

EBU Core Metadata Set (EBUCore)

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Introduction

This is version 1.2 of the “EBUCore” Metadata set.

EBUCore has been purposefully designed as a minimum list of attributes to describe audio and video resources for a wide range of broadcasting applications including for archives, exchange and publication. It is also a Metadata schema with well defined syntax and semantics for easier implementation.

It is based on the Dublin Core to maximise interoperability with the community of Dublin Core users. EBUCore expands the list of elements originally defined in EBU Tech 3293-2001 for radio archives, also based on Dublin Core.

More information on the role of this specification with regard to other related EBU Metadata specifications is provided in the ‘Metadata’ section of the EBU TECHNICAL website (<http://tech.ebu.ch/metadata>).

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EBU Core Metadata Set (EBU Core)

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1. Scope

Metadata is essential to broadcasting.

The “EBUCore” set of Metadata defined in this specification has been identified as being the minimum information needed to describe radio and television content.

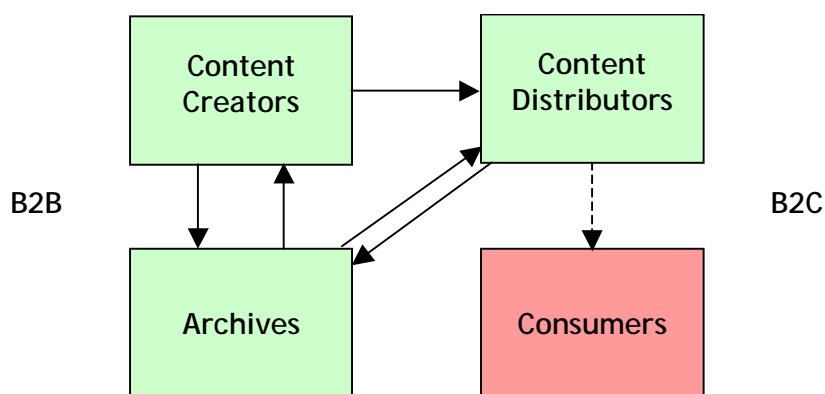


Figure 1: Archiving - a core process to define Metadata

"If you can't find it, you don't have it!", this should not happen in modern IT-based production environments. Metadata is the glue between production operations. Documenting audiovisual resources with EBUCore information is a minimum requirement corresponding to fundamental investment with guaranteed return.

This specification addresses the creation, management and preservation of material that can be re-used as originally produced, or may provide input material for new programmes, be it as the result of programmes exchanges between broadcasters or between production facilities in a distributed environment. The EBUCore can also be used to describe content for distribution.

The core set of Metadata presented in EBUCore is an extension to the Dublin Core. It is a minimum list of attributes characterising a media resource. An XML representation is also specified to facilitate implementation, e.g. in archive exchange projects using the Open Archive Initiative's Protocol for Metadata Harvesting (OAI-PMH).

The Dublin Core is being used as a core Metadata set by librarians and in cultural heritage projects with which radio and television archives have a natural link. The EBUCore, used for such archives, offers a bridge between cultural heritage databases, broadcasting production systems broadcasting archive repositories, and world-wide-web ontologies.

2. Core Metadata Set

2.1 Introduction

EBUCore is a collection of basic Metadata elements to describe audiovisual content including in Dublin Core centric environments.

The characterisation and semantics of each element is organised through the following structure:

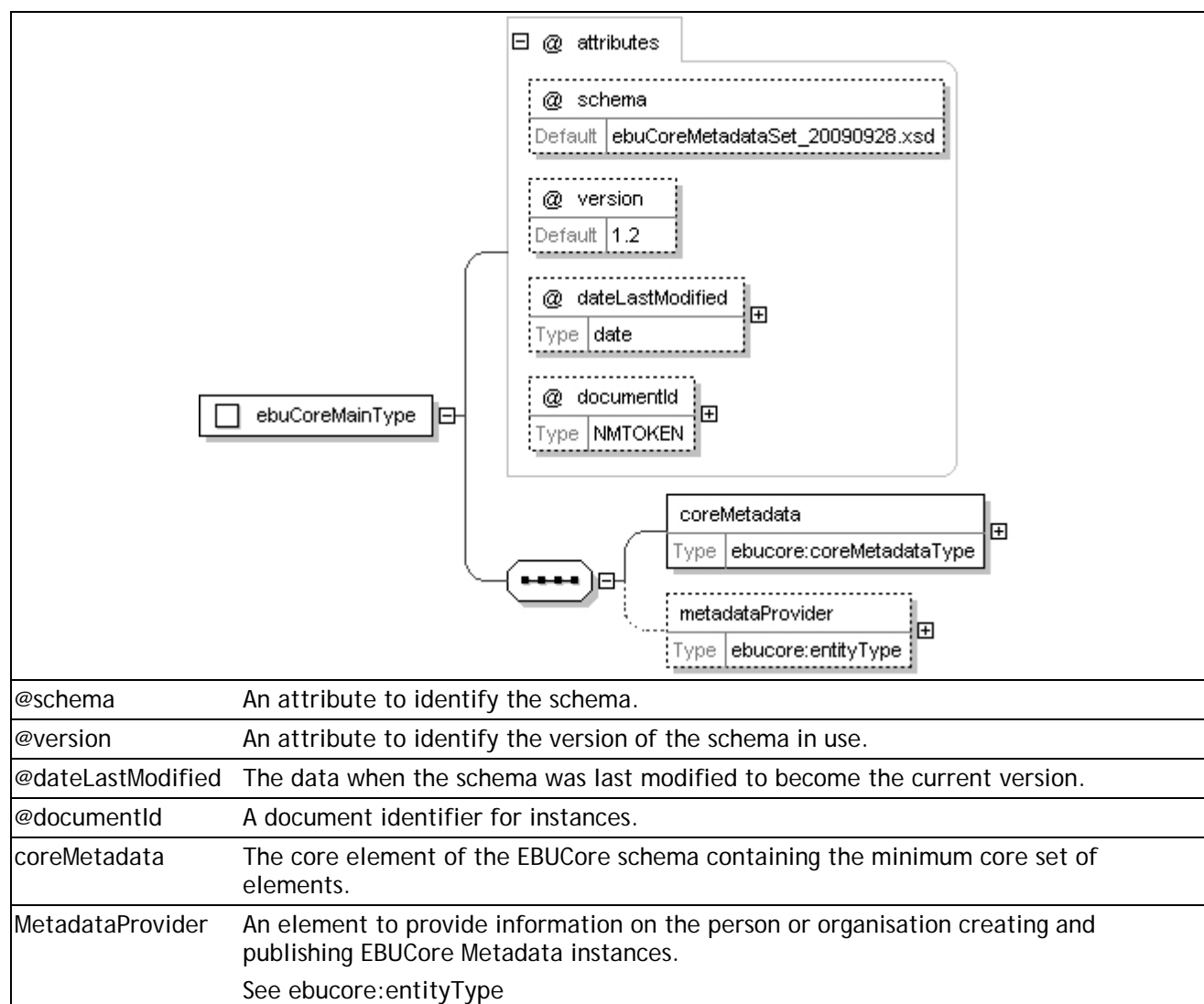
- a. Name: this is the name of the element
- b. Cardinality: this is the number of times an elements can be used when describing a piece of content
- c. Requirement: this states whether is element is required or optional
- d. Definition: this provides a short unambiguous description of the element and its scope of use
- e. Format: defines the type or format of the element e.g. a complex type or text or URI
- f. Schema: give a syntactic view of the element representation in the EBUCore schema
- g. UML representation
- h. Semantic for each element and attribute with reference data and examples

