ISAN User Guide

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Foreword

ISAN is a voluntary numbering system for identification of audiovisual works and versions, developed within an ISO (International Organization for Standardization) working group (Technical Committee 46, Sub-Committee 9). The ISAN project was administered by AGICOA (Association of International Collective Management of Audiovisual Works), CISAC (International Confederation of Societies of Authors and Composers) and FIAPF (International Federation of Film Producers Associations), all three representing many international and national organizations involved with audiovisual content creation and production.

The International Standard that forms the foundation of the ISAN system was published in 2002 as ISO 15706-1:2002, Information and documentation—International Standard Audiovisual Number (ISAN) **--** Part 1: Audiovisual work identifier. In 2007 the ISAN standard was extended to support version identification with ISO 15706-2:2007 Information and documentation – International Standard Audiovisual Number (ISAN) **--** Part 2: Version Identifier. Both parts of the standard are available for purchase from www.iso.org [1] in English and French. Together, they describe a complete audiovisual content identification system.

The ISAN website (www.isan.org) was launched in January 2004, and the ISAN system with the ISAN Registry were launched in June 2004.

The following documents are publicly available on the ISAN web site.

- ISAN Registration Agency - Terms of Reference
- Expression Of Interest to apply to become an ISAN registration agency
- ISAN Registration Agency - Rules and Procedures
- ISAN User Guide (this document)
- ISAN Terms of Use
- ISAN Data Fields and List of Codes

More documents and resources are available on www.isan.org/resources/

1 ISAN Part 1:http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=28779
ISAN Part 2: http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=35581

1 ISAN Overview

ISAN stands for the "**I**nternational **S**tandard **A**udiovisual **N**umber". It is a voluntary numbering system standardized by the audiovisual industry as the ISO 15706 international standard.

The ISAN basic code (the ISAN root) is permanent; it remains unchanged regardless of every stage of a work's distribution. Each new version can be identified with a "sub-number" (the last 8 digits of the ISAN code), whenever needed in transactional systems or digital workflows.

ISAN relates to specific descriptive information (metadata) such as the title, director, type, duration, etc... This applies to all types of audiovisual works including feature films, serials, documentaries, live broadcasts, entertainment programs, shorts, clips, educational, multimedia, etc… and their many versions (dubbing, VoD, Broadcast, Blu-ray,…) including closely related contents (e.g. trailers) or closely related items (e.g. soundtracks, closed captions).

While the ISAN root segment remains the same across all variants of an audiovisual work, the ISAN version segment enables thinner granular identification at the version level such as edits, language variants, and media fixation as for example Film Print, Digital Cinema Packages, VOD, Blu-ray, DVD, Tapes, Digital Files. ISAN is integrated in most major audiovisual standards such as MPEG, Windows Media, DVB ATSC, MXF, ….

ISAN can be incorporated in physical media, digital streams, digital files, as well as in barcodes, publications, packaging, advertising and on audiovisual agreements. The ISAN assigned to an audiovisual content (work or version) is persistent, irrespective of the life cycle of the content it identifies (e.g. changes in ownership, etc…).

The standard guidelines and implementation is constantly adapted to follow the evolution and needs of the audiovisual industry. One of its strength lies in the flexibility of the standard and its universal benefits.

Because of the strong cultural diversity worldwide, the ISAN standard is based on a network of Regional ISAN Registration Agencies that interface between the International ISAN System and the local industry. Regional ISAN Registration Agencies are appointed by ISAN-IA after they have gained support from the local industry. Registration Agencies deliver adapted ISAN Services and expertise in the local language and report local expectations and experience to the global ISAN community.

ISAN can only be issued by appointed Registration Agencies via the ISAN System.

The ISAN network is backed up by the International Agency, ISAN-IA, founded by AGICOA, CISAC and FIAPF.

ISAN has already been assigned to almost 1 Million audiovisual contents.

ISAN registration is online, whether for one or many works. Bulk ISAN allocations is easy to implement via Excel/CSV or XML files or through API calls. The ISAN Rest API enables automated registrations, queries and ISAN lookups (resolutions) in an easy integration in third party applications (e.g. transactional systems, digital workflows).

ISAN identifies works throughout their commercial life, across all versions (different languages, edits, formats, mediums, …) at all times, in all ways and at all stages of production, distribution and consumption.

ISAN is for everyone: authors, broadcasters, collection societies, listing companies, producers, rights holders, digital platforms, and many others.

ISAN Benefits

ISAN provides a foundation for electronic exchange of information related to audiovisual contents. Without a unique identifier shared across the industry, there is no standardized key that systems / users can leverage to communicate efficiently with each other. ISAN enables with certainty the identification of a work or a version of a work for a wide variety of applications.

- The purpose of each ISAN is to act as a **unique international identifier** for any audiovisual work and every derived versions. The audiovisual works and the related versions share the same root segment. ISAN is linked to descriptive information (metadata), all hosted in a central repository: the **ISAN Registry**.

- ISAN idenifiers are delivered from a **unique central database: the ISAN Registry**. Each audiovisual work or version has one unique ISAN. Each ISAN identifies only one audiovisual work (or one version). ISAN is a **permanent and persistent identifier**.

- ISAN applies to **all type of audiovisual works** and all kind of **versions** such as linguistic variants, editing, extracts, clips, media embodiments, digital encodings, as well as closely related contents or items such as soundtracks, closed captioning tracks, boxed sets, etc...

- ISAN has been designed by the International Organization for Standardization (ISO) to **meet the requirements of the digital revolution** as defined by content owners, broadcasters, media companies and standards organizations.

- ISAN and its related descriptive information are **accessible online at all times** by users (registrants and readers). APIs and bulk processes enable access and efficient integration in existing systems and processes.

- ISAN helps ISAN registrants with **efficient inventory management** particularly in a digital environment.

- By requiring an ISAN to be listed in usage logs (broadcasting, digital platforms), usage tracking is facilitated. In a fully digital environment, the **ISAN is integrated into the work itself.**

- When filing for administration through collective management, rights registration is facilitated through use of ISAN which brings important savings in time and cost. This enables quicker, more reliable and efficient rights distribution by the collection societies.

- ISAN facilitates **electronic information exchanges** between systems and databases.

- ISAN helps better **tracking** the use of content in the digital world, thereby helping anti-piracy.

- ISAN codes are **resolvable in the ISAN Registry** and can be used in the audiovisual e-commerce environment.

- **Not for Profit**: ISAN is an ISO property. ISO obliges contractually ISAN-IA and ISAN Registration Agencies to operate the ISAN standard on a cost recovery basis and invoice reasonable fees for the ISAN services.

- ISAN Terms of Use enable **ISAN codes to be used and circulated without restrictions** for commercial and non commercial purposes.

- ISAN identifiers are public, there is no need to subscribe and pay a membership to use existing ISAN.

2 The ISAN Structure

2.1 GENERAL STRUCTURE OF THE ISAN IDENTIFIER

ISAN has been designed to be read by humans and processed in information systems, as a 24-bit hexadecimal number (characters 0 to 9 and A to F) or as a 96-bit binary number. The structure of ISAN has been designed to meet the diverse needs of the audiovisual supply chain, and the numbering scheme has been dimensioned to enable the identification of billions of discrete titles and thus, covering the audiovisual production needs for at least one century.

An ISAN is divided in three segments:

- the first 12 digits represent the root segment,
- the following 4 digits represent the episode/part of a serial work,
- the last 8 digits represent the version segment.

The first 16 digits representing the root and episode segments of an ISAN remain the same regardless of any versions of the work – only the last 8 digits change as versions are created for the work.

The 17th and 26th digits of an ISAN are check characters which guard against errors resulting from improper transcription of an ISAN. The check characters are automatically assigned by a computer algorithm.

When an ISAN is allocated to a stand-alone work, without episodes or parts of a serial audiovisual work, such as a feature film, the episode segment shall consist of 4 zeros (0000).

When an ISAN is allocated to an episode or a part of a serial audiovisual work, the episode segment is used to identify a registered episode in a serial. In this case an episode segment never consists of 4 zeros (i.e 0001 ; 0002; 0003).

A value of 0 (i.e. 0000-0000) is assigned to the version segment of an ISAN when no version exists.

ISAN version segment where the first 4 bits are 1111 (i.e. hexadecimal value F) are reserved for private use and will never be referenced in the ISAN Registry.
This range of ISAN version segment is reserved solely for internal applications (e.g. to track internal edits during the preparation of a version for public release) as determined by an ISAN "version registrant" who may self-assign such ISAN version segment on a non-registered basis. ISAN codes with this internally defined range shall not be distributed externally as they will automatically be interpreted as invalid for other applications.

2.2 PRINTED FORM

When the ISAN is printed or otherwise displayed for the human-eye, it always includes the "ISAN" prefix and the two check characters. To assist in accurate transcription of an ISAN, the following rules apply:

- the word "ISAN" followed by a blank space (prefix) shall precede all digits ;
- the first 16-digit shall be divided into 4 units of 4 digits with each unit separated by a space or hyphen, followed by the check character;
- then, the 8-digit version shall be divided into 2 units of 4 digits with each unit separated by a space or hyphen, followed by the check character;

These rules are solely intended to provide a visual aid for accurate transcription of ISAN; no meaning is attributed to any digits, units or characters. Example:

ISAN 0000-0000-3A8D-0000-Z-0000-0000-6

2.3 BINARY FORM

When represented in a binary form, the ISAN is encoded left-to-right as a 96-bit binary number. The 96 bits are encoded and transmitted as an unsigned integer. Check digits are ignored.

msb = most significant bit
lsb = least significant bit

2.4 XML FORM

When represented in XML documents the ISAN should be encoded according to the schema defined in http://www.isan.org/ISAN/isan.xsd

The leading letters ISAN are omitted and the two check characters are optional in the XML representation of an ISAN.
In addition to the constraints defined in the XML schema in http://www.isan.org/ISAN/isan.xsd, the XML encoding is additionally constrained as follows:

- If the check1 attribute is present, then the episodeOrPart attribute shall be present
- If the version attribute is present, then the episodeOrPart attribute shall be present;
- If the check2 attribute is present, then the check1 attribute shall be present;
- Unless the XML encoding is used strictly between machines, all attributes are required.

Examples:

1. <ISAN root="**1881-66C7-3420**" episodeOrPart="**6541**" version="**9F3A-0245**" />
2. <ISAN root="**1881-66C7-3420**" episodeOrPart="**6541**" check1="**X**" version="**9F3A-0245**" check2="**Y**" />
3. <ISAN root="**1881-66C7-3420**" episodeOrPart="**6541**" />
4. <ISAN root="**1881-66C7-3420**" />

Note: the example 4 does not fully define an ISAN but can be used in special circumstances where only the root component of the ISAN is known.

2.5 URN FORM

When represented in the URN form, the representation is similar as in the human readable form and "URN:ISAN:" is pre-pended, as shown in the following example.

URN:ISAN:0000-0000-3A8D-0000-Z-0000-0000-6

"URN:ISAN" can be resolved in the ISAN Registry, either via the ISAN API or the ISAN discovery search web interface accessible from www.isan.org/registry/

Example: **http://www.isan.org/lookup/URN:ISAN:0000-0000-3A8D-0000-Z-0000-0000-6**

For more information on the ISAN Name Space Identifier, refer to IETF RFC 4246.

3 Applying ISAN to audiovisual works and versions

3.1 AUDIOVISUAL WORKS

For the purposes of the system, ISAN defines an audiovisual work as a "work consisting of a sequence of related images, with or without accompanying sound, which is intended to be made visible as a moving image through the use of devices, regardless of the medium of initial or subsequent fixation". This is without prejudice to any legal definition of audiovisual works.

Most types of work can be registered as episodic (serial) or non episodic.

