a voluntary system for the identification of versions of audiovisual works and other content derived from or closely related to an audiovisual work (see [Annex A](#)). It is based on the International Standard Audiovisual Number (ISAN) system defined in ISO 15706-1. An ISAN combined with the version segment specified in [Clause 4](#) constitutes an ISAN version identifier, hereinafter referred to as a V-ISAN. A V-ISAN is a registered, globally unique identifier for versions of an audiovisual work and related content.

A V-ISAN identifies a specific version or other content related to an audiovisual work throughout its life. It is intended for use wherever precise and unique identification of a specific version or other content related to an audiovisual work would be desirable, such as in audiovisual production and distribution systems, broadcasting applications, digital platforms and electronic program guides.

A V-ISAN identifies a specific version or other content related to an audiovisual work as the unique compound of its component elements (e.g. its artistic content, languages, editing and technical format) throughout its life and independent of any physical form in which that version or related content is distributed.

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The assignment of a V-ISAN to a version or other content related to an audiovisual work does not constitute evidence of the ownership of rights to either that version or related content or to the audiovisual work itself.

This document specifies the basic systems and procedures to support the issuance and administration of V-ISANs.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

ISO 639-2, *Codes for the representation of names of languages — Part 2: Alpha-3 code*

ISO 3166-1, *Codes for the representation of names of countries and their subdivisions — Part 1: Country code*

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

ISO 8601 (all parts), *Date and time — Representations for information interchange*

ISO 15706-1, *Information and documentation — International Standard Audiovisual Number (ISAN) — Part 1: Audiovisual work identifier*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 15706-1 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>

3.1 ISAN

International Standard Audiovisual Number

number allocated for the unique identification of an audiovisual work in accordance with ISO 15706

3.2 private number

reserved *V-ISAN* (3.6) that has meaning only in the context of the organization that created it, is not registered with the V-ISAN register and is not normally exchanged between entities

Note 1 to entry: Since different entities may assign the same private number to different versions of a work, these numbers are not intended to be exchanged between entities.

3.3 resolution service provider

entity that maintains and makes available a set of additional metadata associated with specific *V-ISANs* (3.6)

Note 1 to entry: While the term resolution service provider is used in its singular form, there may be any number of providers.

Note 2 to entry: The provider optionally listed in the V-ISAN registration information is called the “designated” resolution service provider.

3.4 version

particular aggregation of elements that affects the content of an audiovisual work

Note 1 to entry: Any change that affects the content of an audiovisual work (e.g., artistic content, language, editing or technical format) and which requires separate identification for the use or exploitation of that specific content can be treated as a new version for the purposes of assigning a V-ISAN. See [Annex A](#).

3.5 version segment

32-bit version segment specified in this document

3.6 V-ISAN

unique identifier composed of a registered *ISAN* (3.1) in combination with an appended version segment for a specific version or other content derived from or directly related to an audiovisual work, and allocated in accordance with this document

3.8 V-ISAN metadata

information associated with a version of a work identified by a *V-ISAN* (3.6)

Note 1 to entry: *V-ISAN metadata* (3.8) includes information such as the associated ISAN, the V-ISAN registration information, and descriptive information related to the audiovisual work or unique to that version of the audiovisual work.

3.9

V-ISAN register

database of registered *V-ISANs* (3.6) and the associated *V-ISAN metadata* (3.8) necessary for the operation of the V-ISAN system

3.10

V-ISAN registrant

entity associated with the registration of a particular *V-ISAN* (3.6)

Note 1 to entry: The V-ISAN registrant can be the original applicant or the entity currently responsible for keeping the required V-ISAN registration information and metadata up to date.

3.11

V-ISAN registration information

administrative class of *V-ISAN metadata* (3.8) that uniquely identifies the *V-ISAN registrant* (3.10) and provides other pertinent information required for administration of the V-ISAN system

4 Construction of the V-ISAN

4.1 A V-ISAN assigned to a version of an audiovisual work or to a related content entity shall incorporate the ISAN for the audiovisual work from which that version or related content is derived.

4.2 A V-ISAN shall consist of a 64-bit ISAN¹⁾ that has been registered in accordance with ISO 15706-1, followed by a 32-bit version segment. When represented using hexadecimal digits, this is equivalent to an ISAN of 16 characters followed by a version segment of eight characters, using Arabic numerals 0 to 9 and letters A to F of the Latin alphabet. See [Figure 1](#).

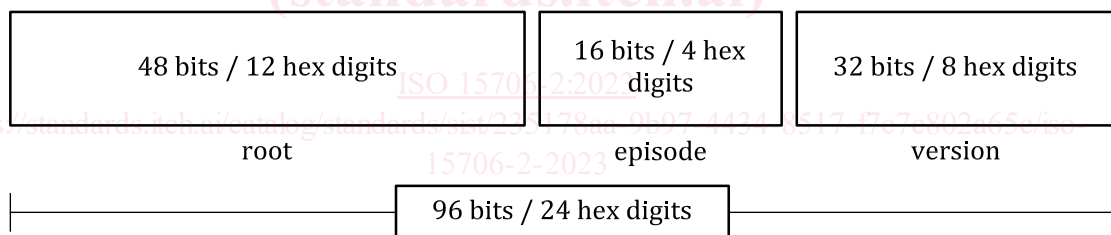


Figure 1 — Construction of a V-ISAN

4.3 As an aid to accurate transcription of V-ISAN in human-readable form (i.e. a form meant primarily to be read or written by a person such as on labels, physical carriers, technical documentation, etc., in contrast to a form primarily meant to be used by data processing equipment), a V-ISAN shall be preceded by the letters ISAN and include the check characters for both the ISAN segment and the V-ISAN as a whole (see [Annex B](#)). Further, it should be separated into groups after every four hexadecimal digits or check character using either a blank space or a hyphen. No internal meaning shall be ascribed to any combination of digits within these groups.

