



CEN/TC 372
Cinematographic Works
Secretariat: Germany (DIN)

DOC. NUMBER:	CEN_TC_372 N0167
REPLACES:	N/A
DATE:	2008-12-04
DOC TYPE:	Working Draft
TITLE:	4 th WD CSH01002 - Film identification - Enhancing interoperability of metadata - Element sets and structures
SOURCE:	Secretariat CEN/TC 372
PROJECT:	CSH01002
STATUS:	N/A
ACTION ID:	FYI
DUE DATE:	
DISTRIBUTION:	CEN/TC 372
MEDIUM:	PDF file on Livelink
NO. OF PAGES:	1 page cover + 31 pages document

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

Filmidentifikation — — — —

Identification des films — — — —

ICS:

Descriptors:

Document type: European Standard
Document subtype:
Document stage: Working Document
Document language: E

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Foreword

This document (TC TC 372 WI CSH01002) has been prepared by Technical Committee CEN/TC TC 372 "", the secretariat of which is held by DIN.

This document is a working document.

CSH01001 – "Film Identification – Minimum metadata set for cinematographic works"; which contains a minimum set of 16 data elements needed for interoperability of existing cinematographic databases. In addition, it contains a unified terminology required for the clear understanding of the standard.

CSH01002 – "Film Identification – Enhancing interoperability of metadata – Element sets and structures", which provides a comprehensive standard on metadata for cataloguing and indexation of cinematographic works, as well as a comprehensive and consistent terminology.

Introduction

Cinematographic works are an essential component of European cultural heritage. Film history and culture is recognized as an integral part of everything from tourism to documentary evidence 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, cinémathèques and other cultural organisations have the responsibility to both preserve and make accessible film heritage. 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.

The European Commission charged CEN with a mandate on 14 March 2005 to create a metadata standard for cinematographic works. In response to this mandate a two parts standard – of which this document is the second part, and the first part is EN 15744:2008 – has been developed to define the metadata essential for data migration between databases and consistent identification of films.

The primary users of this European standard will be film archives, film museums, cinémathèques and any other cultural organisations with filmographic databases. 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 15744:2008 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 contains 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 serialised representations of metadata about cinematographic works including their variants, editions, and items. Specific vocabularies for values of elements, sub-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.

EN 15744, Film identification - Minimum set of common rules and required terminology

CWA 14051-1:2001 Information Technology - European generic locales - Part 1: General specifications

ISO 639-1:2002. Codes for the representation of names of languages -- Part 1: Alpha-2 code

ISO 639-2:1998. Codes for the representation of names of languages -- Part 2: Alpha-3 code, first edition

ISO 8601:2004, Data elements and interchange formats — Information interchange — Representation of dates and times

ISO/IEC 11179-3, Information technology – Metadata registries (MDR) – Part 3: Registry metamodel and basic attributes

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

ISO 15511:2003 Information and documentation — International Standard Identifier for Libraries and Related Organisations (ISIL)

ISO 15706 (all parts), Information and Documentation – International Standard Audiovisual Number (ISAN)

ISO 15836, Information and documentation – The Dublin Core metadata element set

RFC 4122 - A Universally Unique IDentifier (UUID) URN Namespace <http://www.faqs.org/rfcs/rfc4122.html>.

IETF RFC 4246 - International Standard Audiovisual Number (ISAN) URN Definition. <http://www.ietf.org/rfc/rfc4246.txt>.

3 Terms and definitions

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

3.1

Attribute

A named property whose value domain can be restricted by a data type (q.v.)

3.2

Cardinality

The number of times an instance of a relationship (e.g. with a subordinate element) is permitted in a given context

3.3

Data type

A specification of the value domain for elements and attributes. A data type can either be atomic (e.g. a number, a vocabulary term, etc.) or complex (i.e. being composed of multiple atomic or complex types)

3.4

Entity

A conceptual unit defining a focus of description. Entities can enter relationships (q.v.) with other entities.