Most types of works can be registered in their early stage of production with an In-Development ISAN

Most types of works can have versions (variants and manifestations) that can be identified with a distinct ISAN version

Types of Audiovisual Work to which an ISAN can be assigned :

- **Commercials / Advertising film:** Works which promotes a product, service, idea, person or company, including promotional material for consumer products, services shown in theaters and infomercials. Trailers (promotional advertising for a film or television production) might be identified as version of the work as a "related content".
- **Feature Film:** Work, usually originally released theatrically or direct to video.
- **TV movie or Telefilm:** A fiction work intended for television broadcast.
- **Documentary:** A moving image production providing a factual archive or report depicting persons, animals, vegetables and plants, events or industrial processes.
- **Educational:** Works restricted to traditional training, coursework, classroom or distance learning. Such works are primarily intended to educate rather than entertain.
- **Series** (Drama, Soap, TV Serial, …)**:** A set of episodic fiction works often with the same main actors or on related subjects and open-ended television drama or comedy where the story continues from episode to episode.
- **Short :** Fiction work, usually originally released theatrically or direct to video, with an original length less than feature film. This includes short animated works.
- **Multimedia :** Audiovisual work with interactivity.
- **News:** An audiovisual production which reports on topics of current interest. Non-fiction programming, reporting and commentary on current events, usually organized into reports from various correspondents.
- **Live Event:** All non-fiction works recording live events except related to sport or performances which have their own types. Examples include extensive coverage of political conventions, talk shows, live recordings of political debates, elections, space coverage, marriage, funerals, etc…
- **Performance :** Works that capture an artistic performance including concerts, dance, music, opera, stage production, recitation, magic, circus, stand-up comedy, burlesque, vaudeville or other variety stage act.
- **Sport Event:** Sports Related Program: Non-fiction productions reporting on sporting events.
- **Television Entertainment:** Programming intended for airing on television including reality programs, magazines, variety, game shows, except where otherwise categorized.
- **Music Video Clip:** Short audiovisual non live production which shows images related to a specific sound recording
- **Video Game:** Game composed of a computer-controlled virtual universe that players may interact with in order to achieve a goal.
- **Compilation:** a combination made of two or more featured works in a single package such as a disk, boxed set, etc (e.g. South Park Season One, Indiana Jones Trilogy, etc…) each work in the compilation should have its own ISAN.

  Note: A single featured work packaged with several related minor works (e.g. the traditional DVD or Blu-ray with bonus features) is registered as a version of the major work (e.g. single featured work). Each minor work (e.g. bonus features) is registered as a "Related Content" version of the major work.

Other kinds of works such as clips or sequences extracted from an audiovisual work, trailers, etc… can be identified as a version.

3.2 VERSIONS OF AN AUDIOVISUAL WORK

An ISAN version can be applied to any specific instance (or version) of an audiovisual work resulting from any particular aggregation of elements that affects the content or format of an audiovisual work already identified with an ISAN. Changes such as editing, the addition of subtitles, dubbing, alterations of the soundtrack, fixation of the content on a specific media (Film print, Blu-ray, digital file …) the change of technical properties (HD/SD, 2D/3D, encoding format…) can all result in the issuance of a new ISAN version or V-ISAN.

Some examples of changes to works resulting in new versions of audiovisual works to which an ISAN Version may be issued are:

- Changes to a specific language track or the arrangement of language tracks (language version)
- Changes to the subtitling (subtitled versions)
- Changes in specific image or sound formats, such as: wide screen vs. "pan & scan", standard definition vs. high definition, 2D vs 3D, “high quality” to “low quality” (e.g., D1 tape to VHS tape transfer, transcoding with a quality degradation)
- Transcoding (e.g. change from AC3 to MP4 sound encoding)
- Changes in the physical / Digital carrier(s) for an audiovisual work
- Editing of an audiovisual work for a specific purpose, such as: edits for length, edits to alter commercial placement, edits for content advisory reasons.
- Change in the technical data stream that affects the content of the work (e.g. a different software program to generate background images or the vertical blanking interval for closed captioning).
- Changes to the format and/or duration of an audiovisual work (e.g. for television broadcast, for use on airlines or similar changes for the requirements of a specific exploitation)
- Digitized version of a work originally in analogue format
- a director’s cut;
- a substantially abridged and re-edited version;
- a "colorized" version of an audiovisual work that was originally created in black and white, or a "black and white" version of an audiovisual work that was originally created in color;
- Other significantly re-edited versions of an audiovisual work.

The following changes do not constitute the creation of a distinct audiovisual work or version ISAN:

- A copy in the identical format and recording medium (e.g. a tape-to-tape copy)
- A change in the metadata describing the work
- A change in the price or fees associated with use of an audiovisual work

Versions can only exist if an ISAN of the original work exists. Versions can be of 3 types:

- ***Variants of audiovisual works*,** which are audiovisual contents resulting from change(s) to the audiovisual work that do not significantly alter the nature of the intellectual creation (would it result into a new/different intellectual creation, a new ISAN would apply instead). Such changes can for example be one or a combination of: editing, the addition of subtitles, dubbing, alterations of the soundtrack, etc… Variants are usually abstract things since no fixation on a physical medium or digital asset can be pointed to (see manifestations below).

- ***Manifestations of the audiovisual work (or a variant of it)***, which are characterized by the fixation of the audiovisual work or a variant of it on a physical medium (e.g. film print, tape, digital file, …). Since an increasing number of audiovisual works are dematerialized (without a fixed physical carrier), manifestations can also be digital assets such as files without physical properties. A manifestation can exist only if an audiovisual work exists. Manifestations are described with ISAN with a specific set of metadata that define the technical properties of the embodiment (HD/SD, 16:9 / 4:3, 2D/3D, etc…) and the media of fixation (Blu-ray, Film Print, DVD, Windows Media File, etc…).

Related Content or Items: ISO 15706-2 enables to apply an ISAN version to other content that is derived from or closely related to versions of the audiovisual work when this content is intended for mass distribution as for example broadcasting and when it is necessary to identify that content in the broader context of an existing ISAN or ISAN version application. Such related content can be:

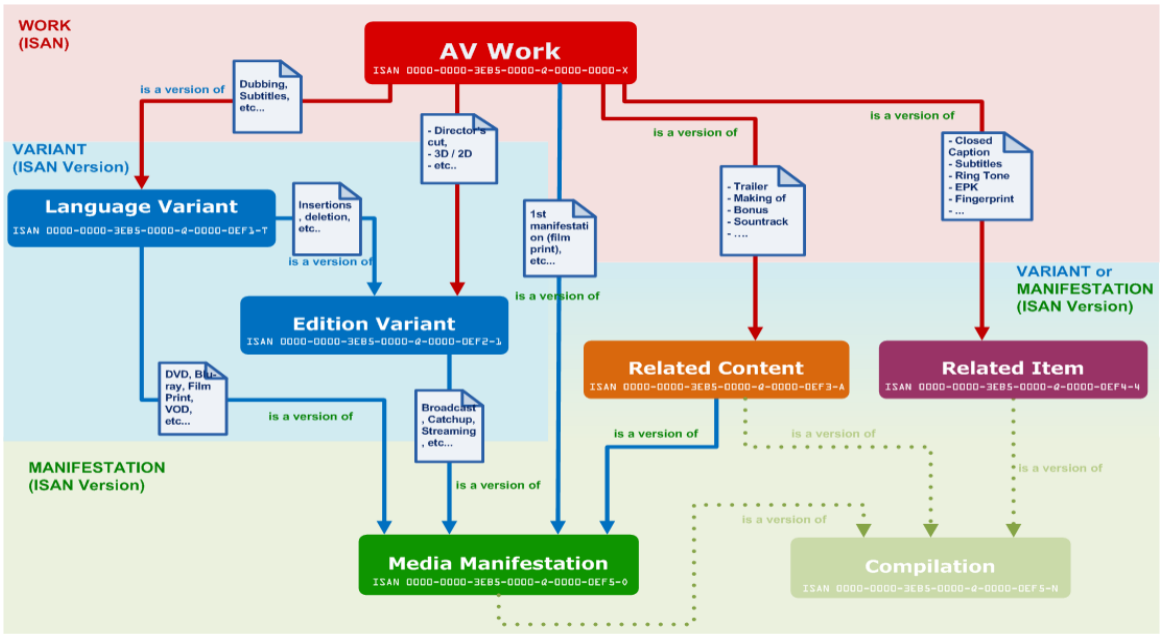
- An audio track extracted from a broadcasted audiovisual work
- A descriptive audio track
- A closed captioning track,
- A multiple system sound track
- A ring tone extracted from the audio track of an audiovisual work
- A fingerprint of an extract or the full audiovisual work
- An audio fingerprint of an extract or the full audio track of an audiovisual work.
- A poster of the audiovisual work
- A boxed set as a compilation of audiovisual works
- Etc…

Relationship between ISAN works and versions

The ISAN identifier is a 24 digit number made of two major sections:

- The first 16 digits are defined in ISO 15706-1 as the audiovisual work identification.
- The next (and last) 8 digits are defined in ISO 15706-2 as the version identification.

The relationship between work and version is natively contained in the ISAN identifier; indeed all versions share the same first 16 digits. Only the last 8 digits of the ISAN differ from one version to another.
Differences between versions of an audiovisual work, as well as the relationship (if there are some) between the versions of a same work are defined in the ISAN Registry via the metadata of each version.
The different versions of a same audiovisual work can be linked in the ISAN Registry to fit with FRBR based models (e.g. EN15907) or to enable other hierarchies as for example in the schema below:



3.3 SERIAL OR EPISODIC AUDIOVISUAL WORK

For the purposes of the ISAN system, serial audiovisual works and episodes are defined in a broad sense.

No apparent sequential allocations in the episode segment shall imply the order in which episodes were produced or transmitted.

A serial audiovisual work is produced in individual episodes or parts which bear a relationship to each other. There is usually a common title for the whole series.

Examples of serial audiovisual works are:

- any (television) series, regardless of genre, produced in episodes that are intended for broadcast at intervals;
- daily/weekly talk show, newscast, sports event, etc…;
- daily or regular news broadcasts;

These are NOT serial audiovisual works:

- a sequel to a feature film (e.g. “Rocky IV”);
- separate broadcasts of parts of a single audiovisual work; Versions of the single audiovisual works can be used instead to identify the separate broadcasted parts.
- an annual telecast of a yearly event (e.g. a New Year’s Eve special or the annual Academy Awards presentation).

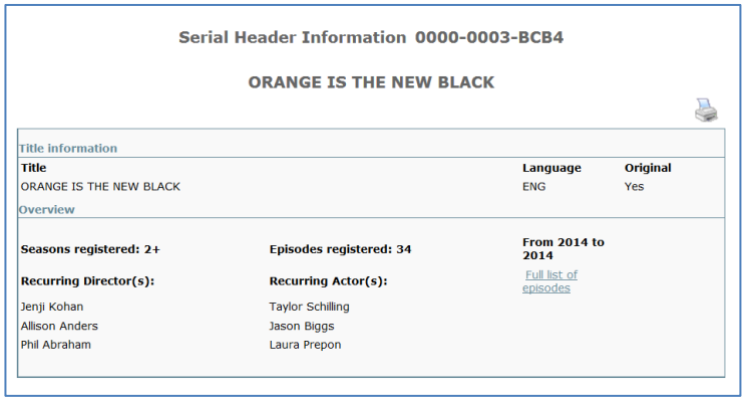
3.4 REGISTERING INDIVIDUAL EPISODES OF A SERIAL AUDIOVISUAL WORK

Each episode within series or other episodic audiovisual work must have its own “episodic” ISAN. Series are identified in the ISAN system with the root ISAN, i.e. the first 12 digits of an ISAN, shared between all ISAN allocated to the episodes of that serial. Groups of episodes including seasons are not identified with an ISAN, instead the group of episode information (i.e. the season number) is defined for each episode in the “Season number” field within the episode metadata.

No single ISAN can be assigned to cover a serial or a season of a serial as a whole.