A mapping to similar relevant Metadata sets is provided in **Annex B**.

2.2 EBUCore schema root element

ebuCoreMain

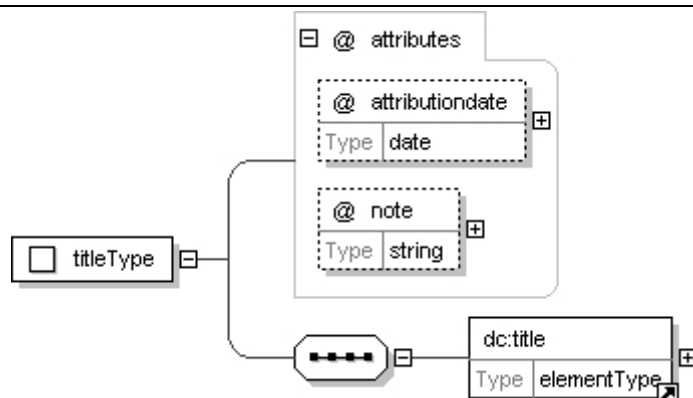
Name	ebuCoreMain
Cardinality	Unique occurrence per instance.
Requirement	Mandatory
Definition	ebuCoreMain is the root element of the EBUCore schema and associated instances.
Format	ebuCoreMainType
Schema	root



2.3 Core Metadata Set Elements and Semantics

Title

Name	Title
Cardinality	Multiple occurrences of the same Title are possible in different languages.
Requirement	Mandatory
Definition	<p>A Title is the 'main' name given to a resource e.g. a media item, a media object, or a sequence as specified by the associated title type. It corresponds for a series to the series title, for a programme to the programme title, for an item to the item title, etc.</p> <p>Titles are recorded as they appear.</p> <p>The Title is the name by which a resource is formally known and that everyone should use to refer to or search for that particular resource.</p> <p>The Title may be provided in several languages.</p> <p>If present, the attributionDate attribute indicates when the Title was attributed.</p>
Format	ebucore:titleType
Schema	/ebucore:coreMetadataType/ebucore:title



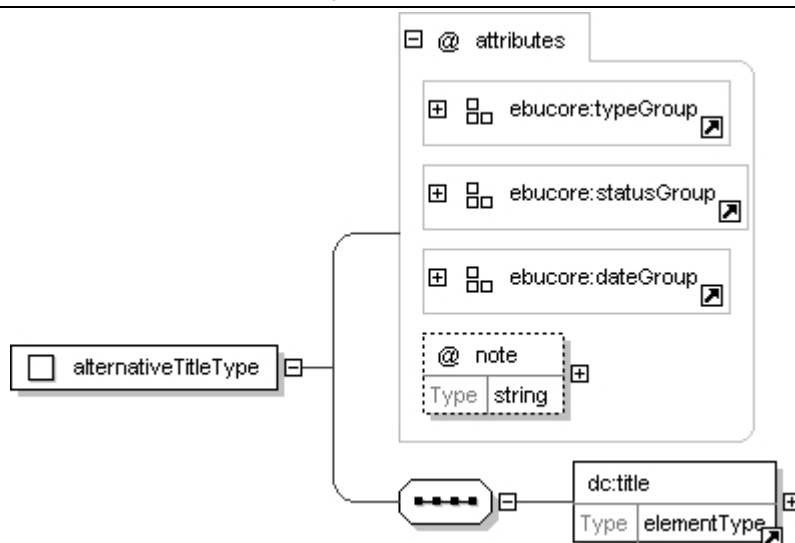
dc:title Free-text to provide the main title by which the resource is known. The title can be provided in different languages. The language in which the title is provided can be provided using elementType's lang attribute.

Example: 'the fifth element'

@ attributionDate The date at which the title was attributed

@ note A note element to provide additional contextual information.

Name	Alternative Title
Cardinality	Multiple
Requirement	Optional
Definition	<p>An Alternative Title is the name other than the 'main' Title given to a resource.</p> <p>The type of title is defined by the typeGroup of attributes.</p> <p>The status of the title is defined by the statusGroup of attributes.</p> <p>Alternative Titles are recorded as they appear.</p> <p>An Alternative Title may be attributed to a resource for several reasons described using the status (e.g. working title) and type (e.g. series title) attributes.</p> <p>The alternativeTitle may be provided in several languages.</p> <p>It is sometimes common practice to put dates into the alternativeTitle. If present, the attributionDate (indicating when the alternativeTitle was attributed) in the date attribute should be consistent.</p>
Format	ebucore:alternativeTitleType
Schema	/ebucore:coreMetadataType/ebucore:alternativeTitle



