BSI Standards Publication

Film identification — Enhancing interoperability of metadata — Element sets and structures

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National foreword

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A list of organizations represented on this committee can be obtained on request to its secretary.

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Identification des films - Moyens d'améliorer l'interopérabilité des métadonnées - Ensembles et structures des éléments

Identifikation von Filmen - Verbesserung der Interoperabilität von Metadaten - Elementsätze und Strukturen

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Foreword

This document (EN 15907:2010) has been prepared by Technical Committee CEN/TC 372 "Cinematographic works", the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by January 2011, and conflicting national standards shall be withdrawn at the latest by January 2011.

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

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

In recent years, there has been a proliferation of new metadata standards intended to provide greater control, consistency and accuracy of the data in the ever-expanding environment of the World Wide Web, through, for example, links to shared named authority files. This is one of the main issues CEN/TC 372 "Cinematographic Works" had to address. It is also the case that the data that exists in many cultural organisations across Europe has been compiled over many years and in some cases predates the advent of computer databases. To help reconcile some of the data inconsistencies that will inevitably exist in such a volume of data from so many disparate sources, this standard, together with EN 15744, seeks to provide a bridge between the data that exists and the emerging technologies chosen to represent this data. While the principle of EN 15744 is to enable the clearest possible enunciation of data that is available to assist with the task of resource identification, the aim of EN 15907 is to provide a framework for improved interoperability of that data by providing a common definition for that data.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

Introduction

Cinematographic works are an essential component of European cultural heritage. Film history and culture is recognized as an integral part of everything from leisure to education, from art and fiction to documentary and is known to have a significant impact on culture and education worldwide. This has been emphasized by the European Parliament and Council Recommendation of 16 November 2005 on film heritage and the competitiveness of related industrial activities.

Film archives, film museums, cinematheques, libraries and other cultural organisations have the responsibility to both preserve and make film heritage accessible. This responsibility includes acquisition of culturally important works; preservation through good storage and duplication to modern stable formats; curatorial research and interpretation; and programming and exhibition. Key to all of these activities is the responsibility of creating and maintaining databases containing information about the films. Without such documentation preservation and access activities are not possible.

At present, there is great variation in how filmographic databases are organized and implemented. Experts of all European countries have recognized that this variance stands in the way of interoperability and commonality of data.

On 14 March 2005, the European Commission charged CEN with a mandate to create metadata standards for cinematographic works. In response to this mandate two standards, EN 15907:2010 and EN 15744:2009, have been developed to define the metadata essential for facilitating data exchange between databases and consistent identification of films.

The primary users of this European Standard will be film archives, film museums, cinematheques and any other cultural organisations with databases about audiovisual media. They will also be the primary beneficiaries of the implementation of this European Standard throughout Europe as it will facilitate their access to filmographic metadata on works held by other organisations. Researchers, universities, students and the general public will also benefit in that it will be easier to integrate the information contained in the databases into larger information systems if it is organised according to these European Standards. The standards will also benefit film producers which, like the primary users, will be able to organize their metadata as defined by the standard. In consequence, these European Standards are expected to raise the visibility of Europe's rich and diverse film heritage on the internet, and to improve access to it by citizens and professional users of cultural material in line with the objectives set out in the Commission Recommendation on the digitisation and online accessibility of cultural material and digital preservation of 24 August 2006.

As requested by the European Commission's mandate, this standard provides a comprehensive set of metadata for the description of cinematographic works, as well as a comprehensive and consistent terminology, whereas EN 15744 defines and enables the selection of those data elements that are considered of prime importance for distinguishing and identifying individual cinematographic works.

1 Scope

This European Standard specifies a set of metadata for the description of cinematographic works, as well as a terminology for use by parties wishing to exchange such descriptive metadata. It also defines some basic entities and relationships useful for defining data models as well as for structuring hierarchically ordered and serialised representations of metadata about cinematographic works including their variants, manifestations, and items. Specific vocabularies for values of elements and attributes are mandated only in selected cases, and only if these vocabularies are actively maintained by a standardisation body.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 639-1, *Codes for the representation of names of languages — Part 1: Alpha-2 code*

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

ISO 15511, *Information and documentation — International standard identifier for libraries and related organizations (ISIL)*

ISO/IEC 14882:2003, *Programming languages — C++*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1
attribute
<metadata for cinematographic works> named property, related to elements, entities or relationships, whose value domain may be restricted by a data type

3.2
cardinality
<metadata for cinematographic works> number of times an instance of a relationship is permitted in a given context

3.3
data type
<metadata for cinematographic works> specification of the value domain for elements and attributes

3.4
entity
<metadata for cinematographic works> conceptual unit defining a focus of description

NOTE   Entities may enter **relationships** with other entities. Entities may have **attributes**.

3.5
element
<metadata for cinematographic works> semantic unit that is a major component of an entity

NOTE   An element may have **attributes** and may be composed of other elements.

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3.6
relationship
<metadata for cinematographic works> association between the same or different entities

NOTE   Relationships may have **attributes**.

4   Primary Entities

4.1 Cinematographic Work

4.1.1   General

This entity forms the node that relates all variants and manifestations of a moving image work to a common creation. The concept of cinematographic work comprises both the intellectual or artistic content and the process of realisation in a cinematographic medium. Since this process determines the characteristics which are expected to persist in any variant of a cinematographic work, this entity is defined here as the topmost level of description. Characteristics that should remain constant throughout all variants of a cinematographic work include circumstances of the creation process such as date(s) and place(s) of production, most contributions by agents such as directors, screenwriters, production staff and cast members, as well as any statements about the contents. Statements about the extent of a cinematographic work are not defined at this level of description. If a statement about an "original format" is required, then this may be expressed through an associated instance of manifestation labelled with a suitable type name such as "original".

A cinematographic realisation of a pre-existing non-film work is considered as a cinematographic work. This includes pure performance works such as concerts, original theatre performances, sports events, etc.