When resolving the root ISAN of an “episodic” ISAN, the ISAN system will return metadata for the serial. Example “Orange is the New Black”

www.isan.org/lookup/ISAN **0000-0003-BCB4** (only the 12 first digits)



When resolving the 24 digit episodic ISAN, the ISAN system will return the metadata for the episode. Example Episode “I Wasn’t Ready” (season 1)

www.isan.org/lookup/ISAN **0000-0003-BCB4**-0002-T-0000-0000-O (the same root but with all 24 digits)

ISAN 0000-0003-BCB4-0002-T-0000-0000-O

I WASN'T READY (2013 - 51 min)

Title information

Is episode from : ORANGE IS THE NEW BLACK (ENG)

Title	Language	Original
I WASN'T READY	ENG	Yes

Core information

Type	Series	**Kind**	Live Action
Year of reference	2013	**Year of 1st publication**	
Duration	51 min		
Color Kind	Color	**Episode Number**	1
Composite	No	**Season Number**	1

Production information

Coproduction	No
Production companies	Lionsgate Television
	Tilted Productions
Countries of reference	United States Production
Original languages	English

Participants information

Type	Firstname / Lastname
Director	Michael Trim
Actor	Jason Biggs
Actor	Taryn Manning
Actor	Laura Prepon
Actor	Taylor Schilling
Creator	Jenji Kohan

Relationships

Serie: ORANGE IS THE NEW BLACK - SHID 0000-0003-BCB4

Work : I WASN'T READY - ISAN 0000-0003-BCB4-0002-T-0000-0000-O

When registering the first episode of a serial, the title for the serial must be provided. A first reference episode is created with all the descriptive information.

For each additional episode registration, descriptive information will be inherited automatically from the most recent registered episode. This eases the registration process, as only discriminant information from episode to episode need to be provided; e.g. title of the episode, new actors, etc…

Descriptive information of episodic works are the same as for non episodic works, except Season and Episode information. For details refer to the document ISAN Data Fields.

3.5 COMPOSITE WORKS AND THEIR COMPONENT PARTS

A composite work is an audiovisual work which contains other audiovisual works or excerpts from other audiovisual works, each of which is insubstantial in relation to the whole composite work.

A composite audiovisual work has its own ISAN, independent of any ISAN that may have been issued for its component parts.

Examples of composite works are:

- a feature film which contains parts of animated cartoons or other film clips;
- a television program that contains footage from previously produced feature films;
- a television episode that contains footage from episodes of other television series.

- Compilations are always composite works.

These types of works are NOT composite works:

- a specific scene within a feature film, unless that scene is intended for distribution as a separate work;
- a montage of single images.

For a composite work, registrant is asked to supply the ISAN of each audiovisual work composing this composite work.

3.6 REGISTERING VERSIONS OF AUDIOVISUAL WORKS

All variants or manifestations of episodic or non episodic audiovisual works registered with ISAN can be identified with an ISAN version.

There can be an indefinite number of versions for a given audiovisual work. The uniqueness of the audiovisual work is expressed through the first 16 digits of the ISAN: all versions of a same work will share the same first 16 digits.

A version is always attached to a “parent work”. The parent work is the work from which the version derives. Since versions of versions are allowed in the ISAN system, the parent work can also be a version (with its own parent work being a work or a version). A version and its “parent work” will always share the first 16 digits of their ISAN number. In the ISAN Registry, versions of an audiovisual work are organized in hierarchies: a version can have only one “parent version” and several “child versions”. Hierarchies between work and versions are created automatically when the ISAN is allocated.

Example of series - episode - version relationship:

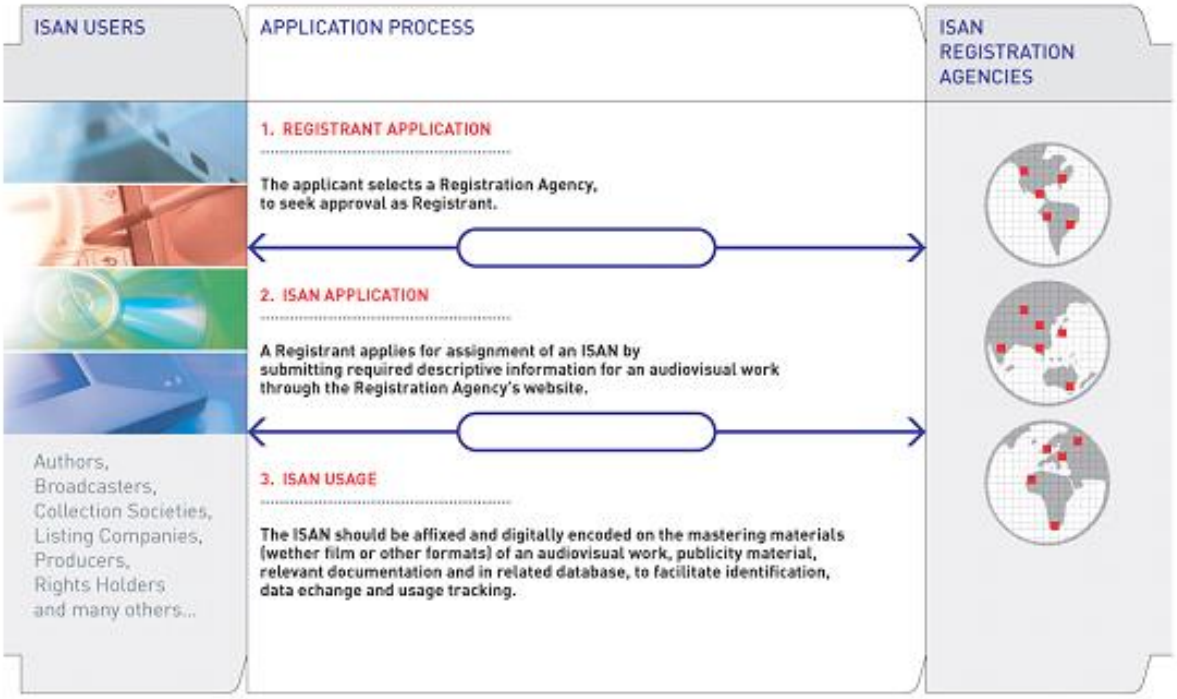
ISAN version identifiers cannot be allocated to versions of audiovisual works identified with an In-development ISAN. ISAN for versions applies once the In-development ISAN has been activated.

Descriptive information for the allocation of ISAN for versions is defined in the document ISAN Data Fields.

4 Registration for an ISAN

4.1 HOW TO APPLY TO BECOME AN ISAN REGISTRANT

Registering content with ISAN is reserved to AV industry professionals. Applicants must apply as ISAN registrant in the ISAN registration agency of their choice. Users registering audiovisual works with ISAN are the producer of said works or an authorized proxy of the producer (e.g. sales agent and/or distributor) or other appropriate entity or individual. ISAN registrants for versions can be any professional who need to identify a particular version of a work for a particular purpose. Each registrant applicant will be asked to apply for ISAN only for those audiovisual works for which he/she guarantees the accuracy of all descriptive information.



The list of appointed ISAN Registration Agencies can be found on the ISAN website (www.isan.org/agencies/appointed.html).

The registrant's one-time registration process requires applicants to provide accurate and verifiable information including documentation of industry affiliation such as:

- Current membership with an audiovisual trade association recognized by the registration agency,
- Sponsorship of the applicant by a trade association recognized by the registration agency,
- Verifiable declaration of appropriate past or current activity in the audiovisual industry (e.g. funding by a public agency recognized by the registration agency).

Once registrant status has been obtained, registrants may apply for ISAN services (registration and search) online via their affiliated registration agency.

The following rules apply to ISAN registrant:

- A registration agency cannot be an authorized registrant.
- A registrant may only be accredited at one registration agency. However, a registrant can change registration agency anytime and on demand at cs@isan.org.
- A registrant can be a legal entity or an individual.
- Registrant status is not transferable from one person or company to another.
- A registrant may be revoked or suspended by a registration agency for significant breach of ISAN set of rules.
- Refused applicants or revoked and suspended registrants may appeal to the ISAN International Agency (in writing at cs@isan.org), which will review such appeal with the registration agency in a timely manner.
- Any entity or individual that does not register content with ISAN and need to search for works in the ISAN Registry or resolve/lookup ISAN for its related descriptive information, can obtain a ***Reader*** access from any appointed registration agency.

4.2 APPLYING FOR ISAN TO IDENTIFY AUDIOVISUAL WORKS

Ideally application for ISAN should be made early in the production process of an audiovisual work. However, registrants may apply for an ISAN at any time during or after production, provided that required descriptive information is known, not expected to change and that an ISAN has not already been assigned to the audiovisual work concerned.

When applying for an ISAN, a registrant will be asked to provide the required descriptive information for the work or version to register with ISAN. This descriptive information is outlined in Annex B and detailed in the document: ISAN Data Fields.

Descriptive information and ISAN identifiers are stored in the ISAN Registry as a permanent and persistent record accessible on-line anytime.

See below an example of ISAN record for the movie “Gone with the wind”:

Title information

Title	Language	Original
Gone with the wind	ENG	Yes
Autant en emporte le vent	FRE	No
E o vento levou	POR	No
Lo que el viento se llevo	SPA	No
Via col vento	ITA	No
Vom winde verweht	GER	No

Core information

Type	Feature Film	**Kind**	Live Action
Year of reference	1939	**Year of 1st publication**	1939
Duration	222 MIN		
Colour	Yes		
Composite	No		

Production information

Coproduction	Yes
Production companies	Mgm
	Selznick International Pictures
Countries of reference	United States
Original languages	English

Participants information

Type	Firstname / Lastname
Producer	David O Selznick
Director	Victor Fleming
Actor	Olivia De Havilland
Actor	Clark Gable
Actor	Leslie Howard
Actor	Vivien Leigh

7 V-ISAN: Hide them

ISAN 0000-0000-3A8D-0000-Z-0000-0001-4	Gone With the Wind – BDX1 (Bonus Disc)	ENG (Original)
ISAN 0000-0000-3A8D-0000-Z-0000-0002-2	Gone With the Wind – BD02DIM1	ENG (Original)
ISAN 0000-0000-3A8D-0000-Z-0000-0003-Z	Gone With the Wind – BD01DIM1	ENG (Original)
ISAN 0000-0000-3A8D-0000-Z-0000-0004-X	Gone With the Wind ¿ BDX1 (Bonus Disc) V2	ENG (Original)
ISAN 0000-0000-3A8D-0000-Z-0000-0005-V	Gone With the Wind ¿ BD01DIM1 V2	ENG (Original)
ISAN 0000-0000-3A8D-0000-Z-0000-0006-T	Gone with the wind	ENG (Original)
ISAN 0000-0000-3A8D-0000-Z-0000-0007-R	Via col vento	ITA (Translated)

ISAN identifiers are delivered almost instantaneously. Delays may occur when the system detects that the applied work might already be registered in the ISAN Registry. In such cases, the system stops the registration process until a confirmation is provided by either the registrant (or its registration agency) to assess if a new ISAN is to be allocated or not.

Preventing the creation of duplicate registration is one of the most important and complex task during the registration process.

4.3 APPLYING FOR ISAN TO IDENTIFY VERSIONS OF AUDIOVISUAL WORKS

Every audiovisual industry professional can be recognized as a valid ISAN version registrant by a registration agency and be entitled to allocate ISAN versions.

All variants or manifestations of episodic or non-episodic audiovisual works registered with ISAN can be identified with an ISAN version or V-ISAN.

Versions of audiovisual works can only be registered if a valid ISAN has been previously allocated to the audiovisual work

Versions of audiovisual works can be allocated anytime in the lifecycle of an audiovisual work.

When applying for an ISAN version, a registrant will be asked to provide the required descriptive information for the version to register with ISAN. This descriptive information for a version is outlined in Annex B and detailed in the document: ISAN Data Fields.

Descriptive information and ISAN identifiers are stored in the ISAN Registry as a permanent and persistent record accessible on-line anytime.