3.5

Element

A semantic unit that is a major property of one or more entities. An element can have attributes (q.v.) and can be composed of sub-elements (q.v.).

3.6

Relationship

A property that relates an entity or element to another resource.

3.7

Sub-element

A semantic unit that is a property of an element, but not a direct property of an entity.

4 Primary Entities

4.1 Cinematographic Work

This entity forms the node that relates all variants and editions 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.

A cinematographic realisation of a 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 can have one-to-many relationships with instances of Variant and Manifestation and many-to-many relationships with instances of Agent, Event and Subject.

4.1.1 Attributes

descriptionLevel

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

a - Monographic component part, used e.g. for a single part of a coherent multi-part work, a single episode from an episode film, or a part of a sequence of related episodes or issues of a serial.

b - Serial component part, used for a sub-unit of an issue from a serial, e.g. a regularly appearing sports section in a newsreel.

m - Monograph/Item. Used if the cinematographic work record describes a self-contained work that exists either in a single part, or in a finite number of parts described collectively.

s - Serial. Used for the entirety of works issued under a common title and intended to be continued indefinitely.

Status: mandatory

4.1.2 Sub-elements

Identifier (one or more) - defined in clause 6.1

Record source (one or more) - defined in clause 6.2

Title (zero or more) - defined in clause 6.3

Identifying title (one or more) - defined in clause 6.4

Country of reference (one or more) - defined in clause 6.5

Year of reference (one or more) - defined in clause 6.6

Agent Relationship (zero or more) - defined in clause 6.17

Production Event (zero or more) - defined in clause 6.11

Award (zero or more) - defined in clause 6.13

IPR registration (zero or more) - defined in clause 6.15

Subject (zero or more) – defined in clause 6.16

Content description (zero or more) - defined in clause 6.20

Other Relationship (zero or more) - defined in clause 6.19

Variant (zero or more). If zero, then one or more instances of Manifestation. Defined in clause 4.2

Manifestation (zero or more). If greater than zero, then no instance of Variant. defined in clause 4.3

4.2 Variant

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.

Changes that shall be described as variants include the addition of subtitles, dubbing, colorisation, and editing as a result of censorship or adjustment of duration, e.g. for TV programming.

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

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

4.2.1 Attributes

source ID

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 additional instance of Variant. Examples are "censored", "dubbed", "TV version", etc.

Status: optional

4.2.2 Sub-elements

Record source (zero or more) - defined in clause 6.2

Identifier (one or more) - defined in clause 6.1

Title (zero or more) - defined in clause 6.3

Agent Relationship (zero or more) - defined in clause 6.17

Award (zero or more) - defined in clause 6.13

IPR registration (zero or more) - defined in clause 6.15

Other Relationship (zero or more) - defined in clause 6.19

Manifestation (one or more) - defined in clause 4.3

Language (zero or one) – defined in clause 6.10

Production Event (zero or more) – defined in clause 6.11

4.3 Manifestation

A manifestation is the physical embodiment of a cinematographic work or one of its variants. Since cinematographic works are also distributed on-line, i.e. without a fixed physical carrier, the definition in this standard also encompasses computer files without physical properties. A manifestation is not exclusively bound to a single cinematographic work or variant, since publishers

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

4.3.1 *Attributes*

source ID

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

Status: optional

manifestation type

A word or phrase denoting the relationship between the manifestation and the variant or cinematographic work that it manifests. Can be omitted if no other manifestation is known. An unknown relationship should be indicated by a value of "unknown". Examples of manifestation types include "16mm print", "U.S. video distribution", etc.

Status: optional

4.3.2 *Sub-elements*

Record source (zero or more) - defined in 6.2.