Moving images created by use of automatic devices such as surveillance cameras, scientific or medical instruments, etc. can be considered as cinematographic works if they are part of an archive collection or if they have been edited, published or distributed by a known Agent.

Instances of the Cinematographic Work entity may have one-to-many relationships with instances of Variant and Manifestation and many-to-many relationships with instances of Agent, Event and Content.

4.1.2   Attributes

descriptionLevel

A one-character symbol indicating the role of the cinematographic work within part-whole relationships.

a - Analytic (component part), content that is contained in another content. A component part may itself be either monographic or serial.

m - Monographic. Complete content in one part or intended to be completed in a finite number of parts.

s - Serial. Content issued in successive parts and intended to be continued indefinitely.

c - Collection. Content issued in several independent parts.

Status: mandatory

4.1.3   Elements

Identifier (one or more). Defined in 6.1.

Record source (one or more). Defined in 6.2.

Title (zero or more). Defined in 6.3.

Identifying title (one or more). Defined in 6.4.

Country of reference (one or more). Defined in 6.5.

Year of reference (one or more). Defined in 6.6.

Language (zero or more). Defined in 6.9.

Subject terms (zero or more). Defined in 6.16.

Content description (zero or more). Defined in 6.17.

4.1.4   Allowed relationships

HasAgent (zero or more). Defined in 8.2.

HasEvent (zero or more). Defined in 8.3. Targets: Production Event - defined in 6.10, Award - defined in 6.12, IPR registration - Defined in 6.14.

HasContent (zero or more). Defined in 8.4.

HasAsSubject (zero or more). Defined in 8.5.

HasOtherRelation (zero or more). Defined in 8.6.

HasVariant (zero or more; if zero, then HasManifestation shall have a cardinality of one or more). Defined in 8.7.

HasManifestation (zero or more; if zero, then HasVariant shall have a cardinality of one or more). Defined in 8.8.

4.2 Variant

4.2.1   General

The Variant entity is used as a description level for statements about content-related characteristics that may vary without changing the overall content of a cinematographic work. Such variants can be produced by minor additions, deletions or substitutions to the intellectual or artistic content as long as these do not significantly affect the content as a whole. As a general rule, any change that would result in a different content description (if such exists) should be treated as a separate cinematographic work rather than a variant. Statements about the extent of a variant are not defined at this level of description.

Each instance of Variant is related to a Cinematographic Work and may have one-to-many relationships with instances of Manifestation, and many-to-many relationships with instances of Agent and Event.

If no variant of a cinematographic work is known, then the instance of this entity may be omitted or represented by an empty node connecting an instance of Cinematographic Work with one or more instances of Manifestation.

4.2.2   Attributes

sourceID

An identifier for the variant-level record, if this exists in the database from which the filmographic record was produced.

Status: optional

variantType

A term characterising the kind of variation that gives rise to an instance of Variant. Values for this attribute should be taken from a controlled vocabulary. Examples are "censored", "dubbed", "TV version", etc.

Status: optional

4.2.3   Elements

Identifier (one or more). Defined in 6.1.

Record source (zero or more). Defined in 6.2.

Title (zero or more). Defined in 6.3.

Language (zero or more). Defined in 6.9.

4.2.4   Allowed relationships

HasAgent (zero or more). Defined in 8.2.

HasEvent (zero or more). Defined in 8.3. Targets: Production Event - defined in 6.10, Award - defined in 6.12, IPR registration - defined in 6.14.

HasOtherRelation (zero or more). Defined in 8.6.

HasManifestation (one or more). Defined in 8.8.

4.3 Manifestation

4.3.1   General

A manifestation is the physical embodiment of a cinematographic work or one of its variants. Since cinematographic works are also distributed online, i.e. without a fixed physical carrier, the definition in this standard also encompasses computer files. A manifestation is not exclusively bound to a single cinematographic work or variant, since publishers may choose to combine more than one variant of a cinematographic work or more than one cinematographic work on a single distribution medium. The distribution medium itself can be composed of several units of the same kind.

Instances of Manifestation may have one-to-many relationships with instances of Item and Event, and many-to-many relationships with instances of Cinematographic Work or Variant.

4.3.2   Attributes

sourceID

An identifier for the manifestation-level record, if this exists in the database from which the filmographic record was produced.

Status: optional

manifestationType

A word or phrase denoting the relationship between the manifestation and the variant or cinematographic work that it manifests. May be omitted if no other manifestation is known. An unknown relationship should be

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indicated by a value of "unknown". Values for this attribute should be taken from a controlled vocabulary. A value of "original" shall indicate that all statements made in elements such as Format, Title or Language may be regarded as statements about an "original work", if such a concept is required.

Status: optional

4.3.3   Elements

Identifier (one or more). Defined in 6.1.

Record source (zero or more). Defined in 6.2.

Title (zero or more). Defined in 6.3.

Language (zero or more). Defined in 6.9.

Extent (zero or more). Defined in 6.8.

Format (zero or one). Defined in 6.7.

4.3.4   Allowed relationships

HasAgent (zero or more). Defined in 8.2.

HasEvent (zero or more). Defined in 8.3. Targets: Publication Event - defined in 6.11; Decision event – defined in 6.13; Preservation Event – defined in 6.15.

HasOtherRelation (zero or more). Defined in 8.6.

HasItem (zero or more). Defined in 8.9.

4.4 Item

4.4.1   General

A single exemplar of a manifestation. Within the scope of this standard, this also encompasses fragments or otherwise incomplete or defective exemplars. In the case of purely digital media, an item is defined as the availability of the computer file from an owner, irrespective of the number of backup copies that may exist.

Instances of Item shall have a many-to-one relationship with an instance of Manifestation.

4.4.2   Attributes

sourceID

An identifier for the item-level record, if this exists in the database from which the filmographic record was produced.