See below an example of ISAN version record for a home video version :

ISAN 0000-0002-C5DD-0001-H-0000-0003-H

黒い死神は金色の妖精を見つける (2012 - 30 min)

Media - is media fixation of		0000-0002-C5DD-0001-H-0000-0000-N
Version Descriptive Name		
Blu-ray version for JPN home video market + trailer		
Title information		
Kind	**Language**	**Version Title(s)**
Original	JPN	黒い死神は金色の妖精を見つける
General Version Information		
Version Running Time	30 min	
Reference Year/Date	2012	
Version Language Description		
Spoken Languages	Japanese (Nihongo)	
Image Details		
Dimension	2D	
Version Distribution		
Country(ies) of Distribution	Japan	
Distribution Channel	Home Video	
Distribution Platform	Home Video	
Media Embodiment		
Media of Fixation		
Blu-ray		
Version Composite/Compilation		
Component 1: **0000-0002-C5DD-0001-H-0000-0002-J**		

Relationships

▿ **Serie:** GOSICK - SHID 0000-0002-C5DD

▿ **Work :** 黒い死神は金色の妖精を見つける - ISAN 0000-0002-C5DD-0001-H-0000-0000-N

:: **Current Version :** 黒い死神は金色の妖精を見つける
ISAN 0000-0002-C5DD-0001-H-0000-0003-H
- Media - is media fixation of

4.4 APPLICATION FOR AN "IN-DEVELOPMENT ISAN"

An "In-development ISAN" is an ISAN identifier reservation for an audiovisual work in project or a work in course of realization.

An in-development ISAN is an ISAN identifier delivered to the ISAN registrant without providing descriptive information, instead this descriptive metadata is to be filled in the ISAN Registry as soon as known/available. As such, in-development ISAN are not yet "valid" ISAN identifiers until the full set of metadata is known and proofed against the ISAN registry as a unique AV work registration. In development ISAN are therefore intended to be transformed as valid ISAN identifiers once all descriptive information is provided and after a validation action by the ISAN registrant.

In-development ISAN (and metadata if any) are stored in the ISAN registry, but associated metadata is only accessible by the ISAN registrant. A resolution/lookup from anyone else than the registrant returns only the "In-development" status but no metadata. Once the "In-development" ISAN is activated, it becomes a regular ISAN that everyone can resolve/lookup to consult its associated metadata.

5 Search the ISAN Registry & Resolve ISAN

The ISAN Registry stores descriptive information for audiovisual works and versions and their related ISAN.

Four types of users are entitled to query the ISAN Registry for searching works and versions or lookup (i.e. resolve) ISAN identifiers:

- Discovery reader
- Registered reader
- Supporter reader
- Registrant

5.1 DISCOVERY READER

A discovery reader is an individual interested to query the ISAN Registry without being registered in the ISAN system. The discovery search is publicly available at http://www.isan.org/lookup/ and does not require to log into the ISAN system. The discovery search is limited to manual title based queries and manual ISAN (or V-ISAN) lookups. Only basic descriptive information is available in the discovery search.

The Discovery reader can make two types of queries:

- By querying an ISAN (ISAN lookup or resolution), the system responds with basic descriptive information for that ISAN and its associated versions, if any.
- By querying a title, the system responds with a list of results. Basic descriptive information along with ISAN can be consulted for each result candidate.

Users looking for full descriptive information or more complex search criteria need to be registered in the ISAN system as a registered reader via an ISAN registration agency.

5.2 REGISTERED READER

A registered reader is any legal entity or individual registered as such in the ISAN system with an ISAN registration agency.

A registered reader can make two kinds of queries once logged in the ISAN web application of its registration agency:

- By providing an ISAN the registered reader accesses full descriptive information when resolving ISAN identifiers (ISAN lookup) for works or versions.
- By providing some/any of the descriptive information, the registered reader can search the ISAN Registry for audiovisual works and retrieve corresponding ISAN or V-ISAN.

Registered readers have access to combined search criteria and full descriptive information.

5.3 SUPPORTER READER

A supporter reader is any individual or legal entity registered as such in the ISAN system and authorized to obtain updated copies of the ISAN Registry or access the ISAN Registry via the ISAN API for search, resolutions and/or bulk ISAN retrieval services (catalogue matching).

A supporter reader pays a contribution fee (cost recovery basis) that helps to cover the costs incurred to manage the ISAN Registry and deliver the service. To become a supporter reader, an applicant shall first register with ISAN-IA or its representatives such as registration agencies.

Depending on the kind of agreement, a supporter reader can:

Query / Lookup the ISAN Registry via the ISAN API.

or

Obtain copies with scheduled updates of the ISAN Registry for a local replication and use of the Registry.

or

Access and use the ISAN dissemination tool (file based or API) to bulk match its audiovisual catalogue with the ISAN Registry in order to retrieve the corresponding ISAN identifiers and store/reuse them.

5.4 REGISTRANT

Registrants are not limited to the registration of audiovisual works or versions: registrants can also query / lookup the ISAN Registry like registered readers.

6 Affixing the ISAN to an audiovisual work or version

The ISAN should be permanently affixed to the master material of the audiovisual work and the subsequent copies and versions that derive from it.

For audiovisual contents in digital formats, the ISAN can be encoded in the work itself. Many audiovisual standards used in digital form are compliant with ISAN, such as MPEG, Windows Media Format, DVB, ATSC, Blu-ray (AACS), UltaViolet, Digital Cinema (DCI), MXF, BXF, Electronic Program Guides (Open EPG, TV Anytime), etc.…

For audiovisual content in analog formats, it is recommended that the ISAN is:

- affixed to master copies or permanently linked to it in the records of the institutions that hold master copies
- made visible in the main and / or end credits of the audiovisual work.

It is also recommended that the ISAN is included in all commercial and technical documentation distributed with each audiovisual work.

When the ISAN is printed or otherwise displayed, whether on an audiovisual content, on labels, technical & commercial documentation, and packaging or elsewhere, it must be preceded by the letters “ISAN” to clearly distinguish it from any other product numbers. Even when used with non-Roman scripts, the letters "ISAN" must appear in the Latin alphabet.

To assist in accurate transcription of an ISAN, the following rules apply:

- the word “ISAN” followed by a blank space shall precede all digits;
- the 16-digit ISAN shall be divided into 4 units of 4 digits with each unit separated by a space or hyphen, followed by the check character;
- then, the 8-digit version extension shall be divided into 2 units of 4 digits with each unit separated by a space or hyphen, followed by the check character;

These rules are solely intended to provide a visual aid for accurate transcription of ISAN; no meaning is attributed to any digits, units or characters.

See Section 2 – The ISAN Structure, of this user guide for more details.

References to major standards and applications that are compliant with ISAN can be found on http://www.isan.org/resources/ .

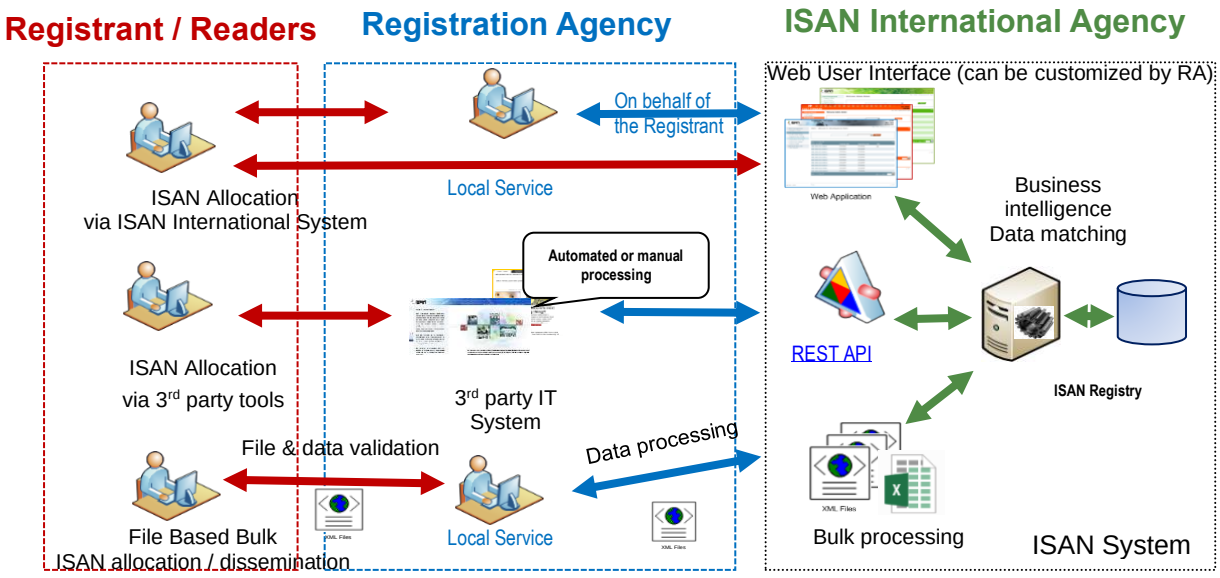
For more information how ISAN in carried End to End in television distribution and the ISAN implementation in Windows Media Technologies, refer to
http://www.isan.org/docs/ISAN_in_Windows_Media.pdf

7 Accessing the ISAN Registry

ISAN and related metadata are stored in the ISAN Registry available online 7/7 – 24/24 for registration, consultation and lookups (resolutions). The ISAN System, infrastructure and application is hosted and managed in Geneva (Switzerland) in a state-of-the-art facility, delivering services in a secure environment, such 24 x 7 x 365 monitoring, fully redundant secured internet connectivity and full weekly and daily back-ups. The ISAN application is fully scalable and evolutive, it is build on the most recent Java and Oracle technologies, it is maintained and enhanced by ISAN-IA's engineers and external service providers.

The ISAN Registry is available for registrations and queries/lookups via the following means:

- An **on-line multi-lingual** web based **user interface**.
- **An on-line Rest API** enabling third parties (such as broadcasters, studios, digital platforms, etc) to interface their systems with the ISAN Registry.
- **Bulk processing:** Large catalogues are processed in bulk, either for registrations to obtain new ISAN identifiers, or for metadata matching to retrieve existing ISAN identifiers. In bulk processing the metadata is provided in flat files or in XML files. The ISAN system supports Excel/CSV and XML files ingestions. XML files are sharing the same ISAN XML schemas as the ISAN Rest API.
- **ISAN Registry snapshots:** updated snapshots of the registry are available to supporter readers for local replication (note that no registrations are possible in a local copy of the registry!).



Contact ISAN-IA (cs@isan.org) or your ISAN registration agency for further details.

Annex A: Calculation of the ISAN Check Character

The **ISO 15706:2002** standard specifies that the first check character for an ISAN shall be calculated over the first 16 hexadecimal digits of the ISAN according to a **MOD 37,36** system specified in accordance with **ISO 7064**.

The **ISO 15706-2** standard extends ISAN over 24 digits and specifies that the second check character calculation shall be calculated over the 16 hexadecimal digits of its ISAN element and the 8 hexadecimal digits of its version segment according to a **MOD 37,36** system specified in accordance with **ISO 7064**.

First ISAN Check Character Calculation

The first check character of an ISAN shall be one alphanumeric character using arabic numerals 0 through 9 and letters A through Z of the Latin alphabet. The check character shall be calculated over the first 16 hexadecimal digits according to the MOD 37, 36 systems specified in accordance with ISO 7064.

Whenever an ISAN (with or without its version extension) is displayed in human-readable form the first check character shall be added as the 17th character.

The following is a simplified description of the procedure for calculating the ISAN check character, using, as an example an ISAN without a version segment: **ISAN B159-D8FA-0124-0000-K**

To verify the correctness of ISAN, convert the ISAN from hexadecimal to decimal values.

Here is the decimal representation:

ISAN	B	1	5	9	-	D	8	F	A	-	0	1	2	4	-	0	0	0	0	-	K
ISAN	11	1	5	9	-	13	8	15	10	-	0	1	2	4	-	0	0	0	0	-	20

Step 1: Take the first digit of the 16 digit ISAN character string and add it to 36. The sum of this addition will be the Intermediate Sum used in the next step.