Identifier (one or more) - defined in clause 6.1

Title (zero or more) - defined in clause 6.3

Language (zero or more) - defined in clause 6.10

Length (zero or more) - defined in clause 6.8

Duration (zero or more) - defined in clause 6.9

Format (zero or more) - defined in clause 6.7

Agent Relationship (zero or more) - defined in clause 6.17

Award (zero or more) - defined in clause 6.13

Decision event (zero or more) - defined in clause 6.14

Publication event (zero or more) - defined in clause 6.12

Other Relationship (zero or more) - defined in clause 6.19

4.4 **Item**

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.

Detailed item-level description Detailed item-level description is limited to information required for interoperability. As further information (e.g. physical defects, legal status, handling requirements, etc.) is subject to constant change, it is usually supplied upon request.

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

Cardinality: zero or more for Manifestation

4.4.1 *Attributes*

source ID

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

Status: optional

4.4.2 *Sub-elements*

Title

Titles should be given on the item level if (a) 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 clause 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 ISIL¹ namespace), or a registered namespace identifier for the institution.

Cardinality: one or more

Agent relationship

Activity, name of, or reference to a person or corporate body associated with the item. Examples include restorers, manufacturers, laboratories, etc.

Cardinality: zero or more; for sub-elements, see definition in clause 6.17.

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

Copy 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)", "dup positive", "Lavender", "image negative", "sound negative", "non-film analogue carrier", "non-film digital carrier").

Cardinality: zero or one

Variation from manifestation

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", "fragment, 1500 m of 2400 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

¹ Cf. clause 6.1.1

Catalogue reference

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

Cardinality: zero or more

Length (zero or more) - defined in clause 6.8

Duration (zero or more) - defined in clause 6.9

Agent Relationship (zero or more) - defined in clause 6.17

Other Relationship (zero or more) - defined in clause 6.19

4.5 Content

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

- Subject term - 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 can be represented as subject relationship (see below).
- Subject relationship - a reference to an instance of Agent, Event, Cinematographic Work, or an individual instance of any entity outside the scope of the standard. 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 (see above).
- Content description - 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) can have a common content description if they are described on an aggregate level (i.e. as a complex work).

4.5.1 Attributes

None.

4.5.2 Sub-elements

Subject terms (zero or more) – defined in clause 6.16

Subject relationship (zero or more) – defined in clause 6.18

Content description (zero or more) – defined in clause 6.20

5 Abstract Entities

5.1 Agent

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.

This standard neither defines an Agent element nor any specific Agent types. Instead, an instance of Agent can be represented via an Agent Relationship (cf. clause 6.17) 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 can be used alone if no authority file for the Agent instance was available when the cinematographic work record was prepared.

These three methods can 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 can 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 can have any internal structure, provided that all corresponding elements are identified by a namespace prefix that can be resolved to a schema declaration.

An instance of Cinematographic Work, Variant, Manifestation, Item, and Event can have any number of relationships with instances of Agent.

5.2 Event

An Event is an abstract entity that characterise occurrences in the life cycle of a cinematographic work. Instances of Cinematographic Work, Variant, Manifestation and Item can be associated with any number of Events. In addition, instances of any Event type can 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 on-line. Defined in clause 6.12.
- Decision Event - A decision about the suitability of a cinematographic work or variant for a particular audience. Includes censorship and rating decisions. Defined in clause 6.14.
- IPR registration event - A registration of intellectual property rights. Defined in clause 6.15.
- 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 clause 6.13
- Production event – A specific event in the creation of the cinematographic work. Defined in clause 6.11

