Using ISAN with IMF

1 Introduction

1.1 General considerations

This draft document provides guidance for the use of ISAN with IMF. The practice described is this document is under development, it can still evolve for an optimal use of ISAN with IMF. Questions, comments or suggestions about this document and practice can be submitted to regis.flad@isan.org.

This guide is developed in compliance with the principle of shared or compliant practices agreed in the context of the accompanying measures of the European Commission set out in the Copyright Communications of December 2015 (COM(2015) 626) and September 2016 (COM(2016) 592) to support the efforts of ISAN and EIDR to achieve full interoperability between the two systems.

The reader of this guide is supposed to be familiar with the following ISAN documents:

- ISAN User Guide
- ISAN Data Fields & ISAN Data Fields Appendix - List of Codes
- Applying ISAN to versions of audiovisual works
- IETF RFC 4246 : Uniform Resource Name (URN) Namespace Identifier (NID) for ISAN

The term ISAN can refer to work identifiers or version identifiers (V-ISAN)

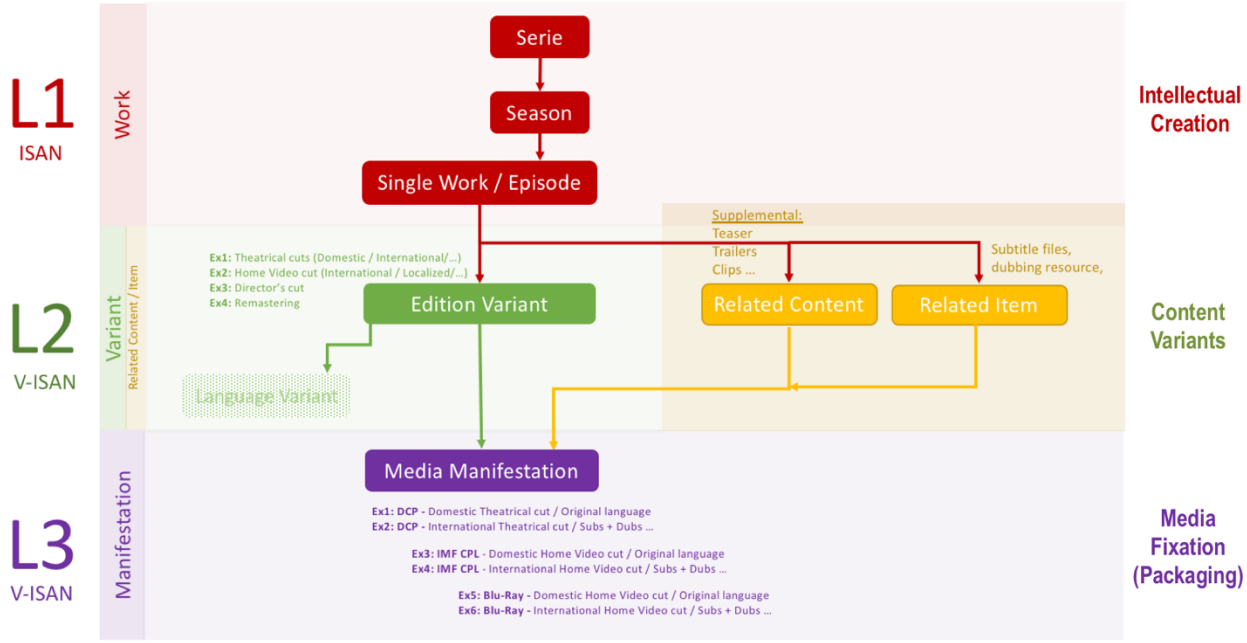
1.2 Records, relations and hierarchies in the ISAN Registry

ISAN identifies audiovisual Works and Versions of works. The relationship between works and versions is natively contained in the ISAN identifier (all versions of a work share the same first 16 digits of the work, only the last 8 digits of the ISAN differ from one version to another).

The ISAN Registry contains Works records that are categorized in Series, Season[1], Episode and Single Works and Version records that are categorized in Variants, Manifestations, Related Content & Items.

[1] Seasons were until now handled as a metadata field of Episode records. Season records are currently being implemented in the ISAN registry to substitute to the Season metadata field.

All records (Series, Season, Episode, Single Works, Variants, Manifestations, Related Content, Related Items) are linked in the ISAN Registry to form a hierarchy of records that can easily be mapped with FRBR based models such as EN15907.



Variants of audiovisual works**,** are audiovisual contents resulting from change(s) to the audiovisual work that do not significantly alter the nature of the intellectual creation. Such creative changes are typically video editing and occasionally language changes[2]. Would such change result into a new/different intellectual creation, a new ISAN would apply. Variants are described with metadata that define the purpose and specificities of the content change.