EXAMPLE ISAN RRRR-RRRR-RRRR-EEEE-X-VVVV-VVVV-Y

or

ISAN RRRR RRRR RRRR EEEE X VVVV VVVV Y

In the above example:

— “RRRR-RRRR-RRRR-EEEE” represents a registered ISAN for a specific audiovisual work.

1) When presented in hexadecimal form, an ISAN is composed of a 12-character root segment (“RRRR-RRRR-RRRR”) followed by a four-character segment (“EEEE”) for the identification of episodes or parts of an audiovisual work (see ISO 15706-1).

- “X” represents the check character for that ISAN, calculated in accordance with ISO 15706.
- “VVVV-VVVV” represents the version identifier segment linked to that ISAN. (The combination of the ISAN and the version identifier segment constitute the V-ISAN.)
- “Y” represents the check digit for that V-ISAN. It is computed over the positions labelled “R”, “E” and “V”. The position labelled “X” is not included in the computation of “Y”. [Figure B.1](#) shows the range of positions covered by each check character.

Additional encodings of V-ISAN are specified in [Annexes C](#) and [D](#).

4.4 To avoid confusion, a V-ISAN version segment of 0 (i.e. 0000-0000) shall be treated as an ISAN without a version segment.

4.5 V-ISAN version segment range 1 (0000 0001 in hexadecimal) to 4 026 531 839 (FFFF FFFF in hexadecimal) are public numbers and shall be issued from and tracked within the V-ISAN register.

4.6 V-ISAN version segment range 4 026 531 840 (F000 0000 in hexadecimal) to 4 294 967 295 (FFFF FFFF in hexadecimal) are reserved for private numbers and shall not be issued from within the V-ISAN register. This corresponds to version segments where the first four bits are 1111 (i.e., hexadecimal value F). Private numbers are reserved solely for internal applications (e.g., to track internal edits during the preparation of a version for public release) as determined by a V-ISAN registrant who may self-assign such V-ISANs on a non-registered basis. Any time a V-ISAN with a private number is encountered external to the organization that created it, it shall be treated as if it has no version segment at all (i.e., treated as an ISAN without a version segment).

4.7 It is not meaningful to express information on a version or related content entity without reference to a specific audiovisual work. Therefore, the version segment shall only appear in conjunction with the ISAN for the work in question and in the form of a V-ISAN. The version segment of a V-ISAN shall have no meaning on its own.

4.8 A V-ISAN shall signify only that it is a globally unique identifier that has been registered with an agency of the V-ISAN system.

5 V-ISAN issuance

5.1 A V-ISAN shall be issued only in reference to a valid ISAN registered in the ISAN system in accordance with ISO 15706.

5.2 V-ISAN shall be issued to applicants by the Registration Authority.

5.3 Applicants for V-ISAN shall provide all of the registration data required by the Registration Authority prior to being issued a V-ISAN. The Registration Authority shall ensure that required registration data (see [Annex E](#)) is recorded in the V-ISAN register for each V-ISAN issued.

5.4 A V-ISAN may be assigned before, during, or after the production of the associated version of an audiovisual work, providing that the source work has been assigned an ISAN that is valid.

6 Affixing and displaying the V-ISAN

6.1 The V-ISAN for a version or content entity related to an audiovisual work shall be incorporated permanently in, or affixed to, all occurrences of that specific version or content entity to the extent that it is technically feasible to do so.

6.2 The V-ISAN should be included in the documentation, advertising and packaging associated with the specific version or content entity related to an audiovisual work.

6.3 The inclusion of a V-ISAN with a version of an audiovisual work shall conform to the specifications of ISO 15706 for inclusion of an ISAN with the audiovisual work.

6.4 The characters A to F appearing in a V-ISAN and A to Z appearing in either check character should be displayed in upper-case letters when the V-ISAN is presented in human-readable form. However, the lower-case and upper-case forms of these characters shall be treated as equivalent.

6.5 If a version of an audiovisual work is issued in a specific product item that has its own product numbering system (e.g., a Global Trade Item Number of the EAN.UCC system), the V-ISAN shall be displayed on the container and/or packaging of that product immediately below and clearly distinguished from any product numbers associated with the item.

6.6 Further details regarding methods of affixing a V-ISAN to a version of an audiovisual work are explained in the user's guide that is available from the Registration Authority.

7 V-ISAN system overview

7.1 General

At the centre of the V-ISAN system is the Registration Authority, the entity responsible for overseeing the V-ISAN system. The Registration Authority maintains a register of all V-ISAN registration records, issues new V-ISANs upon proper request, and establishes the necessary operational policies and procedures to keep the system functioning properly.

The V-ISAN system shall work cooperatively with the ISAN system. Many V-ISAN functions require the cooperation of the ISAN system. For example:

- V-ISANs cannot be issued unless the associated ISAN has already been issued and is valid;
- V-ISAN registration records contain information about the version, but not about the work upon which the version is based. That data shall be obtained from the ISAN system.