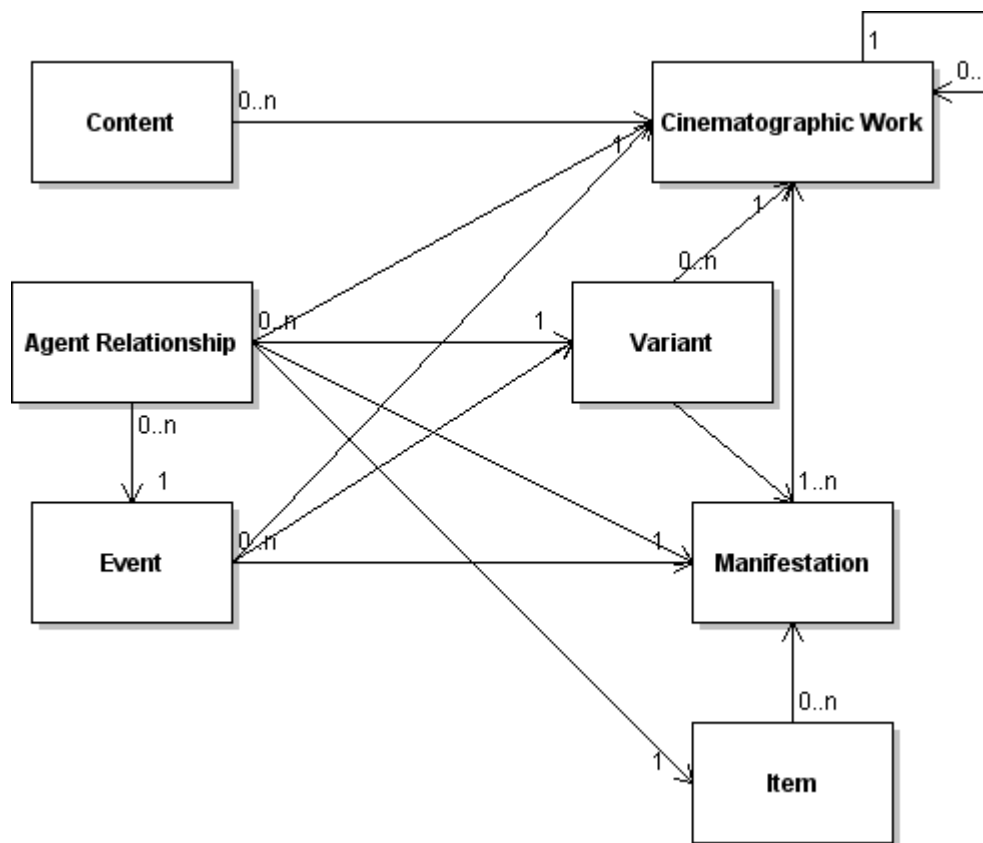


Fig. 1: Cardinality restrictions between entities

6 Individual sub-elements

6.1 Identifier

An unambiguous reference to the resource within a given context, where possible the International Standard Audio-visual Number (ISAN²), otherwise a specific number issued by a government department or other official body in an individual country, or an archive's inventory number.

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

6.1.1 Attributes

None.

6.1.2 Sub-elements

scheme

² ISO 15706 (all parts), Information and Documentation – International Standard Audiovisual Number (ISAN)

An unambiguous reference of the scope within which the identifier is unique. References can 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 given in clause 2.13.1 of ISO/IEC 14882³. Note that the *numeric* attribute is not required for the urn:uuid⁴ or urn:ISAN⁵ namespaces, since all valid representations of these namespaces can be converted to any number base for identity comparison.

Status: optional

6.2 Record source

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

6.2.1 Attributes

None

6.2.2 Sub-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 ISIL⁶ namespace), or a registered namespace identifier for the institution.

Cardinality: zero or more

6.3 Title

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 can be determined from the item itself, or from any suitable secondary source.

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

³ ISO/IEC 14882:2003(E). Programming languages — C++ . Second Edition. pp.15-16.

⁴ RFC 4122 - A Universally Unique Identifier (UUID) URN Namespace. <http://www.faqs.org/rfcs/rfc4122.html>.

⁵ IETF RFC 4246 - International Standard Audiovisual Number (ISAN) URN Definition. <http://www.ietf.org/rfc/rfc4246.txt>.