Status: optional

4.4.3   Elements

Title

Titles should be given on the item level (a) if it is not known if the title found on or in the item has been used for other items of the same manifestation, (b) if no title is known or directly applicable (such as for trims, outtakes and rushes from the production of published works) and the archive has created its own descriptive

title, or (c) if the item contains a unique combination of more than one work (e.g. a projection reel with added trailers and advertisements).

Cardinality: zero or more; type: Title - defined in 6.3

Holding institution

The name of the archive or other institution possessing the copy or authorised to make it available. Alternatively, if available, a suitable URI (e.g. from the ISIL namespace according to ISO 15511), or a registered namespace identifier for the institution.

Cardinality: one or more

Inventory number

An identifier such as a call number, shelf mark or similar, required by the holding institution to uniquely identify the copy.

Cardinality: zero or more

Instantiation type

A term or phrase describing the item type relative to the duplication process (e.g. "original negative", "dup negative", "positive", "original positive (reversal film)", "dupe positive", "Lavender", "image negative", "sound negative", "non-film analogue carrier", "non-film digital carrier").

Cardinality: zero or one

Item specifics

This element should be used for recording any major differences between the individual copy and the properties stated in the associated manifestation record. It is not intended for statements about minor degradations such as scratches. Some examples: "b/w copy of manifestation (in color)", "copy without soundtrack from sound film", "fragment, 1 500 m of 2 400 m (manifestation)", "4 of 5 reels (last reel missing)", etc.

Cardinality: zero or one

Access conditions

Any information on how and to whom the item can be made available.

Cardinality: zero or more

Catalogue reference

A reference to a more detailed catalogue record describing the item.

Cardinality: zero or more

Extent (zero or more). Defined in 6.8.

4.4.4   Allowed relationships

HasAgent (zero or more). Defined in 8.2.

HasEvent (zero or more). Defined in 8.3. Target: Preservation Event – defined in 6.15.

HasOtherRelation (zero or more). Defined in 8.6.

4.5 Content

4.5.1   General

Statements about the content of a cinematographic work may be made using any of the following elements:

- Subject term (defined in 6.16) - An item from a concept naming scheme or a term used for describing the subject, genre or form of a cinematographic work. This element is intended to carry instances of subject terms. Terms represented as reference to an external resource may be represented as subject relationship (*HasAsSubject* relationship).

- Content description (defined in 6.17) - A textual description of the contents of a work. A content description should refer to a single work, in contrast to subject terms and relationships, which are intended to identify works that share certain characteristics. Works that form a group (e.g. series) may have a common content description if they are described on an aggregate level (i.e. as a complex work).

In addition, a cinematographic work may be associated with instances of Agent, Event, Cinematographic Work through a **HasAsSubject** relationship (defined in 8.5). A subject relationship states that the instance referred to is a major or minor subject of the cinematographic work. If the subject is described by name (e.g. work title, personal name, subject keyword, etc) alone, it is regarded as **subject term.**

4.5.2   Attributes

None.

4.5.3   Elements

Subject terms (zero or more). Defined in 6.16.

Content description (zero or more). Defined in 6.17.

4.5.4   Allowed relationships

None.

5   Contextual Entities

5.1 Agent

5.1.1   General

An Agent is defined as an entity that is involved in the creation, realization, curation or exploitation of a Cinematographic Work, Variant, Manifestation or Item. Typical distinctions between agent types are Person, Corporate Body, Family and Person Group.

An instance of Agent may be represented in one of the following ways:

- by inclusion of an authority record. With this representation, the user of a cinematographic work record can re-build the relevant parts of the authority file that was used for preparing the record.

- by reference to an authority record. This requires that any user of the cinematographic work record has access to an authority file from which names and other details of the Agent instance can be obtained.

- by name. This method may be used alone if no authority file for the Agent instance was available when the cinematographic work record was prepared.

These three methods may be used in any combination. For example, a full authority record may be included only once within a contiguous collection of cinematographic work records, and referred to by use of an identifier (or an identifier and a name) in all other cases. Names alone may occur in combination with authority-based references or records if the latter are only available for some instances of Agent.

An Agent authority record included within a cinematographic work record may have any internal structure, provided that all corresponding elements are identified by a namespace prefix that can be resolved to a schema declaration.

5.1.2 Attributes

sourceID

An identifier for the relationship record, if this exists and has an identifier in the database from which the filmographic record was produced.

Status: optional

5.1.3 Elements

Name

The name of the Agent (person, group, etc.) credited for a particular activity. A name may appear either as the sole identifier for an agent, or in conjunction with an agent reference or instance.

Cardinality: one or more

Agent type

The class of Agent, e.g. Person, Corporate Body, Person Group, etc., may be omitted if no distinction is made between classes of Agents.

Cardinality: zero or one

Agent reference

A resource identifier denoting an associated Agent record in an authority file.

Cardinality: zero or more

Agent instance

A (partial) record from an authority file identifying the Agent. Each sub-element shall carry a namespace identifier that resolves to a schema declaration in which it is defined.

Cardinality: zero or more

5.2 Event

An Event is an abstract entity that characterises occurrences in the life cycle of a cinematographic work. Instances of Cinematographic Work, Variant, Manifestation and Item may be associated with any number of Events. In addition, instances of any Event type may have Agent relationships. This standard defines the following event types:

- Publication event - A public screening or broadcast, or a public release on a physical distribution medium or online. Defined in 6.11.

- Decision Event - A decision about the suitability of a cinematographic work or variant for a particular audience. Includes censorship and rating decisions. Defined in 6.13.

- IPR registration event - A registration of intellectual property rights. Defined in 6.14.

- Award - A bestowal of an award relating to the cinematographic work or to a specific achievement by an Agent in the context of a cinematographic work. Defined in 6.12.

- Production event - A specific event in the creation of the cinematographic work. Defined in 6.10.