Step 2 Take the Intermediate Sum and adjust it as follows:

- If the Intermediate sum is greater than or equal to 36, subtract 36 from it to create the Adjusted Intermediate Sum;
- If the Intermediate Sum is less than 36, use it without change as the Adjusted Intermediate Sum.

- If the Adjusted Intermediate result equals zero (after these two previous steps) use 36.

Step 3 Take the adjusted intermediate sum and multiply it by 2 to arrive at a Product.

Step 4 Take the Product created in Step 3 and adjust it as follows:

- If the Product is greater than or equal to 37, subtract 37 from it. The remainder will be the Adjusted Product.
- If the Product is less than 37, use it without change as the Adjusted Product.

Step 5 Carry forward the Adjusted Product to the next step.

Step 6 Take the next digit (reading from left to right) of the 16 digit ISAN character string and add it to the Adjusted Product carried forward from the previous step. Repeat the steps outlined from C.2 through C.6 until all 16 digits of the ISAN have been processed and the Adjusted Product for the 16th digit has been determined.

Step 7 If the Adjusted Product for the 16th digit of the ISAN equals 1, use 0 for the check character. Otherwise, take the Adjusted Product for the 16th digit and subtract it from 37.

The remainder will be the check character for that ISAN.

Second Check Character Calculation

The second check character (that includes the Version segment) of an ISAN shall be one alphanumeric character using Arabic numerals 0 through 9 and letters A through Z of the Latin alphabet. The check character for an ISAN as a whole (the 24 digits) shall be calculated over the 16 hexadecimal digits of its ISAN elements and the 8 hexadecimal digits of its version segment according to the MOD 37, 36 systems specified in accordance with ISO 7064.

Whenever an ISAN with its version extension is displayed in human-readable form its correct check character shall be added as the 26th character at the end of the ISAN with the version segment string. Note that the ISAN check character after the first 16 hexadecimal digits shall also be present in such cases, so the resulting string of 26 characters incorporates two check characters: one as the 17th character and one as the 26th character.

Validation of an ISAN with its Version segment being entered into or retrieved from a database or other machine-readable format by a human **shall require both correct check characters** (for the ISAN root element and for the version segment character string) to be verified or presented.

The procedure to compute the second check digit is similar as for the first check digit.

Procedure for ISAN Check Character Calculation

The table below shows the steps in calculating the check character for the ISAN: **ISAN B159-D8FA-0124-0000-K**

Step	**ISAN digits** (processed from left to right)	**Add (+)** (Use 36 for the first step; for subsequent steps, use the Adjusted Product from the previous step)	**Intermediate Sum**	**Adjusted Intermediate Sum** (If Intermediate Sum was greater or equal to 36, adjust by subtracting 36. If adjusted sum equals zero, put 36)	**x 2**	**Product**	**Adjusted Product** (If the Product was greater or equal to 37, adjust by subtracting 37)
1.	11	+ 36	= 47	11	x 2	= 22	22
2.	1	+ 22	= 23	23	x 2	= 46	9
3.	5	+ 9	= 14	14	x 2	= 28	28
4.	9	+ 28	= 37	1	x 2	= 2	2
5.	13	+ 2	= 15	15	x 2	= 30	30
6.	8	+ 30	= 38	2	x 2	= 4	4
7.	15	+ 4	= 19	19	x 2	= 38	1
8.	10	+ 1	= 11	11	x 2	= 22	22
9.	0	+ 22	= 22	22	x 2	= 44	7
10.	1	+ 7	= 8	8	x 2	= 16	16
11.	2	+ 16	= 18	18	x 2	= 36	36
12.	4	+ 36	= 40	4	x 2	= 8	8
13.	0	+ 8	= 8	8	x 2	= 16	16
14.	0	+ 16	= 16	16	x 2	= 32	32
15.	0	+ 32	= 32	32	x 2	= 64	27
16.	0	+ 27	= 27	27	x 2	= 54	17
17.	37 minus 17 = 20 (20->K)Therefore the 16 digit ISAN character string **ISAN B159-D8FA-0124-0000** has the check character **K** and the complete 17 digit ISAN is **ISAN B159-D8FA-0124-0000-K.**						

Annex B: Descriptive information for ISAN registrations

A detailed description of the ISAN metadata is available in the document ISAN Data Fields.

B1. GENERAL RULES FOR DESCRIPTIVE INFORMATION QUALITY

In order to maintain quality and consistency of descriptive data, the following rules should be followed when completing applications for assignment of ISAN (root and episode only):

A Title should be formatted in mixed case (e.g. not UPPERCASE only), conforming with the style as it appears on the audiovisual work (including correct use of any numbers, without abbreviations, etc.).

Titles **shall not** be written with the particle at the end: “Godfather, the” is **not** correct.

Language(s) information should be consistent between the language code and title(s) listed.

Names (participants and companies) should be completed in mixed case (e.g. not UPPERCASE only), completed in full (without abbreviation), including any prefix or suffix. In the case where a middle name is found, it should be written in the First Name field.

No Last Name can be accepted with only one (1) letter.

“None” or similar misleading information cannot be considered as a valid entry.

Production Companies shall be the company(ies) that originally created the work. The following companies should not be listed instead: distributor(s), right owner(s), group(s). And in case of acquisitions or bankruptcy, only the original company shall be listed.

Duration listed should conform to approximate running time as used for original release.

Each episode within series must have its own “episodic” ISAN. Groups of episodes including seasons are not identified with an ISAN, instead the group of episode information (i.e. the season number) is defined for each episode in the “Season number” field within the episode metadata.

No single ISAN can be assigned to cover a serial or a season of a serial as a whole.

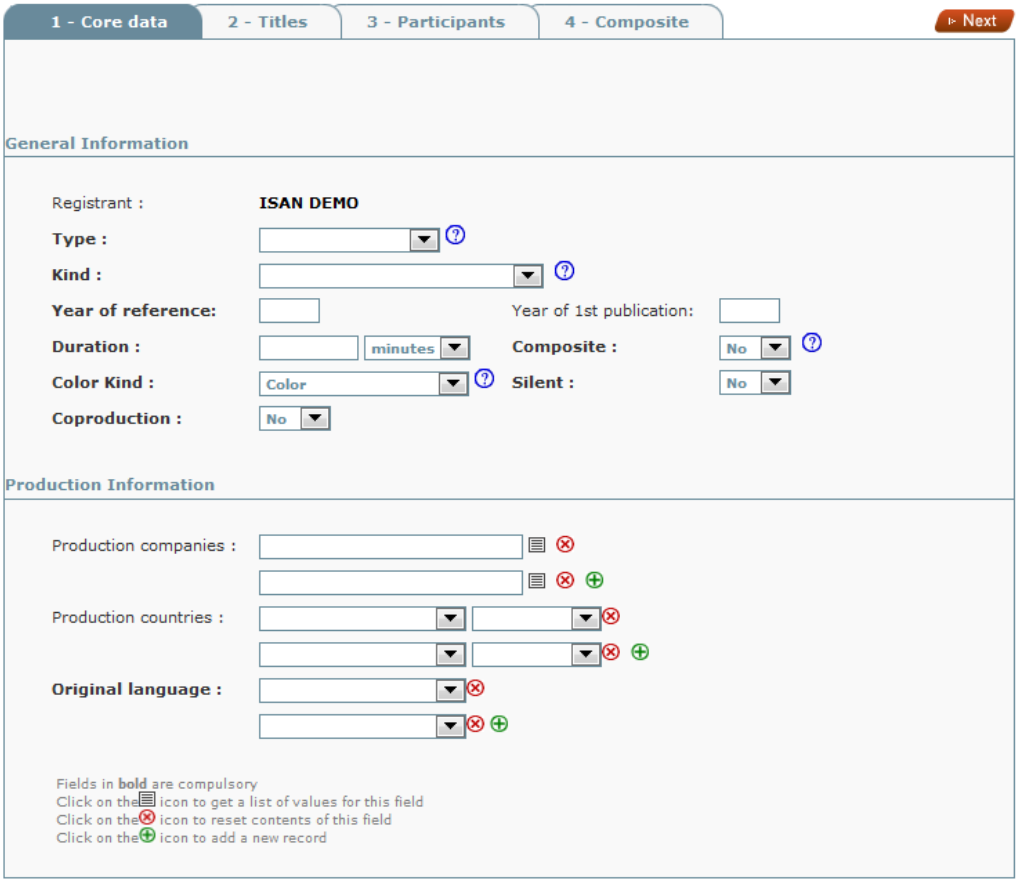
B2. DESCRIPTIVE DATA FOR NON EPISODIC AUDIOVISUAL WORKS

Of the following descriptive data, fields marked with an asterisk (*) on the ISAN Application Form are mandatory. All other fields are optional.

Required data on serial episodes is similar as they do not differ fundamentally from other types of audiovisual work.

Descriptive data listed below do not apply to ISAN versions registration information (refer to Annex B4).

1 - CORE DATA



General Information:

- **Type (*)**
  - Specify the type of work, using the categories described in this User Guide (Chapter 3). For example: feature film; series; commercial; recording of a live event etc.

- **Kind (*)**

- Specify whether the work is:
  - a combination of animation and live action
  - live action
  - animated

- **Year of reference (*)**
  - The year of reference should preferably be any year that is listed on the work itself (e.g. the year that appears in conjunction with any copyright statement in credits on the work).

Convert dates in Roman numerals to Arabic numerals (e.g. MCMXCIX should be transcribed as 1999).

- **Year of 1st publication**
  - The year in which the work was first released to the public. (Do not use the date of any pre-screenings to test audiences).

- **Duration (*)**
  - Specify the approximate duration in minutes or seconds as first released.
  - If the duration is not known at the time of initial application, it should be supplied as soon as possible thereafter (only possible for In development ISAN).
  - Duration is not required when registering non-linear (e.g. interactive) audiovisual works.

- **Composite (*)**

  Supply the ISAN of each component part, if applicable and available.

- **Color**

  Enter if original work filmed in full color or black and white or a combination of color and black and white. (

- **Silent**

  Enter if original work filmed with or without sound.

Production Information:

- **Co-production**

  Indicate whether or not the work is a co-production.

- **Production Companies**

- Give the name of the main production company in the same form as appearing in the credits on the work.
- If the applicant is unsure whether to use the name of an individual or a company, the name of a company is preferable.

- **Production Countries**

  Specify whether any listed country is to be considered as the country of production (i.e. where the main production company's headquarters are situated) or the location of principal shooting.

- **Original language (*)**
  - Specify the original spoken language(s) of the work using the categories represented by the ISO 639-2 language codes.
  - Record "None" for silent films.

2 - TITLES

- **Original (*)**
  - Specify whether this is the Original language title of the work or not.

- **Language (*)**
  - Specify the language in which the title is written using the categories represented by the ISO 639-2 language codes.

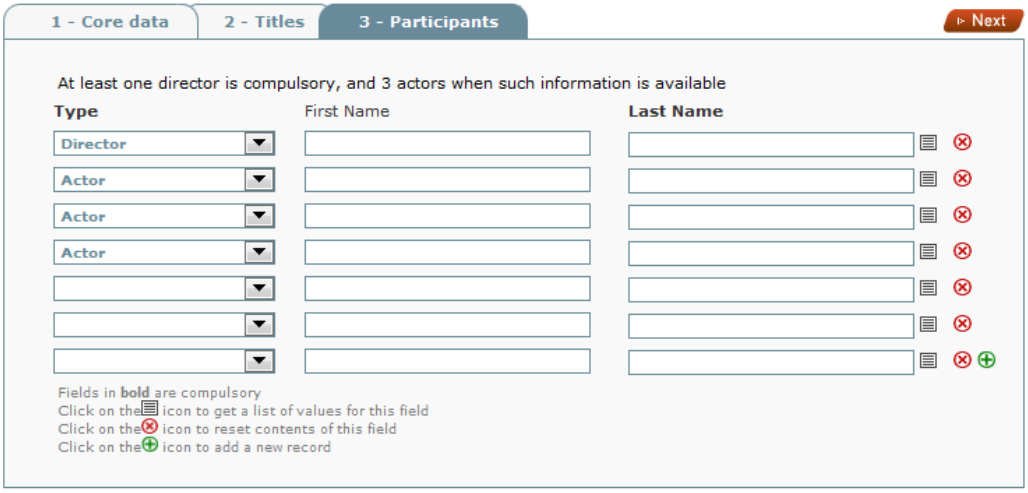
- **Title (*)**
  - Give the title in the same form as appearing on the work.
  - If the title appears in more than one form in the work, give preference to the form that is given most prominence in the opening sequence of the work.