⁶ ISO 15511:2003 Information and documentation — International Standard Identifier for Libraries and Related Organisations (ISIL)

6.3.1 *Attributes*

None

6.3.2 *Sub-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 can 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

Sub-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 clause 7.2

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 clause 7.1

6.4 **Identifying Title**

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 can 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 can be derived by an automatic procedure based on a set of rules. Rules for constructing an identifying title can 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

6.4.1 *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

6.4.2 *Sub-elements*

None

6.5 Country of Reference

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 can 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

6.5.1 *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 point of reference is different from the country of production.

Status: optional

6.5.2 *Sub-elements*

country

A county code.

Cardinality: one or more; type: Region - defined in clause 7.1

6.6 Year of reference

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

6.6.1 *Attributes*

reference

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

Status: optional

6.6.2 *Sub-elements*

None

6.7 **Format**

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

6.7.1 *Attributes*

None

6.7.2 *Sub-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

Sub-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 more

Colour

The name of the colour system or process (e.g. "monochrome", "Technicolor"). For digital formats, the name of the colour space (e.g. "sRGB"), and for analog video the name of the video colour system (e.g. "NTSC").

Cardinality: zero or one

6.8 Length

The total physical length of the manifestation of a cinematographic work, or of the item from a manifestation. Represented as numerical value, with decimal places if required.

Cardinality: zero or more for Manifestation and Item

6.8.1 Attributes**unit**

Name of the measurement unit (usually "ft." or "m").

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

6.8.2 Sub-elements

None.

6.9 Duration

The running time of the manifestation of a cinematographic work, measured in minutes and seconds.

Cardinality: zero or one for Manifestation and Item

6.9.1 Attributes**frame rate**

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

Status: optional

6.9.2 Sub-elements

None.

6.10 Language

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 clause 7.3.

6.10.1 *Attributes*

usage

This attribute can be used to indicate in what role 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

6.10.2 *Sub-elements*

None.

6.11 Production event

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.

Cardinality: zero or more for Cinematographic Work and Variant

6.11.1 *Attributes*

source ID

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

Status: optional

6.11.2 *Sub-elements*

Production event type

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

Cardinality: one

Location

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

Cardinality: zero or more

Region

The country or other large-scale geographic entity where the event took place

Cardinality: zero or more; type: Region - defined in clause 7.1

Date

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

Cardinality: zero or more; type: Timespan - defined in clause 7.2

Event details

Any further information about the event either in plain textual form, or as an instance of a data type from another schema.

6.12 Publication Event

A public screening or broadcast of a Manifestation, or the public release of a manifestation of the cinematographic work on a physical distribution medium or on-line.

A non-public screening may qualify as publication event if it is considered important for the life cycle of a cinematographic work.

Cardinality: zero or more for Manifestation

6.12.1 *Attributes*

source ID

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

Status: optional

6.12.2 *Sub-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 copies of the manifestation became available for purchase or hire.

Cardinality: zero or more; Type: Timespan - defined in clause 7.2

Region

The country or other large-scale 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 clause 7.1

Place

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

Exhibition organiser

The name of an Agent that was responsible for the exhibition (e.g. name of a cinema company, film club, broadcaster, etc.)

Cardinality: zero or more

Publisher

If not evident from an association of Agent with Manifestation, this element can be used to state the name of the publisher.

Cardinality: zero or more

Access conditions

Specific restrictions for accessing the content of the manifestation (e.g. "for rental only", "limited to subscribers of MSN CinemaNow", etc.)

Cardinality: zero or more

6.13 Award

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).

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

6.13.1 *Attributes*

None

6.13.2 *Sub-elements*

Date

The date the award was bestowed to an Agent associated with the cinematographic work.

Cardinality: zero or one; Type: Timespan - defined in clause 7.2

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 achievement for which the award was given, if not for the cinematographic work in total.

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

Agent relationship

If the award was given for the achievement of a specific Agent within the context of the cinematographic work, then this element should be used to identify the Agent. Also used to identify Agent(s) that have sponsored the award.

Cardinality: zero or more

6.14 Decision event

An event in which a manifestation of a cinematographic work was evaluated by a censorship body or an accredited rating agency.