dc:title	Free-text to provide alternative titles by which the resource is known. The language in which the title is provided can be provided using element's lang attribute. Example: 'the fifth element'
@ typeGroup	The Alternative Title Type descriptor indicates the type of resource to which the Alternative Title applies e.g. a programme or a series.
@ typeLabel	Free text to define the type of resource. Example: 'series'
@ typeLink	A link to a term or only identify n a classification scheme Reference data: ebu_ObjectTypeCodeCS Example: http://www.ebu.ch/metadata/cs/ebu_ObjectTypeCodeCS.xml#5
@ typeDefinition	An optional definition. Example: the 'title' of the series that the resource is an episode of
@ statusGroup	The statusGroup is used to define the status of the Title such as short, long, full, abridged, working, transmission, published, international, subtitle, original, secondary, alternative, pledged, etc. The name of the format can be provided in the form of a text label, or a link to a code of a classification scheme, optionally accompanied by a definition. the status 'main' shall not be used for alternativeTitle as this applies to the Title only.
@ statusLabel	Free text to define the status of the title of the resource. Example: statusLabel: working (for 'working title')
@ statusLink	A link to a term or only identify a classification scheme Reference data: ebu_TitleStatusCodeCS Example: http://www.ebu.ch/metadata/cs/ebu_TitleStatusCodeCS.xml#6
@ statusDefinition	An optional definition. Example: a temporary title, which is different from the formal title under which the content has been published
@ dateGroup	See ebucore:dateGroup
@ note	A note element to provide additional contextual information on the title

Creator

Name	Creator
Cardinality	Multiple
Requirement	Optional
Definition	The descriptor creator identifies an 'entity' (a person, group of persons or organisation) primarily responsible for creating the content of the resource - <u>behind the camera</u> . Different roles may be considered as representing a creator, e.g. a producer, an author, etc. Creator is a sub-class of Contributor.
Format	ebucore:entityType
Schema	/ebucore:coreMetadataType/ebucore:creator
<pre> classDiagram class creator { Type ebucore:entityType } creator "4" -- "1" ebucore:entityType </pre>	
For semantics, see 'entityType'	

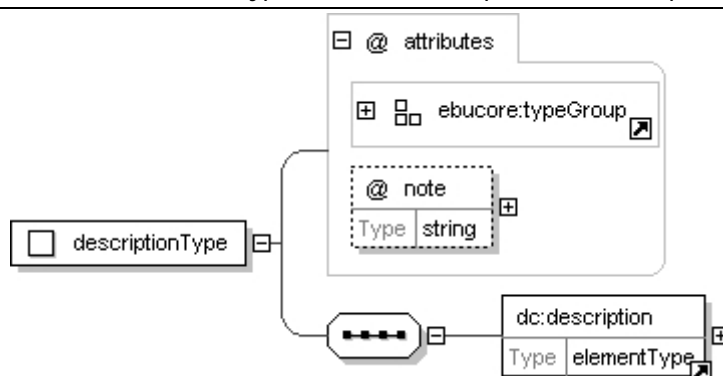
Subject

Name	Subject
Cardinality	Multiple
Requirement	Optional
Definition	<p>The generalised topic that represents the intellectual content of the resource. Typically, a subject is expressed by keywords, key phrases.</p> <p>Free text, controlled vocabularies, authorities, or formal classification schemes (codes) may be employed when selecting descriptive subject terms.</p> <p>Persons as subjects are also placed here.</p> <p>Genre of the content is defined under element "ebucore:type/ebucore:genre".</p>
Format	ebucore:subjectType
Schema	/ebucore:coreMetadataType/ebucore:subject
<pre> classDiagram class subjectType class ebucore_subject["ebucore:subject"] class attributes["@ attributes"] class typeGroup["ebucore:typeGroup"] class note["@ note"] class dc_subject["dc:subject"] class subjectCode["subjectCode"] class subjectDefinition["subjectDefinition"] subjectType --> ebucore_subject ebucore_subject -- attributes attributes -- typeGroup attributes -- note ebucore_subject -- dc_subject ebucore_subject -- subjectCode ebucore_subject -- subjectDefinition </pre>	
dc:subject	<p>Free text to provide subjects</p> <p>Example: 'Tennis'</p>
subjectCode	<p>A link or code to / within a classification scheme.</p> <p>Reference data:</p> <p>Library of Congress Subject Heading (LCSH), Library of Congress Classification (LCC), Medical Subject Headings (MeSH), Dewey Decimal Classification (DDC), Dansk decimalklassedeling 5.utgave (DK5), Klassifikasjonssystem för svenska bibliotek (SAB), Universal Decimal Classification (UDC), Norske emneord</p> <p>http://cv.ipc.org/newscodes/subjectcode/</p> <p>Example: http://cv.ipc.org/newscodes/subjectcode/#15065000</p>
subjectDefinition	<p>An optional definition.</p> <p>Example: 'the subject is about tennis (sport, game)'</p>
@ typeGroup	To define the source of reference for subject such as a reference document or classification scheme.
@ typeLabel	<p>Free text to define the type.</p> <p>Example: 'IPTC Subject Code Classification Scheme' (EBU subset)</p>
@ typeLink	<p>A link to a term or only identify a classification scheme</p> <p>Example: http://cv.ipc.org/newscodes/subjectcode/</p>
@ typeDefinition	<p>An optional definition.</p> <p>Example: the IPTC subject codes formatted using the EBU classification Scheme schema.</p>

@ note	A note element to provide additional contextual information
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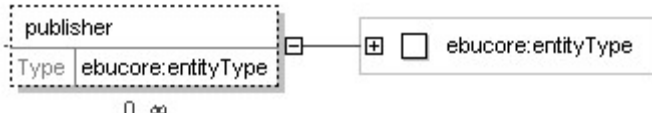
Description

Name	Description
Cardinality	Multiple
Requirement	Optional
Definition	<p>Free-form text or a narrative to report general notes, abstracts, or summaries about the intellectual content of a resource. The information may be in the form of a paragraph giving an individual program description, anecdotal interpretations, or brief content reviews. The description may also consist of outlines, lists, bullet points, edit decision lists, indexes, or tables of content, a reference to a graphical representation of content or even a pointer (URI, URL) to an external resource.</p> <p>A running order can also be provided as a description.</p> <p>For a Radio or television programme a running order can be used as description.</p> <p>A description can be provided in different languages.</p>
Format	ebucore:descriptionType
Schema	/ebucore:coreMetadataType/ebucore:description/dc:description