In the ISAN Registry, variants are versions with a Version Type = "EDITION" *or "LANGUAGE" or a combination of the two****.***

A Manifestation (of a variant) is characterized by the fixation of an EDITION variant on a physical or logical medium (e.g. Blu-ray, digital distribution package, …). A manifestation identifies typically (but not necessary) the compilation of assets that forms a digital distribution package (video edit, subs & dubs, supplemental content) for a specific country or region. Each asset in the compilation is identified with a V-ISAN.

Manifestations are described with metadata such as the media of fixation, languages, the country/region of distribution, technical characteristics (image format, encoding format, …) etc…

In the ISAN Registry, manifestations are versions with a Version Type = "MEDIA"

[2] Language changes should in principle be identified at the Manifestation level where subs & dubs resources should be linked to a MEDIA manifestation V-ISAN

Related Contents or Items: an ISAN version can apply to other content that is derived from or closely related to versions of works when this content is intended for mass distribution and when it is necessary to identify that content in the broader context of an existing ISAN or ISAN version application.
- Related contents can for example be supplemental material such as clips, teasers, interviews, …
- Related Items can for example be subtitles, dubbing or closed captions resources.

In ISAN, related contents are versions with a Version Type = "RELATED CONTENT" and related items are versions with a Version Type = "RELATED ITEM"

2 Identifying a Distribution Master with ISAN

Distribution Masters SHALL be identified in the ISAN system by an ISAN Version (or V-ISAN).

A Distribution Master is in principle identified by a MEDIA manifestation V-ISAN that identifies for example the compilation of a major content with supplemental material and with the dubbing and subtitles resources. However, in most of the cases a distribution master MAY be identified without ambiguity by just an EDITION variant V-ISAN.

An EDITION variant V-ISAN SHALL always have an ISAN Work (Single or Episode) parent.
A MEDIA manifestation V-ISAN SHALL always have an EDITION variant V-ISAN parent.

3 Storing the ISAN in the CPL

3.1 General case

In most situations, and except when the content to identify is a version of a version (see §3.2), the CPL `ContentVersionList` element:

- SHALL include exactly one `ContentVersion` element containing the EDITION variant V-ISAN of the Distribution master.
- SHOULD include exactly one `ContentVersion` element containing the MEDIA manifestation V-ISAN of the Distribution master.

A ContentVersion element containing a V-ISAN SHOULD conform to the following:

- The `ContentVersion/Id` element SHALL contain the URN representation of the V-ISAN as specified in IETF RFC 4246 : Uniform Resource Name (URN) Namespace Identifier (NID) for ISAN
- The `ContentVersion/LabelText` element SHOULD contain the following text:
  - For an EDITION variant V-ISAN, LabelText= "EDITION variant V-ISAN (Level 2)"
  - For a MEDIA manifestation V-ISAN, LabelText = "MEDIA manifestation V-ISAN (Level 3)"

Example 1:

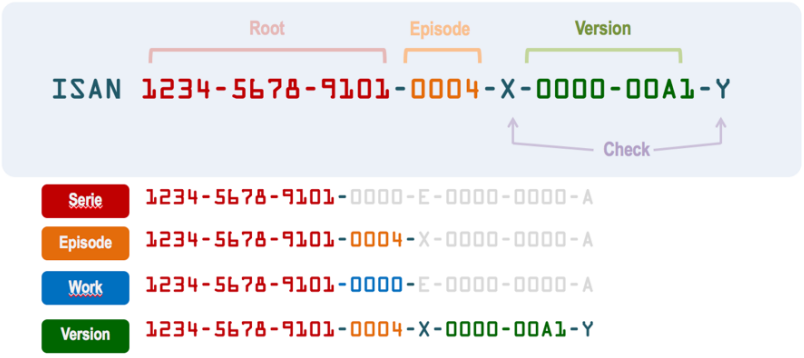
```
<ContentVersion>
    <Id>URN:ISAN:1881-66C7-3420-6541-9-9F3A-0245-U</Id>
```

```
    <LabelText>EDITION variant V-ISAN (Level 2)</LabelText>
</ContentVersion>
```

Example 2:

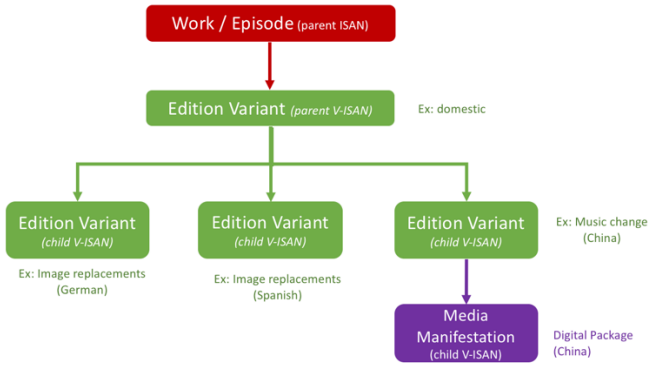
```
<ContentVersion>
    <Id>URN:ISAN:1881-66C7-3420-6541-9-9F3A-0245-U</Id>
    <LabelText> EDITION variant V-ISAN (Level 2)</LabelText>
</ContentVersion>
<ContentVersion>
    <Id>URN:ISAN:1881-66C7-3420-6541-9-E3A1-4218-Z</Id>
    <LabelText>MEDIA manifestation V-ISAN (Level 3)</LabelText>
</ContentVersion>
```

Note that a `ContentVersion` element containing the ISAN Work (or Episode) and the Serie identifier (when applicable) is not required as this information is already contained in the structure of all ISAN/V-ISAN:



3.2 Special case: the content to identify is a version of a version

An EDITION variant V-ISAN can in occasional cases (e.g. localized versions), be declined into several child EDITION variant V-ISANs identifying each distinct changes, such as localized cuts, music changes or image replacements, applied to the parent variant.



In such special cases, parent and child EDITION Variant V-ISAN SHALL be referenced in the CPL. Consequently, the `ContentVersionList` element:

- SHALL include exactly one `ContentVersion` element containing the Parent EDITION variant V-ISAN of the Distribution master.
- SHALL include exactly one `ContentVersion` element containing the Child EDITION variant V-ISAN of the Distribution master.
- SHOULD include exactly one `ContentVersion` element containing the MEDIA manifestation V-ISAN of the Distribution master.

A ContentVersion element containing an V-ISAN SHOULD conform to the following:

- The `ContentVersion/Id` element SHALL contain the URN representation of the V-ISAN as specified in IETF RFC 4246 : Uniform Resource Name (URN) Namespace Identifier (NID) for ISAN
- The `ContentVersion/LabelText` element SHOULD contain the following text:
  - For a Parent EDITION variant V-ISAN, LabelText= "EDITION variant V-ISAN (Level 2)"
  - For a Child EDITION variant V-ISAN, LabelText= "Child EDITION variant V-ISAN (Level 2)"[3]
  - For a MEDIA manifestation V-ISAN, LabelText = "MEDIA manifestation V-ISAN (Level 3)"

Note that a Child EDITION variant V-ISAN can have its own children EDITION variants; this can be repeated as many times as required to identify accurately the content. When multiple versions of versions apply, all ancestors of the last Child EDITION variant V-ISAN SHALL be referenced in the `ContentVersionList` ordered from the first parent to the last child. The MEDIA manifestation V-ISAN SHALL always have the last Child EDITION variant V-ISAN as parent.

Example 1:

```
<ContentVersion>
  <Id>URN:ISAN:1881-66C7-3420-6541-9-9F3A-0245-U</Id>
  <LabelText>EDITION variant V-ISAN (Level 2)</LabelText>
</ContentVersion>
<ContentVersion>
  <Id>URN:ISAN:1881-66C7-3420-6541-9-9F3A-0246-S</Id>
  <LabelText>Child EDITION variant V-ISAN (Level 2)</LabelText>
</ContentVersion>
```

Example 2:

```
<ContentVersion>
```

[3] If relevant to IMF users, the word "Child" could be replaced by a qualifier (out of a list of controlled vocabulary) that defines the purpose of the Child Edition Variant.

```
    <Id>URN:ISAN:1881-66C7-3420-6541-9-9F3A-0245-U</Id>
    <LabelText>EDITION variant V-ISAN (Level 2)</LabelText>
  </ContentVersion>
  <ContentVersion>
    <Id>URN:ISAN:1881-66C7-3420-6541-9-9F3A-0246-S</Id>
    <LabelText>Child EDITION variant V-ISAN (Level 2)</LabelText>
  </ContentVersion>
  <ContentVersion>
    <Id>URN:ISAN:1881-66C7-3420-6541-9-E3A1-4218-Z</Id>
    <LabelText>MEDIA manifestation V-ISAN (Level 3)</LabelText>
  </ContentVersion>
```

4 Resolving ISAN (and V-ISAN) identifiers

ISAN (and V-ISAN) identifiers can be registered, searched and looked-up in the ISAN Registry with the help of the ISAN Rest API. Contact ISAN-IA (cs@isan.org) for more information and dev. credentials.