- Preservation event – The creation of a new manifestation or variant with the intent of safeguarding the contents of a cinematographic work. Defined in 6.15.
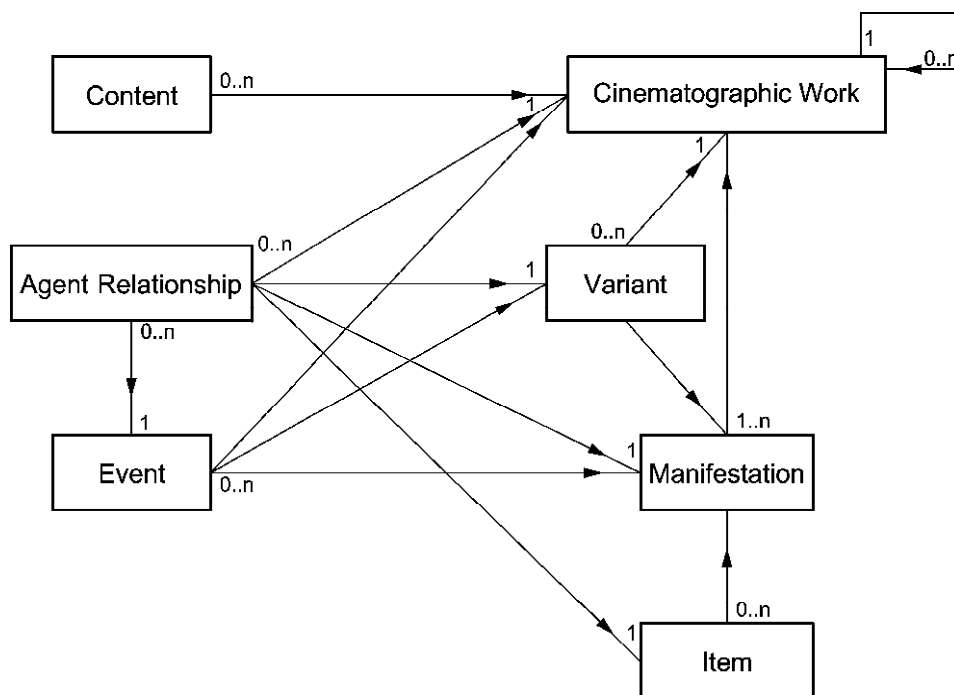

Figure 1 — Entities and their associations

6   Elements

6.1 Identifier

6.1.1   General

An unambiguous reference to the resource within a given context, where possible the International Standard Audio-visual Number (ISAN), otherwise a specific number issued by a government department or other official body in an individual country, or an archive's inventory number.

Occurrence: one or more for Cinematographic work, Variant and Manifestation, zero or more for Item.

6.1.2   Attributes

None.

6.1.3   Elements

Scheme

An unambiguous reference of the scope within which the identifier is unique. References may take the form of an internationally known identification scheme, an XML namespace identifier (e.g. http://deutsches-filminstitut.de/zfdb/id), or a URN namespace (e.g. URN:UUID or URN:ISAN).

Status: mandatory

Value

The value of the identifier excluding any references to an identifier scheme.

Numeric

A numeric representation of the identifier value, to be used for identity comparison if the value is a single natural number and can have more than one lexical representation (e.g. "00027" vs. "27"). The default number base is decimal; hexadecimal and octal representations are permitted if formatted as an integer literal according to the syntax of ISO/IEC 14882:2003 given in 2.13.1. Note that the *numeric* attribute is not required for the urn:uuid of RFC 4122 or urn:ISAN namespaces, since all valid representations of these namespaces can be converted to any number base for identity comparison.

Status: optional

6.2 Record source

6.2.1   General

A reference to the archive or other organisation supplying the record.

Cardinality: one or more for Cinematographic Work, zero or more for Variant, Manifestation and Item

6.2.2   Attributes

None

6.2.3   Elements

Source name

The name of the organisation supplying the record.

Cardinality: one

Source identifier

An unambiguous reference to the organisation supplying the record, if available, a suitable URI (e.g. from the ISILnamespace), or a registered namespace identifier for the institution.

Cardinality: zero or more

6.3 Title

6.3.1   General

A word, phrase, character, or group of characters, naming the work, a group of works, a particular variant or manifestation, or an individual item. Depending on the cataloguing rules in use, titles may be determined from the item itself, or from any suitable secondary source.

Cardinality: one or more for Cinematographic Work, zero or more for Variant, Manifestation and Item

6.3.2   Attributes

None

6.3.3   Elements

Title text

The textual expression of the title. May contain a mark indicating the end of so-called non-filing characters (e.g. after an initial article). These marks should be preserved so that users may decide if and how these characters will be processed.

Cardinality: one

Part designation

A combination of the name of a structuring unit and the count value that identifies the current work as an individual part of a complex work. For complex works with multi-level numberings (e.g. "season 3, episode 12"), an instance of this element should be created for each level. Non-numeric values such as letter symbols (e.g. "part B") or calendar dates (e.g. "August 1965 issue") are permitted.

Cardinality: zero or more

> **Elements**
>
>> **Unit**
>>
>> The name of the unit that this work represents within a series, serial, or multi-part work (e.g. "part", "episode", "issue", etc).
>>
>> Cardinality: one
>>
>> **Value**
>>
>> An ordinal number, numeration symbol, or date value that identifies the individual work within the complex work.

Cardinality: one

Title relationship

Describes the relationship between the title and the entity to which it is assigned. Examples include "original title", "working title", "distribution title", "translation", etc.

Cardinality: one

Temporal scope

For titles that were changed some time after the creation of the corresponding entity, this element should give the date when this change occurred and whether the title was introduced or withdrawn.

Cardinality: zero or one. Type: Timespan - defined in 7.3

Geographic scope

For entities that are or have been distributed under different titles in distinct geographical regions, this element should indicate to which region(s) the title applies.