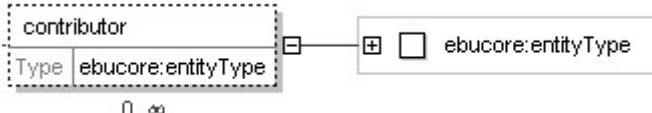


dc:description	Free text to provide a description of the resource. The description can be repeated in different languages as specified by the entityType's lang attribute. The type of description is defined in the type group of attributes.
@ typeGroup	To define the form of presentation for the information: Annotation, abstract, summary, review, table of content, synopsis, shot list, edit decision list, promotional information, purpose, script, outline, rundown, selection/excerpt, transcript, bookmarks, theme, highlights, running order, etc.
@ typeLabel	Free text to define the type. Example: 'summary', 'table of content'
@ typeLink	A link to a term or only identify a classification scheme Reference data: ebu_DescriptionTypeCodeCS Example: http://www.ebu.ch/metadata/cs/ebu_DescriptionTypeCodeCS#4 (summary)
@ typeDefinition	An optional definition. Example: 'A short description of the resource'
@ note	A note element to provide additional contextual information

Publisher

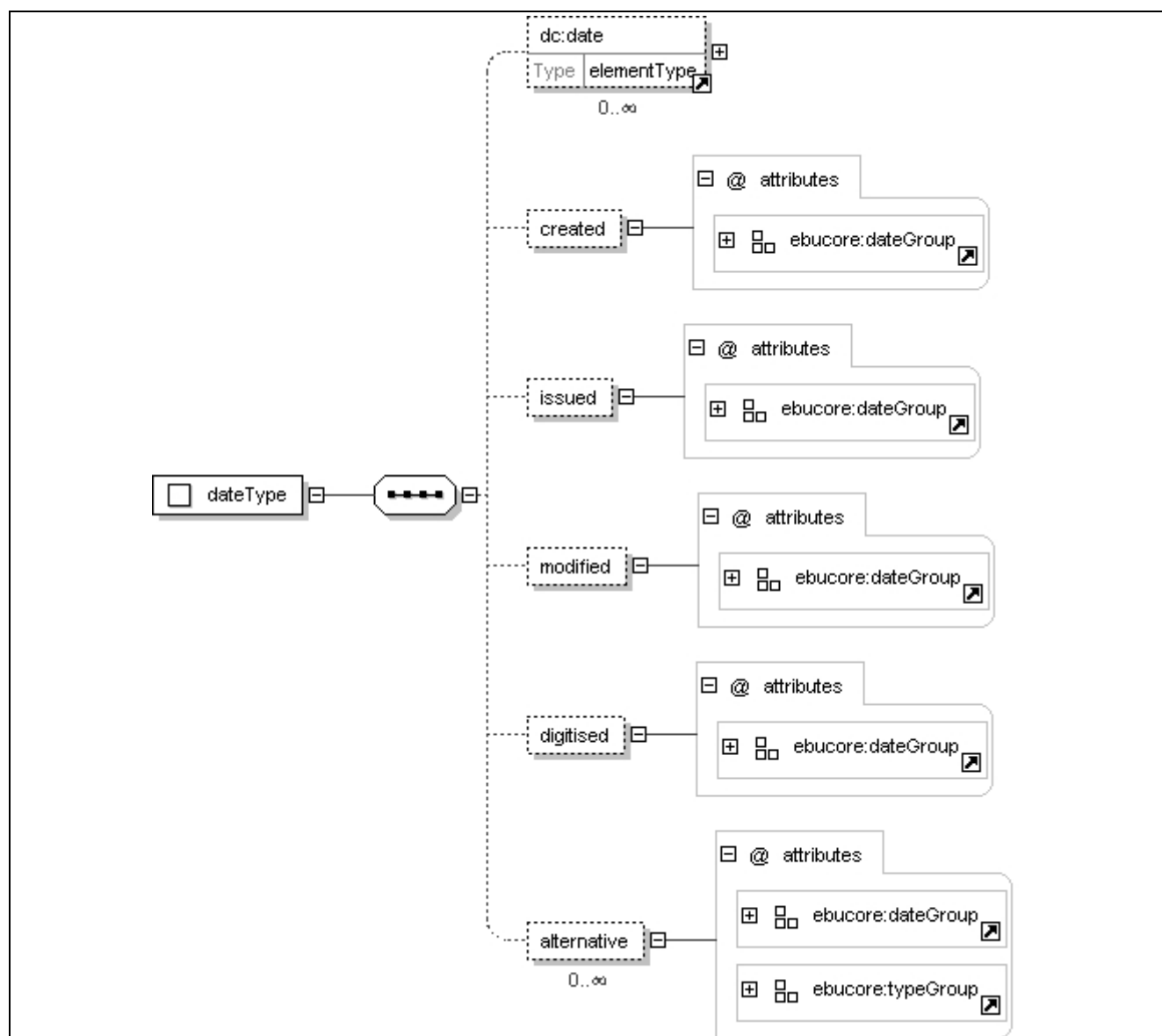
Name	Publisher
Cardinality	Multiple
Requirement	Optional
Definition	A publisher is a person, an organization, or a service. Typically, the name of a Publisher should be used to indicate the entity primarily responsible for distributing or making a resource available to others e.g. by broadcasting, selling, leasing, renting and other modes of distribution.
Format	ebucore:entityType
Schema	/ebucore:coreMetadataType/ebucore:publisher
	
For semantics, see 'entityType'	

Contributor

Name	Contributor
Cardinality	Multiple
Requirement	Optional
Definition	The descriptor contributor identifies a person or organization that has made substantial creative contributions to the content of a resource. Refers particularly (but not only) to participation <u>in front of the camera</u> . If in doubt whether an entity is a creator or contributor use the element contributor.
Format	ebucore:entityType
Schema	/ebucore:coreMetadataType/ebucore:contributor
	
For semantics, see 'entityType'	