- **Alternate title(s) in the original language, if applicable (*)**
  - Give any alternate title(s) in the same form as appearing on the work.

- **Other language (s)**
  - Specify any other language code in which the work is known to have been distributed.

- **Alternate title in other language (s)**
  - Specify the title(s) used in any other language in which the work is known to have been distributed. At least one title in a Latin alphabet is required.

3 - PARTICIPANTS



- **Type (Director) (*)**
  - Give the full name of the principal director, including Last Name and First Name. Several directors if applicable are accepted.

- **Type (Actor) (*) if applicable and available**

  Supply a minimum of 3 principal cast members with their full name to include Last Name and First Name, if applicable and available. If necessary, the names of the principal characters may be supplied instead of the names of the principal cast members.

- **Other participants if known and available**
  - Provide the name(s) of the script writer(s) and producers in the same form as appearing in credits on the work. These may also include:
    - Producer
    - Screenwriter
    - Character

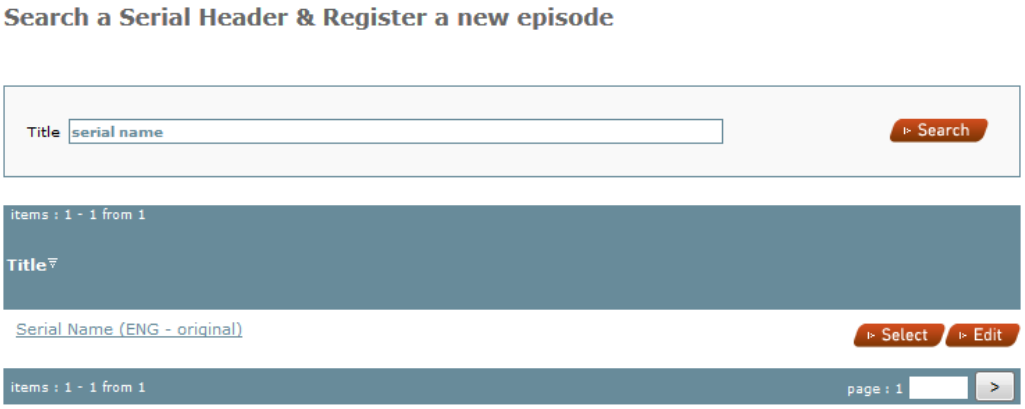
- Composer
- Scriptwriter
- Anchor
- Distributor
- etc…

B.3 DESCRIPTIVE DATA FOR EPISODIC OR SERIAL AUDIOVISUAL WORKS

Each episode within series must have its own “episodic” ISAN. Groups of episodes including seasons are not identified with an ISAN, instead the group of episode information (i.e. the season number) is defined for each episode in the “Season number” field within the episode metadata.

No single ISAN can be assigned to cover a serial or a season of a serial as a whole.

Descriptive data required for episodes is essentially the same as for other audiovisual works. In order to simplify the registration process of each new episode in the same series these are grouped under a common Serial Header identified with a root ISAN. All ISAN identifying episodes of the serial share this root ISAN.



In order to add a new Serial Header, the following descriptive information must be entered:

- **Original (*)**
  - Specify whether this is the Original language title of the entire serial audiovisual work.

- **Language (*)**
  - Specify the language in which the title is written using the categories represented by the ISO 639-2 language codes.

- **Title (*)**
  - Give the title of the entire serial audiovisual work using the form in which it appears in the work.

- **Alternate title(s) in the original language, if applicable**
  - Give any alternate title(s) in the same form as appearing on the entire serial audiovisual work.

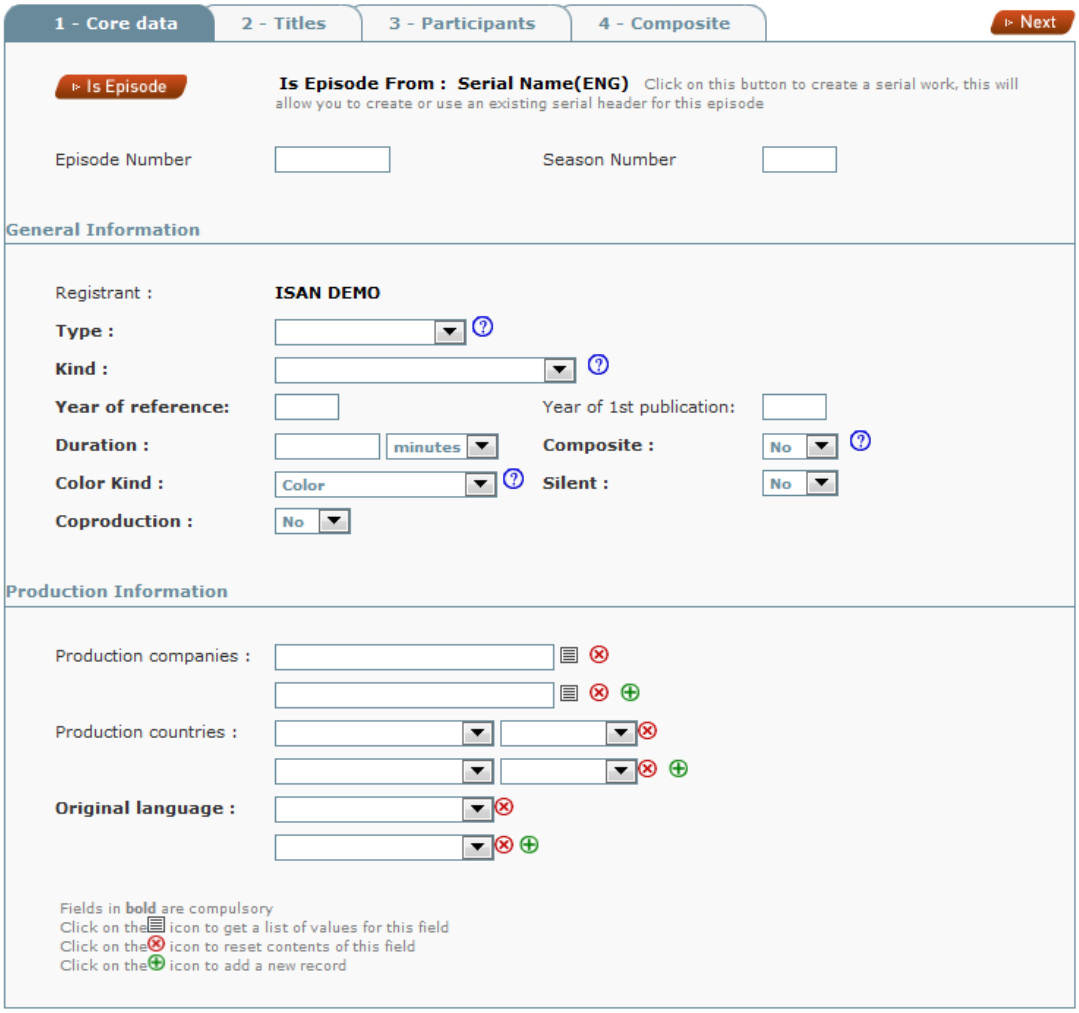
- **Other language (s)**
  - Specify any other language code in which the entire serial audiovisual work is known to have been distributed, using the form in which it appears in the work.

  .

- **Alternate title in other language (s)**
  - Specify the title(s) used in any other language in which the entire serial audiovisual work is known to have been distributed.

Once the Serial Header has been selected or created, the following descriptive information must be entered.

1 - core data



General Information:

- **Is Episode From: (*)**
  - The System will automatically show the Title of the entire serial audiovisual work from the selected Serial Header (which has been created using the form in which it appears in the work).

- **Episode Number (*) Required if applicable**
  - Specify the episode number; if the episode number is not applicable for the serie, the episode title must be distinct from all other episode titles.

- **Type (*)**
  - Specify the type of work. For example: advertisement, series.

- **Kind (*)**
  - Specify whether the work is:
    - a combination of animation and live action
    - live action
    - animated

- **Year of reference (*)**
  - The year of reference should preferably be any year that is listed on the episode itself (e.g. the year that appears in conjunction with any copyright statement in credits on the work).

    Convert dates in Roman numerals to Arabic numerals (e.g. MCMXCIX should be transcribed as 1999).

- **Year of 1st publication**
  - The year in which the episode was first released to the public. (Do not use the date of any pre-screenings to test audiences or of the original recording of the episode in front of a live audience).

- **Duration (*)**
  - Specify the approximate duration in minutes or seconds as first released.
  - If the duration is not known at the time of initial application, it should be supplied as soon as possible thereafter (only for In development ISAN).

- **Composite (*)**

  Supply the ISAN of each component part, if applicable and available.

- **Color**

  Enter if original episode filmed in full color or black and white or a combination of color and black and white (

- **Silent**

  Enter if original episode filmed with or without sound.

Production Information:

- **Co-production**

  Indicate whether or not the series is a co-production.

- **Production Companies**
  - Give the name of the main production company in the same form as appearing in the credits on the work.
  - If the applicant is unsure whether to use the name of an individual or a company, the name of a company is preferable.

- **Production Countries**

  Specify whether any listed country is to be considered as the country of production (i.e. where the main production company's headquarters are situated) or the location of principal shooting.

- **Original language (*)**
  - Specify the original spoken language(s) of the work.

2 - TITLES

- **Original (*)**
  - Specify whether this is the Original language title of the episode.

- **Language (*)**
  - Specify the language of the title using the categories represented by the ISO 639-2 language codes.

- **Title (*)**
  - Give the title in the same form as appearing on the episode.

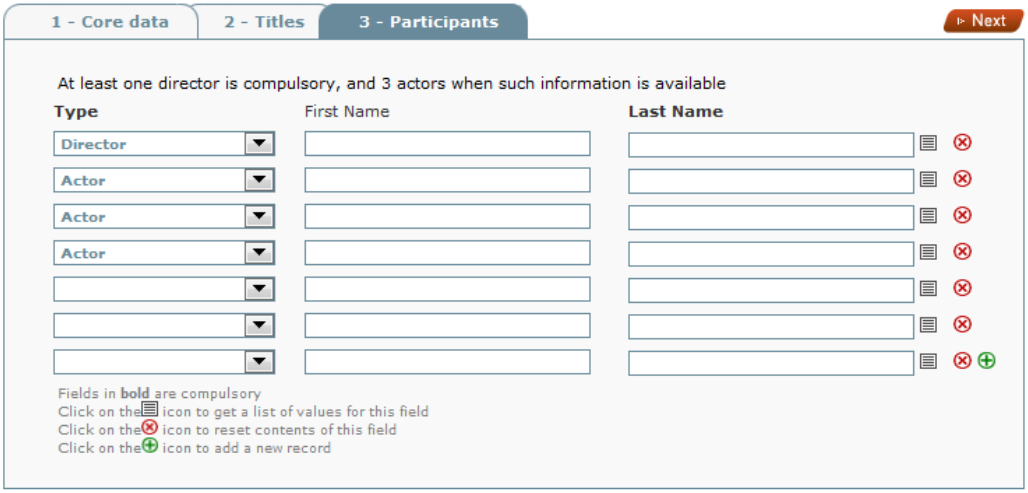
- **Alternate title(s) in the original language, if applicable (*)**
  - Give any alternate title(s) in the same form as appearing on the episode.