Cardinality: zero or more. Type: Region - defined in 7.2

6.4 Identifying Title

6.4.1 General

A short phrase for identifying a cinematographic work, to be used e.g. in human-readable result lists from database queries. The primary part of an identifying title should be taken from actual titles appearing at the variant, manifestation, or item level. It may be supplemented for disambiguation with data such as a Genre term, the Year of Reference, the Country of Reference, a key Agent such as the director, etc.

Since the identifying title is defined to depend entirely on information contained in other data elements, it may be derived by an automatic procedure base on a set of rules. Rules for constructing an identifying title may be adapted from existing specifications such as library cataloguing rules, or devised independently for a specific audience or purpose.

Cardinality: zero or one for Cinematographic Work

6.4.2 Attributes

origin

An acronym or other identifier indicating the origin of the element content. For identifying titles created automatically, this should be the name and version of the software agent employed.

Status: optional

6.4.3 Elements

None

6.5 Country of Reference

6.5.1 General

An element used for describing the geographic origin of a cinematographic work. Wherever known and applicable, this should be the country or countries where the production facilities are located. Multinational productions will typically have more than one country of reference, including those with Agents that were not directly involved in the creation of the cinematographic work (e.g. entities that have contributed financial resources). If production information is missing, this element may refer to countries where the cinematographic work was filmed or distributed, or where copies are known to exist in archives.

Cardinality: one or more for Cinematographic Work

6.5.2 Attributes

reference

The relationship between the country or geographic area and the cinematographic work. Defaults to "production", i.e. use of this attribute is only required if the geographic location is different from the country of production.

Status: optional

6.5.3 Elements

Country

A country code.

Cardinality: one or more. Type: Region - defined in 7.2.

6.6 Year of reference

6.6.1 General

A year associated with an event in the life cycle of the cinematographic work, typically associated with its creation, availability or registration (for example for copyright purposes). A typical use of this element is chronological ordering of lists of cinematographic works.

The year of reference is expressed as a four digit value, optionally followed by a dash (Unicode value 002Dhex) and another year to denote a span of years.

Cardinality: one or more for Cinematographic work

6.6.2 Attributes

reference

A name for the event the Year refers to. If omitted, Year will be interpreted as the production year.

Status: optional

6.6.3 Elements

None

6.7 Format

6.7.1 General

The description of the physical artefact or digital file on which a manifestation of a cinematographic work is fixed.

Cardinality: zero or one for Manifestation

6.7.2 Attributes

None

6.7.3 Elements

Carrier type

The type of physical carrier used for the manifestation. Digital manifestations may be bound to a physical carrier (such as DVD) or exist without a defined carrier (such as online streaming media, podcasts, etc.).

Cardinality: zero or one

Gauge

The width of the film stock or other carrier (such as magnetic tape) used for the manifestation. Should include value and unit (e.g. "35 mm", "1/2 in.").

Cardinality: zero or one

Aspect ratio

The ratio between width and height of the image. For anamorphic formats, this element should contain the aspect ratio of the projected image rather than that on the carrier. Some aspect ratios are known not only by numeric values, but also by names (e.g. "full frame", "Cinemascope").

Cardinality: zero or one

Sound system

    Elements

        Has Sound

        A boolean value indicating if the manifestation includes recorded sound.

        Is recording system

        A boolean value indicating if the system and/or method was used for the primary recording.

        System name

        The name of the system by which sound is recorded either on the carrier, on a separate medium, or as part of the digital encoding (e.g. Western Electric (Westrex) Movietone, RCA Photophone, Tobis, Dolby Digital, etc.).

        Method

A name of the physical principle of sound recording (Needle sound, optical sound, magnetic sound, analog or digital). May include parameters such as number of channels, digital sampling rate, compression type, etc.

Cardinality: zero or one

Colour

Elements

Chromatism

A name for the colour state or colour space, to be selected from a suitable controlled vocabulary.

Attributes

vocabularySource

An identifier for the vocabulary used for the Chromatism element.

Status: optional

Colour system

A name for the colour system or process

Cardinality: zero or one

6.8 Extent

6.8.1 General

The total physical, logical or temporal extent of the manifestation of a cinematographic work, or of the item from a manifestation. Physical extent is the total length of the medium carrying the manifestation or item. Logical extent is the number of discrete units, e.g. image frames, bytes (octets), etc., of which the manifestation or item is composed. Temporal extent is the running time under normal or specific playback conditions (e.g. a specific frame rate).

Cardinality: zero or more for Manifestation and Item

6.8.2 Attributes

unit

Name of the measurement unit (usually "ft." or "m" for physical extents, "frames" or "bytes" for logical extents, "min:s" for temporal extents).

Status: mandatory

reference

If the manifestation or item is composed of more than one physical carrier for which individual lengths are known, then this attribute should be used to refer the length information to a particular carrier (e.g. "reel 3").

Status: optional

frameRate

A value for the projection speed, given in frames per second, to which a given temporal extent refers.

Status: optional

6.8.3   Elements

None.

6.9 Language

6.9.1   General

The language or languages of the spoken, sung or written content of the variant or manifestation of a cinematographic work.

Cardinality: zero or more for Variant and Manifestation; type: Language tag - defined in 7.4.

6.9.2   Attributes

usage

This attribute may be used to indicate in what form the language occurs in the manifestation (e.g. dialogue, song text, intertitles, narrator, voice-over, on-camera voice, etc.). If omitted, the language is assumed to be the primary language of the variant or manifestation.

Status: optional

6.9.3   Elements

None.

6.10   Production event

6.10.1 General

A distinct event in the course of production of a cinematographic work or variant that is significantly separated in space and/or time from the main production event, or is known with a greater amount of detail. Examples are dates and locations where castings took place, dates and locations of shootings or other recordings, or dates and locations of particular post-production activities. A production event may be associated with instances of Agent in the role of their specific involvement with the event.

Cardinality: zero or more for Cinematographic Work and Variant

6.10.2 Attributes

sourceID

An identifier for the event record, if this exists in the database from which the filmographic record was produced.