Date

Name	Date
Cardinality	Multiple
Requirement	Optional
Definition	Dates associated with events occurring during the life of the resource. Typically, Date will be associated with the creation, modification or availability of the resource.
Format	ebucore:dateType
Schema	/ebucore:coreMetadataType/ebucore:date

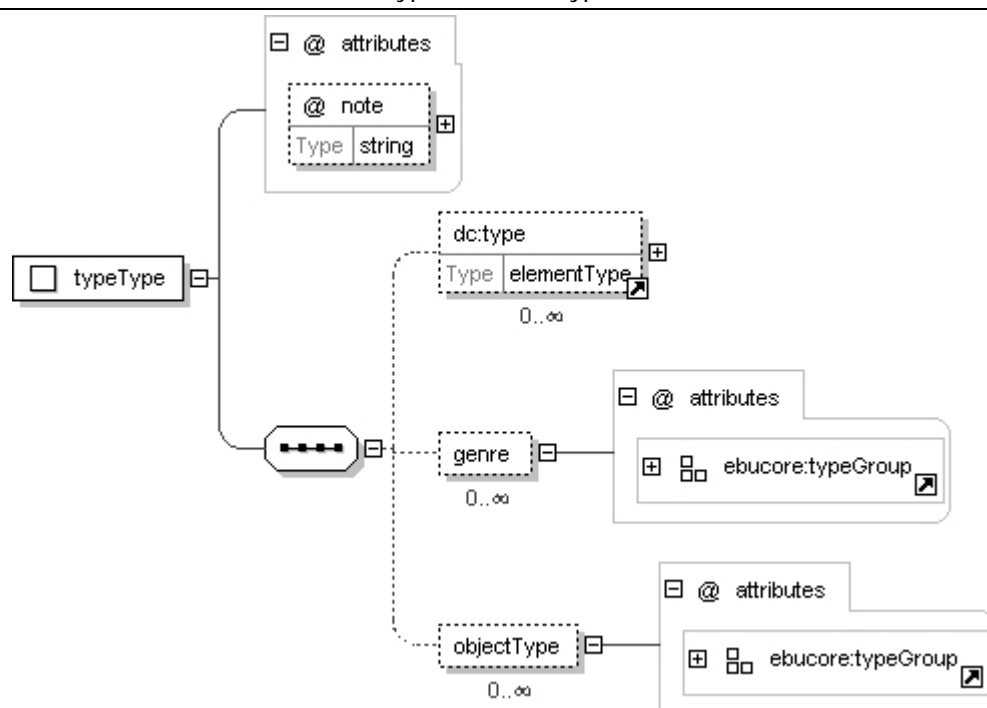


dc:date	An element to provide a date in the xml:date format (NOTE: for Dublin Core compatibility purpose, dc:date is of elementType extending a string).
created	An element to specify the creation date for a particular version or rendition of a resource across its life cycle. It is the moment in time that the media item was finalized during its production process and is forwarded to other divisions or agencies to make it ready for publication or distribution.
@dateGroup	See ebucore:dateGroup
issued	Date of formal issuance (e.g. publication) of the resource. Specifies the formal date for a particular version or rendition of a resource has been made ready or officially released for distribution, publication or consumption, e.g. the broadcasting date of a radio programme. A specific time may also be associated with the date.
@dateGroup	See ebucore:dateGroup
modified	Date on which the resource was last changed.
@dateGroup	See ebucore:dateGroup
digitised	Date on which the resource was digitised.
@dateGroup	See ebucore:dateGroup
alternative	To define an alternative date important to qualify the resource.
@dateGroup	See ebucore:dateGroup

@typeGroup	To define the type of alternative date being instantiated (using a label, or a link to a classification scheme, with an optional definition) Example: typeLabel="ingested"; typeDefinition="the date and time at which content was ingested"
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Type

Name	Type
Cardinality	Multiple
Requirement	Optional
Definition	The nature or genre of the resource. Type includes terms describing general categories, functions, genres, or aggregation levels for content. Recommended best practice is to select a value from a controlled vocabulary or classification scheme. To describe the physical or digital manifestation of the resource, use the FORMAT element.
Format	ebucore:typeType
Schema	/ebucore:coreMetadataType/ebucore:type