- **Other language (s)**
  - Specify any other language code in which the episode is known to have been distributed, using the form in which it appears in the work.

  .

- **Alternate title in other language (s)**
  - Specify the title(s) used in any other language in which the episode is known to have been distributed.

3 - PARTICIPANTS



- **Type (Director) (*)**
  - Give the full name of the principal director of episode, including Last Name and First Name.

- **Type (Actor) (*) if applicable and available**

  Supply a minimum of 3 principal cast members with their full name to include Last Name and First Name, if applicable and available. If necessary, the names of the principal characters may be supplied in lieu of the names of the principal cast members.

- **All other participants if known and available**
  - Provide the name(s) of the script writer(s) and producers in the same form as appearing in credits on the work. These may also include:
    - Producer
    - Screenwriter
    - Character
    - Composer

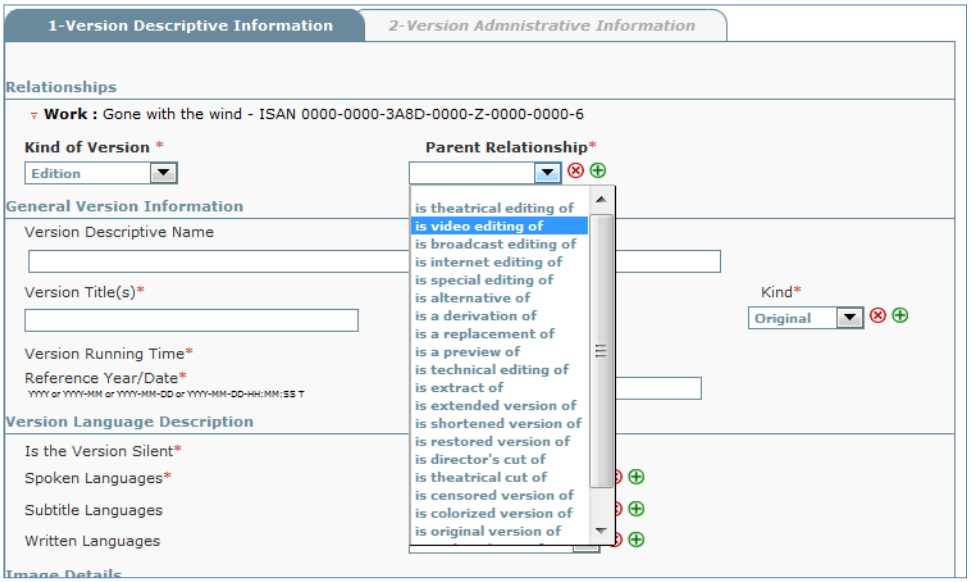
- Scriptwriter
- Anchor
- Distributor

B.3 DESCRIPTIVE DATA FOR VERSIONS OF AUDIOVISUAL WORKS

Of the following descriptive data, fields marked with an asterisk (*) on the ISAN Version Application Form are mandatory. All other fields are optional.

1- Kind of version(*) and parent relationship(*)

Depending of the kind of version to register, a parent relationship description applies.



The possible values for the Version Kind are:

Version Kind	Definition
Language	Language variant such as dubbing or subtitling. Can apply to Expressions and/or Manifestations.
Edition	Editing variant such as add-ons or cutoffs (e.g. ads inserts or local adaptation, a clip extracted from the work, etc). Can apply to Expressions and/or Manifestations.
Media	The fixation of the work on a physical or digital medium (e.g. Blu-ray, digital encoding, a mezzanine file, etc…). Media versions are always manifestations.
Related Content	Related contents can be trailers or promotional material of the work, supplemental material (behind the scenes, bonus, interviews, ..), etc…
Related Item	Related Items can be soundtracks, closed captioning tracks, fingerprints, cue sheets, etc…
Generic Version	Unspecified Version Kind

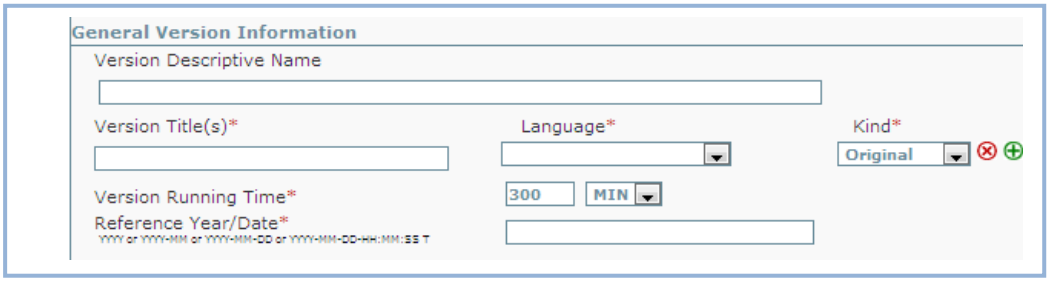
Several "Version Kind " for the same version are authorized, however the registrant should define one Version Kind only which corresponds to **the main purpose of the version**.

For example *the content on a* ***Blu-ray*** *is often resulting from editions + language variations of the original content and then embodiment of this content plus other supplemental material on a disk. If the registrant needs a* ***V-ISAN for AACS*** *and if the previously mentioned editions, language variations and supplemental material are not the main purpose of the version, the*

*registrant will define only one "**Version Kind = Media**" with the "**Relationship = is optical disc of**".*

All possible **values for the Parent relationship** are listed in the document ISAN Data Fields and its annex Lists of Codes.

2 – GENERAL VERSION INFORMATION



Descriptive Name

- **Version Descriptive Name** a description of the version of the work, generally the name by which the version is known by the registrant.

Titles of Version

- **Title(*)**:
  - Give the title in the same form as appearing on the version.
  - If the title appears in more than one form in the version, give preference to the form that is given most prominence in the opening sequence of the version.

- **Language (*)**: Specify the language of the version title using the categories represented by the ISO 639-2 language codes.

- **Kind (*)**: Specify whether this is the Original or Alternate language title of the Version or a non official translation.

Length & Year

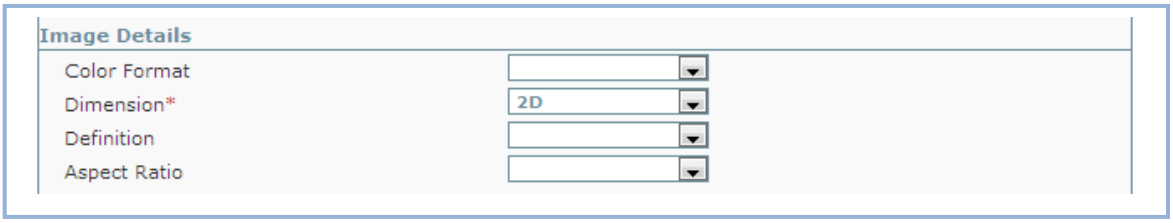
- **Running Time(*)**: The running time of the version. Can be expressed in minutes, seconds or milliseconds.

- **Version Year / Date(*)**: year or date of reference for the version. This can be the year of release for the versions (e.g. a Blu-ray edition), or the broadcast date and time of a TV program (e.g. 2012-11-23-18:05:22). This field accept values in the following format:
  YYYY: Year as for example *2009*
  YYYY-MM: Year-month as for example *2009-05* for May 2009
  YYYY-MM-DD: Year-Month-Day as for example *2009-05-22* for 22nd of May 2009
  YYYY-MM-DD-HH:MM:SS T: Year-Month-Day-Hour:Minutes:Seconds Timezone as for example *2009-05-22-12:15* or *2009-05-22-12:15:03* or *2009-05-22-12:15:03 +7* (where +7 means CET+7)

3 – VERSION LANGUAGE DESCRIPTION

- **Is the Version Silent**: Enter if the Version has a spoken soundtrack or not
- **Spoken Languages**: Only applicable if the version is Not Silent (see above). Specify the spoken language(s) of the version (ISO 632-2 code). If the version has several soundtracks (a Blu-ray or DVD for example), specify each spoken language.
- **Subtitle Languages**: Specify when available the subtitle language(s) of the version (ISO 632-2 code). If version has several subtitle tracks (a Blu-ray or DVD for example), specify each subtitle language.
- **Written Languages**: When written text other than subtitles appears in the version, specify the language(s) of such text (ISO 632-2 code). If several languages are available, specify each of them.

4 – IMAGE DETAILS



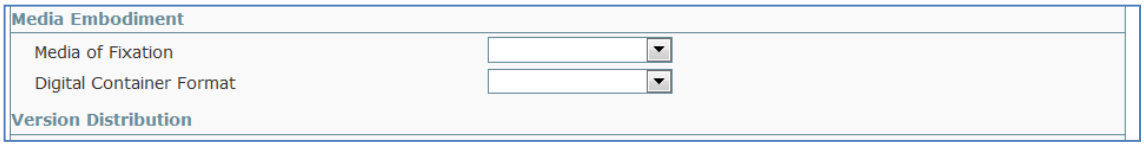
- **Color Format**: Fill in the color scheme that applies to the moving images. Refer to the document ISAN Data Fields and its annex Lists of Codes for all supported color schemes (example: Color, Color with Black & White parts, Black & White, Colorized, …)

- **Dimension**: Fill in whether the image dimension is in 2D or 3D

- **Definition**: Fill in the image definition, typically SD, HD, 2K, 4K, 35mm (film print), etc.… Refer to the document ISAN Data Fields and its annex Lists of Codes for all supported image definitions.

- **Aspect Ratio**: Fill in the image aspect ratio such as 4:3, 16:9, 1.85:1, etc... Refer to the document ISAN Data Fields and its annex Lists of Codes for all supported aspect ratio.

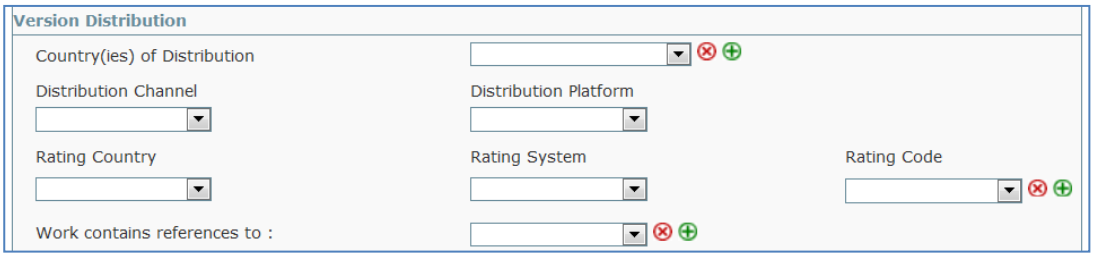
5 - MEDIA EMBODIMENT



- **Media of Fixation**: Specify the medium on which the content is fixed. Since an increasing number of audiovisual works are dematerialized (without a fixed physical carrier), Media can also be files or streams without physical properties. Possible Media are: *Digital File, Blu-ray, DVD, Other optical disc, Film Print, VHS, Betamax, Other Tape, Digital Cinema Package, Other (Unlisted Media).*

- **Digital Container Format**: This applies only to digital files. Fill in the file format for the encoded data (e.g. flv for Adobe Flash or mp4 for H264). Refer to the document ISAN Data Fields and its annex Lists of Codes for all supported digital container formats.

6 - VERSION DISTRIBUTION



- **Country(ies) of Distribution**: Fill in the targeted country, list of countries or regions of the world (e.g. North America, Domestic, Europe, …) for the distribution of the version. Refer

to the document ISAN Data Fields and its annex Lists of Codes for all supported Regions of the World or Countries.

- **Distribution Channel**: Fill in the targeted distribution channel for the version such as Theatre, Broadcasting, Home Video, etc.… Refer to the document ISAN Data Fields and its annex Lists of Codes for all supported distribution channels.