Status: optional

6.10.3 Elements

Production event type

The type of event this element instance refers to. Examples are "outdoor shooting", "indoor shooting", "post-production", etc.

Cardinality: one

Region

The country or other political or physical geographic entity where the event took place.

Cardinality: zero or more. Type: Region - defined in 7.2.

Location

Any geographic name(s) or address(es) of the location(s) where the event took place.

Cardinality: zero or more

Date

The date or time-span during which the event took place.

Cardinality: zero or more. Type: Timespan - defined in 7.3.

Event details

Any further information about the event either in plain textual form, or in any formalised way.

6.10.4 Allowed relationships

HasAgent (zero or more). Defined in 8.2.

HasOtherRelation (zero or more). Defined in 8.6.

6.11 Publication Event

6.11.1 General

A screening or broadcast of a Manifestation, or the public release of a manifestation of the cinematographic work on a physical distribution medium or online. A publication event may be associated with instances of Agent in the role of e.g. publisher, exhibition organiser, etc.

Cardinality: zero or more for Manifestation

6.11.2 Attributes

sourceID

An identifier for the event record, if this exists in the database from which the filmographic record was produced.

Status: optional

6.11.3 Elements

Publication type

The type of an exhibition event (e.g. "Premiere", "Cinema release", "Festival screening", "Broadcast", etc.), or the type of publication (e.g. "Paperback book with DVD", etc.) if not evident from the type of the associated Manifestation.

Cardinality: one

Publication date

The date on which the exhibition took place, or the date on which items of the manifestation became available for purchase or hire.

Cardinality: zero or more. Type: Timespan - defined in 7.3.

Region

The country or other political or physical geographic entity where the event took place (e.g. exhibition) or where published items have been made available (e.g. distribution area).

Cardinality: zero or more.Type: Region - defined in 7.2.

Location

The name of the city or smaller geographic entity where the event took place.

Cardinality: zero or more

Event name

The name of an event that the exhibition was a part of (e.g. name of a film festival, distribution channel of a broadcaster, etc.).

Cardinality: zero or more

Access conditions

Specific restrictions for accessing the content of the manifestation.

Cardinality: zero or more

6.11.4 Allowed relationships

HasAgent (zero or more). Defined in 8.2.

HasOtherRelation (zero or more). Defined in 8.6.

6.12 Award

6.12.1 General

The bestowal of an award relating to the cinematographic work. This excludes awards for entities of type Agent alone (e.g. "for lifetime achievement"), but includes awards for individual achievements within the context of a cinematographic work (e.g. "best screenplay"). Awards will be usually associated at the level of the cinematographic work, except for cases where features of a particular variant are explicitly mentioned (e.g. "best audio commentary for the visually impaired") or the award relates to a particular manifestation (such as a DVD edition). An Award may be associated with instances of Agent in the role of individual winner, sponsor, etc., or with instances of Event, e.g. if the prizegiving ceremony was part of a festival.

Cardinalic: zero or more for Cinematographic Work, Variant and Manifestation

6.12.2 Attributes

None

6.12.3 Elements

Date

The date the award was bestowed.

Cardinality: zero or one. Type: Timespan - defined in 7.3.

Nomination only

If the cinematographic work (or a specific achievement in the creation of it) was nominated but not among the winners, then this element should be set to a logical value of "true".

Cardinality: zero or one

Award name

The name of the award or trophy, possibly including a numeric designation (e.g. 2nd prize).

Cardinality: one

Achievement

A phrase describing a specific aspect for which the award was given (e.g. "best directing", "best screenplay", "best film", etc.).

Cardinality: zero or one

Event relationship

A reference to, or name of an event (e.g. film festival) during which award winners were selected.

Cardinality: zero or one

6.12.4 Allowed relationships

HasAgent (zero or more). Defined in 8.2.

HasEvent (zero or more). Defined in 8.3.

HasOtherRelation (zero or more). Defined in 8.6.

6.13 Decision event

6.13.1 General

An event in which a manifestation of a cinematographic work was evaluated by a censorship body or an accredited rating agency. A Decision Event may be associated with instances of Agent, e.g. in the role of the agency performing the rating or censorship.

Cardinality: zero or more for Manifestation

6.13.2 Attributes

sourceID

An identifier for the event record, if this exists in the database from which the filmographic record was produced.

Status: optional

6.13.3 Elements

Decision type

The type or status of the decision event. Usually either "censor" for decisions mandated by law, or "rating" for decisions under a voluntary scheme. Further types may include special forms of evaluation e.g. for tax privileges (such as those from the German Filmbewertungsstelle), as long as these are distinct from awards.

Cardinality: one

Decision date

The date on which the verdict was announced or from which on the verdict was declared valid.

Cardinality: zero or one

Regional scope

The geographic region for which the verdict is (was) valid.

Cardinality: zero or one

Certificate number

Any identifier issued by the agency uniquely identifying the act of rating or censorship and associated documents such as censorship visa or rating certificates.

Cardinality: zero or one

Verdict

The outcome of the act of rating or censorship.

Cardinality: zero or one

6.13.4 Allowed relationships

HasAgent (zero or more). Defined in 8.2.

HasOtherRelation (zero or more). Defined in 8.6.

6.14 IPR registration

6.14.1 General

The act of registering intellectual property rights in a cinematographic work with an accredited agency. An IPR registration event can be associated with instances of Agent, e.g. in the role of applicant.

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Cardinality: zero or more for Cinematographic Work and Variant

6.14.2 Attributes

None.

6.14.3 Elements

Registration date

The date on which the registration was filed or the date on which registration became effective.

Cardinality: one

Registration agency

Name of the agency issuing the registration certificate (e.g. name of a legal deposit library, etc.).

Cardinality: zero or one

Regional scope

The geographic region for which copyright is claimed.

Cardinality: one or more. Type: Region - defined in 7.2

Name of applicant

Name of the Agent claiming copyright in the cinematographic work.