Cardinality: zero or more for Manifestation

6.14.1 Attributes**source ID**

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

Status: optional

6.14.2 Sub-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

Agency

The name of the agency performing the rating or censorship.

Cardinality: zero or one

Filing 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

6.15 IPR registration

The act of registering intellectual property rights in a cinematographic work with an accredited agency.

Cardinality: zero or more for Cinematographic Work and Variant

6.15.1 Attributes

None.

6.15.2 Sub-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. "UK Intellectual Property Office", 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 clause 7.1

Name of applicant

Name of the Agent claiming copyright in the cinematographic work.

Cardinality: zero or more

6.16 Subject terms

A term or set of vocabulary terms describing the content of the cinematographic work. Controlled and uncontrolled terms can 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 must 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 can be expressed as a subject relationship (cf. clause 6.18).

Cardinality: zero or more for Cinematographic Work

6.16.1 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 language of the content of each Term name. Can be omitted if the language is evident from the scheme.

Status: optional; type: Language tag - defined in clause 6.10

6.16.2 Sub-elements

Term

An element containing a single term

Attributes

term id

A non-text identifier that can be combined with the Scheme ID to form a unique resource identifier for the term within a controlled vocabulary.

Status: optional

Sub-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 Agent relationship

This element is used to express the contribution of an Agent to the creation of a cinematographic work, variant, manifestation or item, or the involvement of an Agent in an Event.

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

6.17.1 Attributes

source ID

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

6.17.2 Sub-elements

Activity

This defines the relationship between an instance of Agent and an instance of Work, Variant, Manifestation or Item.

Cardinality: one.

Credit rank

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.

Cardinality: zero or one.

Name

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

Cardinality: one or more.

Name used

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 Cinematographic Work or Variant.

Cardinality: zero or one.

Agent type

The class of Agent, e.g. Person, Corporate Body, Person Group, etc.; can 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 must carry a namespace identifier that resolves to a schema declaration in which it is defined.

Cardinality: zero or more.

Activity detail

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.)

Cardinality: zero or one.

Character

The name of a (fictious or real) character played by an actor.

Cardinality: zero or more.

6.18 Subject relationship

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

The distinction between subject and object relationships may not always be obvious. For example, a person performing a musical work will be regarded as a co-creator of the cinematographic work, while the musical work will be associated through a subject relationship. However, if the cinematographic work also includes a biographical sketch of the musician, then the musician will be associated both in an object and a subject role.

Subject relationships are distinct from subject terms in that a subject relationship always relates the cinematographic work to an identifiable resource, while a subject term (cf. clause 6.16) relates it to an item from a controlled or uncontrolled vocabulary.

Cardinality: zero or more for Cinematographic Work

6.18.1 Attributes

source id

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

6.18.2 Sub-elements

Relationship type

A term denoting the kind of relationship between the current entity and a related one. Antisymmetric relationships should be defined in pairs (forward/reverse).

Cardinality: one

Target

This element groups formal and informal identifiers for the relationship target. If a resource can be identified through more than one ID scheme, the Target element can be used repeatedly.

Cardinality: one or more

Attributes

scheme

An unambiguous identifier for the ID scheme to which the target identifier belongs. All types of identifier schemes described under Identifier/ID scheme can be used here.

Status: optional

Sub-elements

Identifier

The value of the identifier from an ID scheme.

Cardinality: zero or one

Name

A human-readable representation of the relationship target, e.g. a personal name, a work title, an event name, etc.

Cardinality: zero or one

Section ID

A single time code, a time span of media running time, a start frame, or a start and an end frame, indicating a point or span in the image stream to which the associated subject element relates. Cardinality: zero or more

6.19 Other relationship

This element is used to express relationships that are not covered by the agent, subject, and event 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

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

6.19.1 Attributes**source id**

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

6.19.2 Sub-elements**Relationship type**

A term denoting the kind of relationship between the current entity and a related one. Antisymmetric relationships should be defined in pairs (forward/reverse).