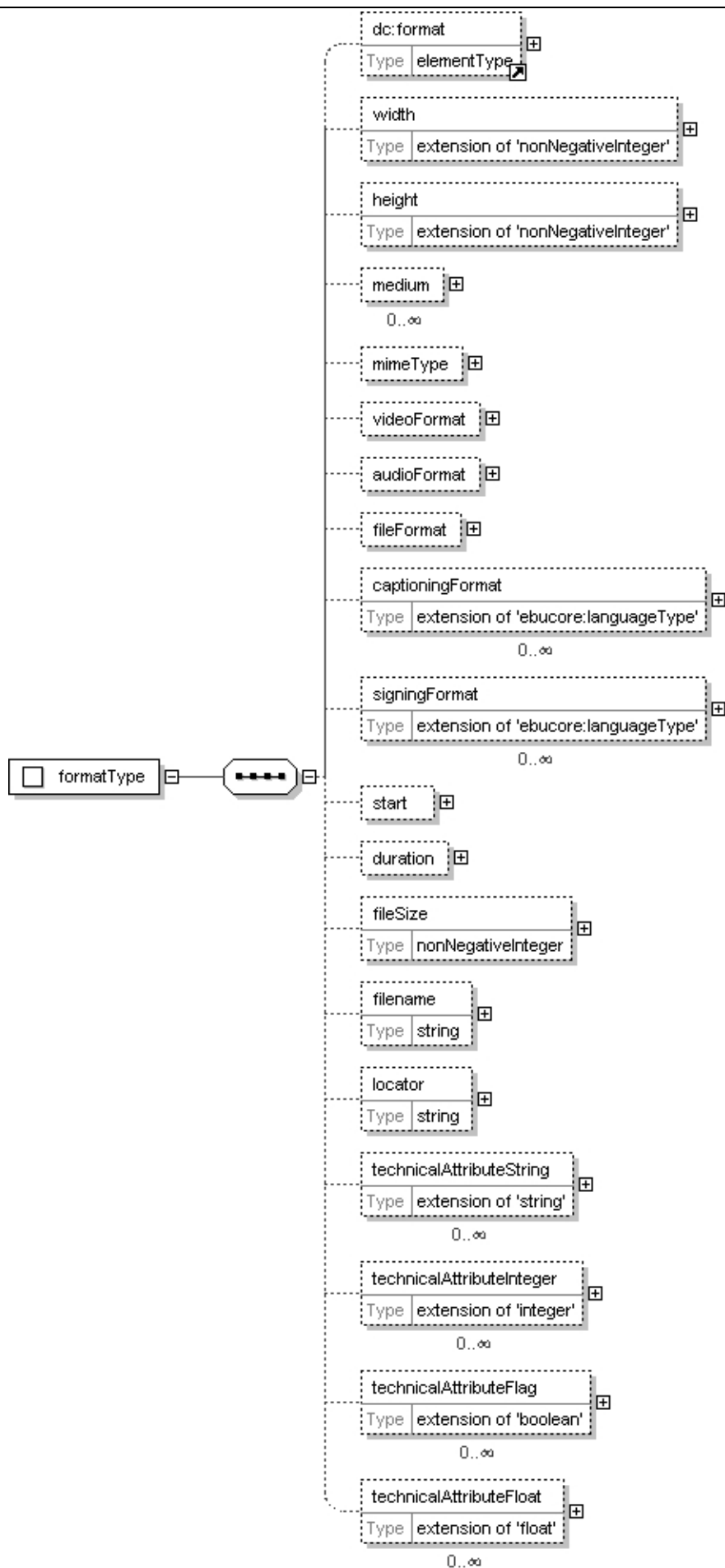


dc:type	Free text to provide 'type' information other than 'genre' or 'objectType', possibly in different languages defined by the elementType's lang attribute
genre	To define the 'genre' categorising the resource. Content genre is often described through more than one single term.
@ typeGroup	A group of attributes to describe the genre.
@ typeLabel	Free text field. This can be used to repeat the term name of the classification scheme term identified by a typeLink. Example: 'non-fiction/information'

@ typeLink	<p>A link to a term or only identify a classification scheme</p> <p>Reference data:</p> <p>ebu_ContentAlertSchemeCodeCS</p> <p>ebu_ContentGenreCS</p> <p>ebu_EditorialFormatCodeCS</p> <p>ebu_IntentionCodeCS</p> <p>tva_ContentCommercialCS</p> <p>tva_ContentAlertCS</p> <p>ebu_IntendedAudienceCodeCS</p> <p>Example: http://www.ebu.ch/metadata/cs/ebu_ContentGenreCS#3.1</p>
@ typeDefinition	An optional definition.
objectType	To define the type of real or abstract media object that the resource consists of or relates to.
@ typeGroup	A group of attribute to describe the objectType.
@ typeLabel	Free text field. This can also repeat the term name of the classification scheme term identified by a typeLink.
@ typeLink	<p>A link to a term or only identify a classification scheme</p> <p>Reference data: ebu_ObjectTypeCS</p> <p>Example: http://www.ebu.ch/metadata/cs/ebu_ObjectTypeCS#8 (scene)</p>
@ typeDefinition	<p>An optional definition.</p> <p>Example: 'A short description of the resource'</p>

Format

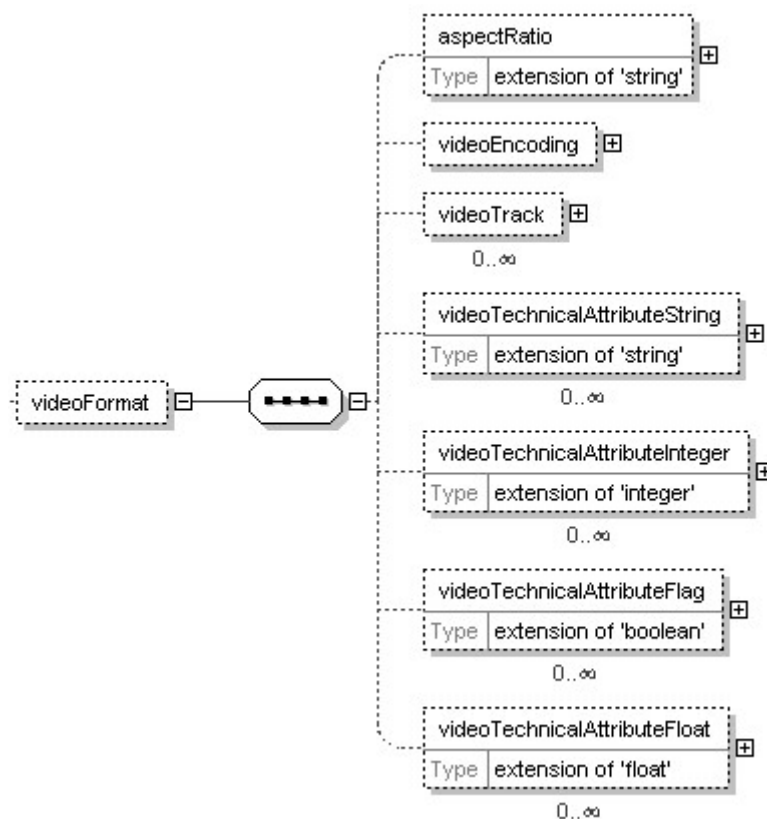
Name	Format
Cardinality	Unique per manifestation of a resource
Requirement	Optional
Definition	<p>The physical or digital manifestation of the resource. Use the descriptor Format to identify the format of a particular resource as it exists in its physical or digital form.</p> <p>Physical form = an actual physical form that occupies physical space, e.g. a tape.</p> <p>Digital form = a digital file residing on a server or hard drive.</p> <p>Format may be used to determine the software, hardware or other equipment needed to display or operate the resource.</p>
Format	ebucore:formatType
Schema	/ebucore:coreMetadataType/ebucore:format