Cardinality: zero or more

6.14.4 Allowed relationships

HasAgent (zero or more). Defined in 8.2.

HasOtherRelation (zero or more). Defined in 8.6.

6.15 Preservation event

6.15.1 General

An event in which the contents of one or more items (or fragments thereof) from manifestations of a cinematographic work were transferred to create a new manifestation or item with the intent of safeguarding it from decay. Some preservation activities may result in a new variant, particularly if the contents of the cinematographic work is affected by the process.

A preservation event shall be associated with the variant, manifestation or item that resulted from the preservation process.

6.15.2 Attributes

None

6.15.3 Elements

Preservation type

The general type of the preservation activity performed (e.g. "restoration", "reconstruction", "transfer", etc.).

Cardinality: one or more.

Date

The date or time span in which the preservation activity was performed.

Cardinality: zero or more. Type: Timespan - defined in 7.3.

Preservation detail

Any information describing the process in greater detail.

Cardinality: zero or more

6.15.4 Allowed relationships

HasAgent (zero or more). Defined in 8.2.

HasOtherRelation (zero or more). Defined in 8.6.

6.16 Subject terms

6.16.1 General

A term or set of terms describing the content of the cinematographic work. Controlled and uncontrolled terms may be used together, but not within a single set of subject terms. Likewise, if more than one controlled vocabulary is used, then terms from each of these shall be contained in a separate instance of this element. A separate instance of Subject terms is also required for each language if terms in more than one language are taken from a multilingual vocabulary.

If the subject of the cinematographic work can be described by referring to an identifiable resource other than a vocabulary term, then this may be expressed as a subject relationship (see 8.5).

Cardinality: zero or more for Cinematographic Work

6.16.2 Attributes

scheme

A unique identifier denoting the controlled vocabulary (preferably in the form of a URI). If the subject terms are not from a controlled vocabulary, the value of this element should be set to "uncontrolled". The scheme ID will be regarded as valid for all terms within a single set of subject terms.

Status: mandatory

language

The source language of the vocabulary. Status: optional. Type: Language tag - defined in 6.9.

6.16.3 Elements

Term

An element containing a single term

> **Attributes**

>> **termId**

A non-textual identifier that may be combined with the value from the scheme attribute to form a unique resource identifier for the term within a controlled vocabulary.

Status: optional

> **Elements**

>> **Term name**

>> The textual value of the term. For non-textual classification codes, preferably a combination of the code and the verbal class description.

>> Cardinality: one

Cardinality: one or more

6.17 Content description

6.17.1 General

A textual description of the contents of the cinematographic work.

Cardinality: zero or more for Cinematographic Work

6.17.2 Attributes

None

6.17.3 Elements

Description type

A keyword denoting the type of description (e.g. "Synopsis", "Shotlist", "Review", etc.).

Cardinality: one

Description text

The textual description.

Cardinality: one

Language

The language of the content of Description text.

Cardinality: one. Type: Language tag - defined in 4.3.3.

Description source

Either the name of the description author, or a URI identifying the source directly or via a reference system such as an online catalogue.

Cardinality: zero or one

7 Common Element types

7.1 General

These are definitions of element types used for element or attribute values within more than one element from Clause 6.

7.2 Region

7.2.1 General

Elements of type Region may contain any number of coded and plain text geographic entity names. For coded entries, the scheme attribute shall indicate the code list from which the value was selected.

7.2.2 Attributes

None

7.2.3 Elements

Code

Value from an encoding scheme for geographic territories.

Cardinality: zero or more

Attributes

scheme

The name of the controlled vocabulary from which the country code is taken. Recommended vocabularies are "ISO 3166-2" for countries currently in existence, "AFNOR XP Z44-002" for historical countries, and "MARC" for general geographic entities (e.g. "Indian Ocean") and extraterrestrial regions.

Countries not found in either of these vocabularies may be represented using the block of "user-defined" codes specified in ISO 3166.

Status: required.

Elements

None.

Region name

Name of a region other than a country, e.g. "International waters", "Arctic", "Southeast Asia", etc.

Implies an attribute value of "none" for scheme, which is only applicable to coded values.

Cardinality: zero or more

7.3 Timespan

Elements of type Timespan shall contain representations of absolute periods of time with variable degrees of precision. Recommendations for a suitable syntax are given in Annex A.

7.4 Language tag

A coded value that may appear as an attribute or element value, denoting a natural language. The syntax for the language tag follows the definition given in RFC 4646. All codes from ISO 639-1and ISO 639-2 are syntactically valid RFC 4646 expressions. Therefore, all extensions such as script, region and language variant are optional.

8   Relationships

8.1 General

A relationship associates an instance of an entity with another instance of an entity. For each relationship defined in this standard, a cardinality of zero or more is assumed for both ends, resulting in a many-to-many association. This may be restricted to a one-to-many association in suitable cases (e.g. for HasVariant).

Relationships can be implemented in many ways, depending on the purpose, the modelling paradigm, or architectural constraints of the chosen platform. Therefore, this standard does neither specify any form of expression for relationships, nor how entity instances are identified and referenced.

8.2 HasAgent

8.2.1   General

This associates an instance of an entity with an instance of Agent.

8.2.2   Attributes

activity

Defines the kind of relationship between an instance of Agent and an instance of Cinematographic Work, Variant, Manifestation, Item or Event.

Status: mandatory

creditRank

If the ordering of credited Agents as given in particular information sources needs to be preserved, this element should be used to carry the rank number. An ordering by entry sequence alone may not be conserved by all software agents.

Status: optional

nameUsed

If the Agent is credited under a name that is not identical with the preferred name from an authority file, this element should contain the name as used in the current instance of the related entity.

Status: optional

activityDetail

If Activity is described using a controlled vocabulary, use this element for information that cannot be expressed in Activity (e.g. "appears only in final scene", etc.).

Status: optional

character

The name of a (fictitious or real) character played by an agent.