Cardinality: one

Target

This element groups formal and informal identifiers for the relationship target. If a resource can be identified through more than one ID scheme, the Target element can be used repeatedly.

Attributes**scheme**

An unambiguous identifier for the ID scheme to which the target identifier belongs. All types of identifier schemes described under Identifier/ID scheme can be used here.

Status: optional

Sub-elements**Identifier**

The value of the identifier from an ID scheme.

Cardinality: zero or one

Name

A human-readable representation of the relationship target, e.g. a work title, a bibliographic citation, event name, etc.

Cardinality: zero or one

6.20 Content description

A textual description of the contents of the cinematographic work.

Cardinality: zero or more for Cinematographic Work

6.20.1 *Attributes*

None

6.20.2 *Sub-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 clause 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 on-line catalogue.

Cardinality: zero or one

7 Common sub-element types

These are definitions of element types used for sub-elements or attributes of more than one element from the preceding section.

7.1 Region

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

7.1.1 *Attributes*

None

7.1.2 *Sub-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" for historical countries, and "MARC"7 for extraterrestrial regions.

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

Status: required.

Sub-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

Cardinality: zero or more

7.2 *Timespan*

Elements of type Timespan contain representations of absolute time spans based on the Gregorian calendar with a maximum precision of one calendar day. The notation uses the element order defined in ISO 86098 in the form YYYY-MM-DD (year, month, day)⁹.

Lower-precision dates can 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 can 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 can 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 can 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.

7 Additions to the MARC Code List for Geographic Areas. MDS Technical Notice, September 27, 2001 <http://www.loc.gov/cds/notices/notgac2.html>

8 ISO 8601:2004, Data elements and interchange formats — Information interchange — Representation of dates and times.

9 cf. section 4.1.5 in CWA 14051-1:2001 E: Information Technology - European generic locales - Part 1: General specifications. January, 2001 <ftp://cenftp1.cenorm.be/PUBLIC/CWAs/e-Europe/EUR/cwa14051-01-2001-Jan.pdf>

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.

7.3 Language tag

A coded value that can appear as an attribute or element value, denoting a natural language. The syntax for the language tag follows the definition given in RFC 4646¹⁰. All codes from ISO 639-1¹¹ and ISO 639-2¹² are syntactically valid RFC 4646 expressions. Therefore, all extensions such as script, region and language variant are optional.

8 Mappings to part 1

The following is a list of the elements from part 1 of this standard, together with equivalent constructs using the definitions from part 2.

Title

Cinematographic work / Identifying Title

Series/Serial

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

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

Cast

Cinematographic work / Agent relationship [Activity="Actor"]

Credits

Cinematographic work / Agent relationship [Activity=anything except "Actor"]

Production Company

Cinematographic work / Agent relationship [Activity="Production company"]

Country of Reference

Cinematographic work / Country of Reference

Original Format

Manifestation [manifestation type="original"|none] / Format

Original Length

Manifestation [manifestation type="original"|none] / Length

Original Duration

Manifestation [manifestation type="original"|none] / Duration

Original Language

Variant [variant type=none] / Language [usage=none]

Manifestation [manifestation type="original"|none] / Language [usage=none]

Year of Reference

Cinematographic work / Year of reference

Identifier

10 Phillips, A. and M. Davis: Tags for Identifying Languages. BCP 47, RFC 4646, 2006. <http://www.ietf.org/rfc/rfc4646.txt>

11 ISO 639-1:2002. Codes for the representation of names of languages -- Part 1: Alpha-2 code

12 ISO 639-2:1998. Codes for the representation of names of languages -- Part 2: Alpha-3 code, first edition

Cinematographic work / Identifier

Genre

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

Relationship

Cinematographic work / Other relationship [relationship type=any work-to-work relationship]

Source

Cinematographic work / Record source

9 Implementation notes

This standard is primarily intended to support the creation of serialised representations of 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.