dc:format	Free text to provide information on the format
width	The width of the image or picture. Used as numerator to define the aspect ratio for video content.
@unit	An attribute to specify the unit in which the width is expressed.
height	The height of the image or picture. Used as denominator to define the aspect ratio for video content.
@unit	An attribute to specify the unit in which the height is expressed.
medium	The material or physical carrier of the resource. If a file, it should be the carrier format.
@ typeGroup	To define the type of medium in which the resource is available.
@ typeLabel	Free text field. Example: D5 format HDTV digital television tape
@ typeLink	A link to a term or only identify a classification scheme Reference data: ebu_StorageMediaTypeCode (extension to IBTN, EBU Tech Doc 3279 - http://tech.ebu.ch/docs/tech/tech3279.pdf) Example: http://www.ebu.ch/metadata/cs/ebu_StorageMediaTypeCodeCS.xml#D5H
@ typeDefinition	An optional definition.
contentType	
@ typeGroup	To define the type of medium in which the resource is available.
@ typeLabel	Free text field. Example: video only
@ typeLink	A link to a term or only identify a classification scheme Reference data: MIME Type (http://www.iana.org/assignments/media-types/) ebu_MediaTypeCS Example: http://www.ebu.ch/metadata/cs/ebu_MediaTypeCS.xml#7.1.2
@ typeDefinition	An optional definition. Example: 'the resource contains only video footage'
videoFormat	See Video Format below
audioFormat	See Audio Format below
fileFormat	To provide information on the File Format in complement to stream encoding information
@ formatGroup	To define the file format of the resource.
@ formatLabel	Free text field. Example: mpeg TS
@ formatLink	A link to a term or only identify a classification scheme Reference data: ebu_FileFormatCS Example: http://www.ebu.ch/metadata/cs/ebu_FileFormatCS.xml#7.2.2
@ formatDefinition	An optional definition. Example: 'The file format or wrapper defined by ISO/IEC (so called MPEG Transport Stream)'
captioningFormat	To provide on the captioning format, if used. See Captioning Format below.
signingFormat	To provide on the signing format, if used. See Signing Format below
start	The beginning point for playback of a time-based media item, such as digital video or audio. Use in combination with Duration to identify a sequence or segment of a media item that has a fixed start time and end time. See Start & Duration below

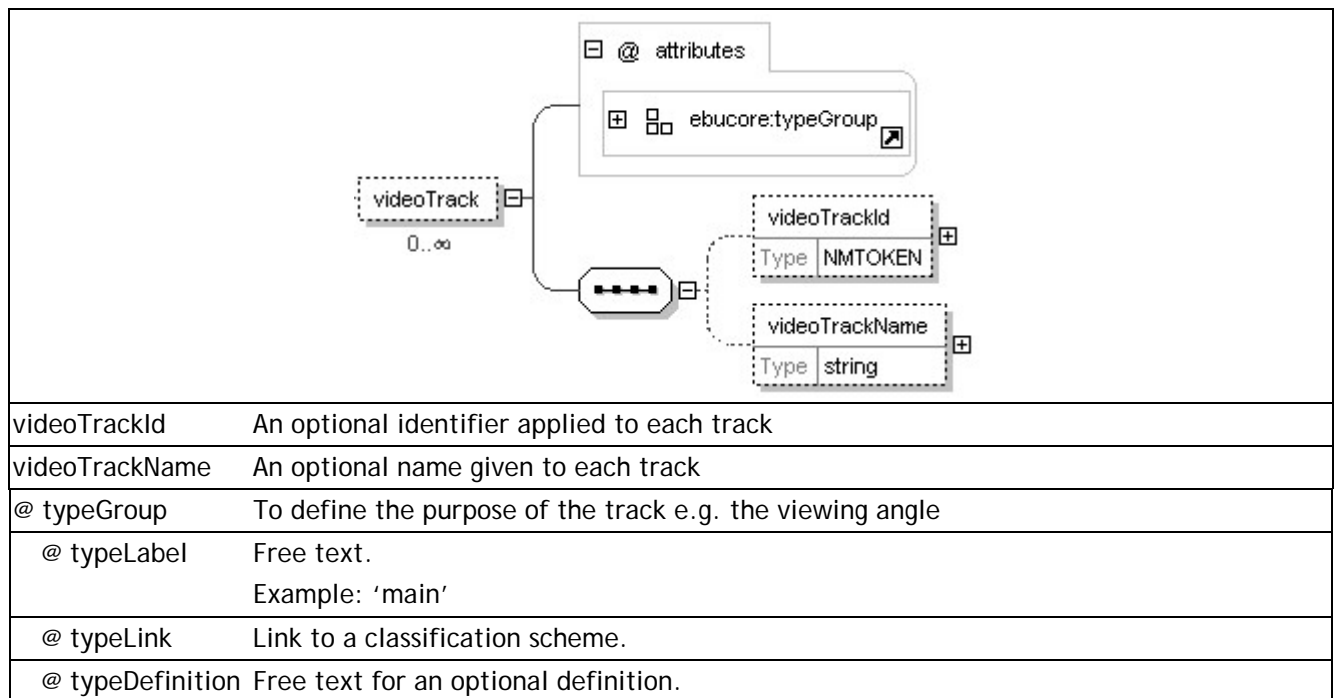
duration	The time duration/extent of the resource. See Start & Duration below
filesize	To indicate the storage requirements or file size of a digital resource. The file size is expressed in bytes.
locator	An "address for a resource". For an organisation or producer acting as caretaker for a media resource, Format Location may contain information about a specific e.g. tape name, shelf location for an asset, including an organisation's name, departmental name, shelf id. and contact information. The Format Location for a data file or web page may include a complete URI with a domain, path, filename or html URL. See http://tools.ietf.org/html/rfc3986 . Example: Archives Building A, Row J, Shelf 2", "d://playout/server/content.mpg", "http://www.ebu.ch/CorporateVideo.avi"
technicalAttributeString	To provide a user defined technical attribute. See Technical Attribute String below.
technicalAttributeInteger	To provide a user defined technical attribute. See Technical Attribute Integer below.
technicalAttributeFloat	To provide a user defined technical attribute. See Technical Attribute Float below.
technicalAttributeFlag	To provide a user defined technical attribute. See Technical Attribute Flag below.