- **Distribution Platform**: Fill in the targeted distribution platform for the version such as Cable, IPTV, Electronic Sell Through, etc… The distribution platform options are conditioned and specific to a given Distribution Channel. Refer to the document ISAN Data Fields and its annex Lists of Codes for all supported distribution platforms.

Rating & Content Alert: Rating systems for almost 50 countries are already pre recorded in the ISAN system. Several rating countries and systems can be applied to the same version.

- **Rating Country**: Specify the country for which the rating system applies

- **Rating System**: Specify the rating system

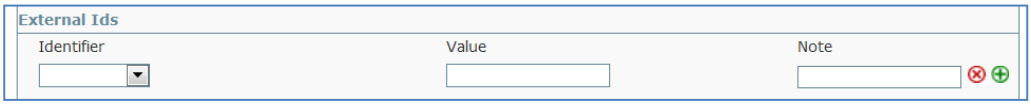
- **Rating Code**: Specify the rating code

- **Work Contain References To**: Content alert. Specify one or several alerts from the list of content alerts:

ALCOHOL	Reference or use of alcohol
BLASPHEMY	Reference to blasphemy
BLOOD	View of blood, animated blood
DRUG	Reference or use of drugs
GAMBLING	Reference to Gambling
GORE	View of blood and gore
KISSING	Reference to Kissing
LANGUAGE	Crude language, lyrics or humor
MATURE	Mature content
MISCHIEF	Reference to Mischief
NUDITY	View of Nudity
SEXUAL	Sexual content
TOBACCO	Reference or use of tobacco
VIOLENCE	References to violence
OTHER	Any other alert not covered by this list

7 - EXTERNAL IDENTIFIERS

For each version an unlimited list of external related identifiers can be specified such as private and commercial identifiers, EIDR codes, ISO identifiers, URI or URL, etc... For example a version that identifies the content on a Blu-ray can be linked to the UPC code of the Blu-ray, and/or be linked to the ISRC code of the musical recording of the soundtrack, etc.



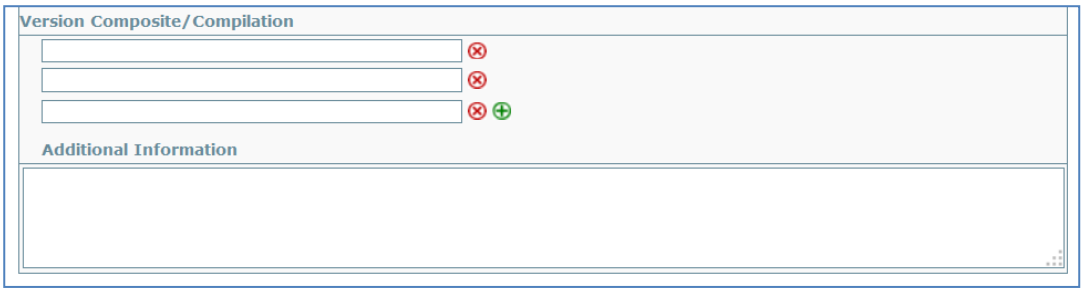
- **Identifier**: Specify the type of identifier such as ISRC, ISNI, EIDR, etc… Refer to the document ISAN Data Fields and its annex Lists of Codes for all supported identification schemes.

- **Value:** Fill in the value of the identifier

- **Note:** Any information related to the external identifier, as in the example below:

The Note field can also be used to point a link for resolving resolve the identifier

8 - COMPOSITE / COMPILATION AND ADDITIONAL INFORMATION



- **Composite / Compilation**: a list of ISAN codes (works or versions) that compose the versions or from which the version is a compilation.

  a) When the version contains content (or extracts of content) identified with another ISAN work or version, the ISAN of such composite elements must be filled in here.

  b) When the version is identifying a compilation of various components such as a DVD or Blu-ray made of a video track identified with a V-ISAN, several sound tracks (dubbing) identified each with a V-ISAN, several subtitling tracks identified each with a V-ISAN, bonus material identified with V-ISAN: all V-ISAN of the components that are compiled in the version must be listed here.

- **Additional Information** : Any other relevant information for which no dedicated metadata field exist.

Annex C: Glossary

"Audiovisual Content" or "AV Content" means collectively "Audiovisual Work" and/or "Version" as applicable.

"Audiovisual Work" or "AV Work" means a work consisting of a sequence of related images, with or without accompanying sound, which is intended to be made available as a motion imagery experience through the use of various devices, regardless of the medium of initial or subsequent fixation or distribution.

"Compilation": A compilation work is a collection of two or more separate works in a single distribution package, such as a DVD containing a feature film along with various bonus features, a theatrical feature with a trailer for another feature attached at its head, a home video boxed set of all episodes from a season of a series, etc.

"Composite audiovisual work" means an audiovisual work which contains one or more other audiovisual works or portions of audiovisual works, each of which is insubstantial in relation to the entire Composite audiovisual work (e.g. segments, highlights, etc).
EXAMPLES: A feature film which contains parts of animated cartoons or other film clips; a television program that contains footage from previously produced feature films, from episodes of television series, or from other audiovisual works.

"Episode" means an audiovisual work or a portion of an audiovisual work, connected to other audiovisual works forming a series of audiovisual works.

"InDev ISAN" or **"In-Development ISAN"** means an ISAN allocated to an audiovisual work in development, pre-production or production, therefore not yet complete, for which the applicable registrant has not yet submitted all necessary and final metadata for an active ISAN.

"ISAN" means the unique number generated, allocated, managed and stored by ISAN-IA upon application by a registrant filed via an appointed RA for the unique identification of an audiovisual work, in accordance with ISO 15706-1 & ISO 15706-2 and their amendments.

"ISAN Barcode" means the bi-dimensional barcode to which an ISAN and/or V-ISAN is associated.

"ISAN Registry" or **"ISAN Central Repository"** shall mean the central database owned, held, operated and managed by ISAN-IA, which includes all administrative and descriptive information associated to ISAN and V-ISAN (including ISAN Records), of which the ISAN Database is a subset.

"ISAN Database" means the compilation by ISAN-IA of ISANs and V-ISANs, including the ISAN Records and ISAN Metadata and any updates as may occur from time to time.

"**ISAN Lookup"** or "**ISAN Resolution**" means an ISAN or V-ISAN consultation request done on the ISAN Registry, for which the ISAN System will return as a lookup result, the metadata fields from the ISAN Record with respect to such ISAN or V-ISAN from the ISAN Database.

"ISAN Metadata" means any audiovisual content descriptive information including but not limited to title, duration, year of production, director, actors etc., registered in the ISAN Record (as part of the ISAN Database) and associated to the ISAN or V-ISAN which is allocated to the registered audiovisual content.

"ISAN Metadata Schema" means the XML encoding schema for the ISAN Metadata, as may be published by ISAN-IA on the ISAN-IA Website and updated from time-to-time.

"ISAN Queries" means the query services (consultation of the ISAN Registry) offered by ISAN-IA and its designees such as Registration Agencies, via Web Template, API or any other form of database look-up now known or hereafter invented.

"ISAN Record" means the full metadata set, including ISAN Metadata and administrative and descriptive information, associated to a particular ISAN or V-ISAN, as allocated to a registrant's submitted audiovisual content.

"ISAN registrant" means the producer of an audiovisual work, authorized proxy of such a producer, or other such Person who is registered within the ISAN System for the purposes of obtaining an ISAN for audiovisual works.

"ISAN Standard" means collectively the ISAN and V-ISAN standards (ISO 15706-1 & 2) and any of its updates and amendments.

"ISAN System" shall mean all business, information technology and security components used to implement the ISAN Standard, including but not limited to software applications, ISAN Web Template and ISAN API enabling access to the ISAN Registry and any information included therein.

"**ISAN API**" or "ISAN Web Services" means a set of services offered by ISAN-IA, which enables websites, services and applications to perform various functions on the ISAN System, including but not limited to accessing the ISAN Registry for audiovisual content registration for the purpose of obtaining ISAN or V-ISAN, or for ISAN Queries, ISAN Lookups.

"ISAN Web Template" means an online browser-based web application service designed and managed by ISAN-IA, offered to appointed Registration Agencies and their clients (i.e., registrants and readers) for the purpose of accessing the ISAN System via a publicly available web browser to perform various functions including but not limited to accessing the ISAN Registry for audiovisual content registration for the purpose of obtaining ISAN or V-ISAN, and conducting ISAN Queries, ISAN Lookups.

"ISAN-IA Marks" means all registered ISAN trademarks and service marks used and registered by ISAN-IA to indicate source of goods or services.

"ISAN-IA Materials" means any information authored, published or owned by ISAN-IA, whether ephemeral or fixed in any material form, including without limitation ISAN, V-ISAN, ISAN Records, ISAN Database and ISAN Registry, ISAN-IA Website, the ISAN Web Template, ISAN API, and any documents, whether electronic or in hard-copy print, or other communication containing information relating to the ISAN System and/or services associated with ISAN and/or V-ISAN.

"ISAN Version" see V-ISAN.

"ISAN-IA Website" or "ISAN Website" means the official, publicly available website for ISAN, which is located at www.isan.org. ISAN Lookups are available on the ISAN-IA Website.

"Minimum Required Metadata" means the fields of metadata that are required with respect to any particular audiovisual content before issuing an ISAN or V-ISAN with respect to such audiovisual content.

"Person" means a reference to a natural individual or any legal entity.

"Reader" means every Person interested to consult the ISAN Registry.

"Registrant" means collectively "ISAN registrant" and "V-ISAN registrant".

"Registration Agency" or "RA" means a Person appointed and authorized by ISAN-IA for the purpose of conveying ISAN and/or V-ISAN allocated to audiovisual content submitted by registrants.

"Resolution Service Provider" or "RSP" means a Person that maintains and makes available a set of metadata associated with specific V-ISAN (e.g. rating information, synopsis, fingerprint reference, business rules, etc.).

"root ISAN" corresponds to the root segment (12 first digits) common to all ISAN that identify the episodes of a serial. The root ISAN is the serial header reference used to identify a serial witch episodes are identified with ISAN

Sequel work : Refers to a feature film that continues the story begun in a previous feature film and proposing all or some of characters of the preceding motion picture. For the purpose of ISAN registration each component of the sequel is registered as a non episodic work.

Serial audiovisual work: Audiovisual work produced in individual episodes or parts which bear a relationship to each other and (usually) a common title for the whole series.

Serial Header (SH): It is the header of a set of works linking all the episodes and sharing the same serial title.

"Shall not engage in any form of Rights Management" under the present User Guide shall be read in relation to the provisions of paragraph 1 of the ISO standard 15706 which states that "The issuance of an ISAN is in no way related to any process of copyright registration, nor does the issuance of an ISAN provide evidence of the ownership of rights in an audiovisual work," and therefore does not prevent any RA from engaging in the provision of systems enabling the expression and communication of business rules relating to content, "DRM", etc., provided such activity does not conflict with these ISO restrictions. For such uses of ISAN, the ISAN Founders will maintain MFN status with regard to licensing and use of ISAN data. Further, unless a current RA is doing so at the time of adoption of the present User Guide, RAs are prohibited from the actual collection and/or distribution of royalties.

Standardized Metadata: Standardized Metadata is the descriptive information about a work, uniformed to one unique model, developed within the International Standard Organization (ISO) as ISO:15706-1 and V-ISAN is 15706-2 and maintained and enhanced by ISAN-IA. Standardized metadata facilitates the exchange of information by interoperability since every work is described with the same metadata, regardless its original country.

"Users" means collectively any registrant, reader, RA, and/or any other user of the ISAN Standard.

"Version" means a particular version, or aggregation of elements that affects the content of an audiovisual work. For example, any change that affects the content of an audiovisual work (e.g. artistic content, language, editing, technical format, distribution) 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.

"V-ISAN" or "ISAN Version" means the unique identifier composed of a registered ISAN 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 ISO 15706-2 and this User Guide.

"V-ISAN registrant" means the Person associated with the registration of a Version, for obtaining a V-ISAN.