Status: optional

8.3 HasEvent

8.3.1   General

This associates an instance of an entity with an instance of any of the Event types.

8.3.2   Attributes

relationshipType

This attribute may be used for distinguishing between different kinds of association with particular event types.

Status: optional

relationshipDetail

If the relationship type is expressed with the aid of a controlled vocabulary, this attribute may be used for additional information concerning the association.

Status: optional

8.4 HasContent

8.4.1   General

This associates an instance of Cinematographic Work with instances of Subject terms (defined in 6.16) or Content description (defined in 6.17).

8.4.2   Attributes

role

This attribute may be used for distinguishing between different semantics of the relationship, e.g. for separating statements about actual and fictional contents.

Status: optional

8.5 HasAsSubject

8.5.1 General

This element relates a cinematographic work with any instance that has been identified as a subject of the work. A subject relationship may be used to express that a particular person, event, work, or instance of any other entity is the subject of the cinematographic work.

The HasAsSubject relationship is distinct from the HasContent relationship in that it associates the cinematographic work with an identifiable instance of an entity, while HasContent (see 8.4) relates it to an instance of a dependent element. It is also distinct from the HasOtherRelation (see 8.6) in that it is only permitted for the Cinematographic Work entity.

8.5.2 Attributes

relationshipType

The kind of association expressed by the relationship. Wherever possible, values for this attribute shall be taken from a controlled vocabulary.

Status: mandatory

relationshipDetail

If the relationship type is expressed with the aid of a controlled vocabulary, this attribute may be used for additional information concerning the association.

Status: optional

8.6 HasOtherRelation

8.6.1 General

This expresses types of association that are not covered by the HasAgent, HasContent, HasAsSubject, and HasEvent relationships, such as all kinds of aggregation and re-use of cinematographic works, their variants, manifestations and items. Examples include:

- Object relationships such as with published reviews, books about a cinematographic work, advertising materials, archival documents and museum objects relating to the cinematographic work, etc.;

- Aggregates of works such as compilations;

- Re-use of a whole, or parts of, a cinematographic work in another cinematographic work;

- Re-use at the variant level, e.g. by addition of outtakes described separately;

- Aggregation at the manifestation level, e.g. combination of several cinematographic works within a DVD edition, combination of cinematographic works with works in other media or with any kind of reproducible object for which a description is available;

- Aggregation at the item level, e.g. projection reels containing more than one cinematographic work.

8.6.2 Attributes

relationshipType

The kind of association expressed by the relationship. Wherever possible, values for this attribute shall be taken from a controlled vocabulary.

Status: mandatory

relationshipDetail

If the relationship type is expressed with the aid of a controlled vocabulary, this attribute may be used for additional information concerning the association.

Status: optional

8.7 HasVariant

This associates an instance of Cinematographic work with an instance of Variant.

8.8 HasManifestation

This associates an instance of Cinematographic Work or Variant with an instance of Manifestation.

8.9 HasItem

This associates an instance of Manifestation with an instance of Item.

9   Mappings to EN 15744

The following is a list of the elements from EN 15744:2009, together with equivalent constructs using the definitions from this standard.

Title

> Cinematographic work / Identifying Title

Series/Serial

> Variant / Title [Title relationship="Series"|"Serial"]
> Manifestation / Title [Title relationship="Series"|"Serial"]

Cast

> Cinematographic work / HasAgent [activity="Actor"] / Agent / Name

Credits

> Cinematographic work / HasAgent [activity=anything except "Actor"] / Agent / Name

Production Company

> Cinematographic work / HasAgent [activity="Production company"] / Agent / Name

Country of Reference

> Cinematographic work / Country of Reference

Original Format

Manifestation [manifestationType="original"|none] / Format

Original Length

Manifestation [manifestationType="original"|none] / Extent unit="ft."|"m"

Original Duration

Manifestation [manifestationType="original"|none] / Extent unit="min:s"

Original Language

Variant [variantType=none] / Language [usage=none]
Manifestation [manifestationType="original"|none] / Language [usage=none]

Year of Reference

Cinematographic work / Year of reference

Identifier

Cinematographic work / Identifier

Genre

Cinematographic work / Subject relationship [relationship type="Genre"]

Relationship

Cinematographic work / HasOtherRelation [relationshipType=any work-to-work relationship]

Source

Cinematographic work / Record source

10 Implementation notes

This standard is primarily intended to support the creation of serialised representations of hierarchically structured information about cinematographic works. It can also serve as a checklist of data elements and relationships to be considered in the design of database schemas. Applications claiming conformance with this standard should indicate this in the system documentation by including the clause number in the description of each element for which conformance is asserted.

Annex A
(informative)

Expression of time spans

Absolute time spans are based on the Gregorian calendar with a maximum precision of one calendar day. The notation uses the element order defined in ISO 8601 in the form YYYY-MM-DD (year, month, day).

Lower-precision dates may be expressed by setting the day, or day and month values to zero (e.g. "1950-08-00" for August, 1950 and "1950-00-00" for the year 1950). Decades may be represented by a question mark as the least significant digit of the year (e.g. "195?" for the decade 1950-1959), and centuries by two question marks (e.g. "19??" for the 20th century).

Time spans with known start and end dates may be represented by concatenating two date notations with as sequence of two dashes (Unicode value 002Dhex), e.g. "1979-12-15--1980-01-00" for a time span starting on the 15th of December, 1979 and extending to some date in January, 1980.

Relative time statements may be expressed by prefixing a calendar date, or range of dates, with one of the following:

before - any time before, but not including, the given date.

after - any time after, but not including, the given date.

between - any time between, but not including the two given dates.

started - any time from the given date until now.

ended - any time from the past up to, and including, the given date.

circa - the given date or any date shortly before or after that date. The given date can be regarded as the maximum of a probability function.

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[2])   http://www.ietf.org/rfc/rfc4646.txt

[3])   http://www.loc.gov/cds/notices/notgac2.html

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