Name	Format Video Format
Cardinality	unique per Format
Requirement	Optional
Definition	A description of video characteristics of the resource to provide technical information such as colour, greyscale or black and white colour schemes, frame rate, sampling rate, scanning format, encoding, track configuration.
Format	Complex type
Schema	/ebucore:coreMetadataType/ebucore:format/ebucore:videoFormat

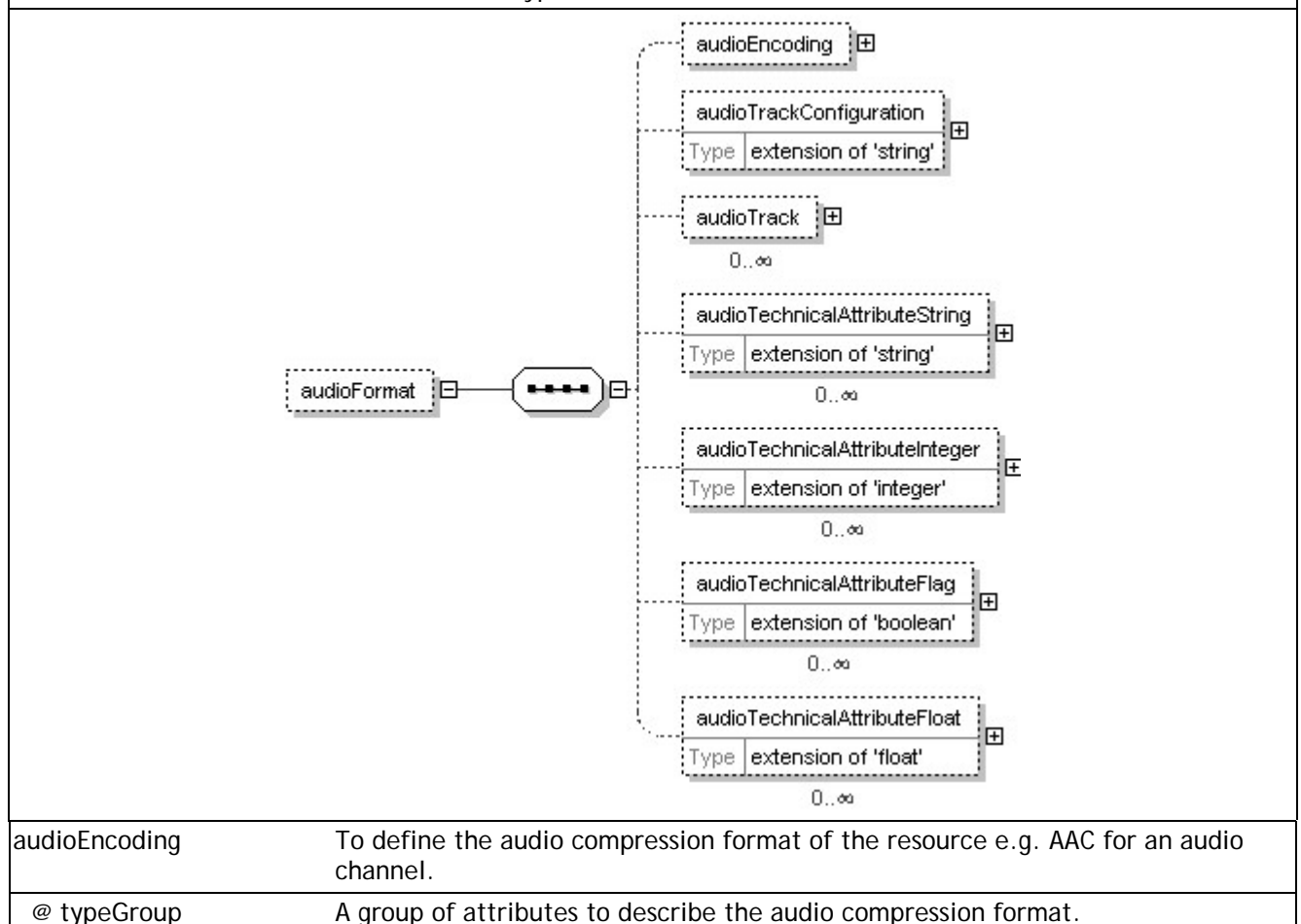


aspectRatio	The value of the ratio of the width by the height of the video expressed in the format defined by the formatGroup attributes
@ formatGroup	To define the type of format used to represent the aspect ratio and an example in the definition e.g. formatLabel='rational' and formatDefinition='e.g. 16 9 (number, space, number)'
@ formatLabel	Free text Example: 16:9
@ formatLink	Link to a classification scheme. Reference data: ebu_VisualAspectRatioCS Example: http://www.ebu.ch/metadata/cs/ebu_VisualAspectRatioCS.xml#3
@ formatDefinition	Free text for an optional definition. Example: 'the so-called "widescreen" picture format'
@ note	A note to add contextual additional information.
videoEncoding	Used to express the encoding parameters of the resource e.g. H264 for a video channel.
@ typeGroup	
@ typeLabel	Free text. Example: 'H264 Main Profile @ Level 1'
@ typeLink	Link to a classification scheme. Reference data: ebu_VideoCompressionCodeCS . Example: http://www.ebu.ch/metadata/cs/ebu_VideoCompressionCodeCS.xml#9.2.1
@ typeDefinition	Free text for an optional definition. Example: 'the video compression scheme H264, main profile, level1 as specified by ISO/IEC'
videoTrack	To describe the main features of video tracks such as in mutliview systems See VideoTrack below.
videoTechnicalAttribute String	To provide information on the Video Format (in addition to the video encoding format already provided in channel/encoding): colour scheme, scanning format, etc. Examples: 1/ value=50, Black&White, value=progressive, attribute label=scan type, etc To provide a user defined technical attribute. See Technical Attribute String below.
videoTechnicalAttribute Integer	To provide a user defined technical attribute. See Technical Attribute Integer below.
videoTechnicalAttribute Float	To provide a user defined technical attribute. See Technical Attribute Float below.
videoTechnicalAttribute Flag	To provide a user defined technical attribute. See Technical Attribute Flag below.

Name	Format Video Format Video Track
Cardinality	Multiple per Video Format per Channel.
Requirement	Optional
Definition	Used to describe the different video tracks of the resource by identifying their type, ID and name.
Format	Complex type
Schema	/ebucore:coreMetadataType/ebucore:format/ebucore:videoFormat/ebucore:videoTrack

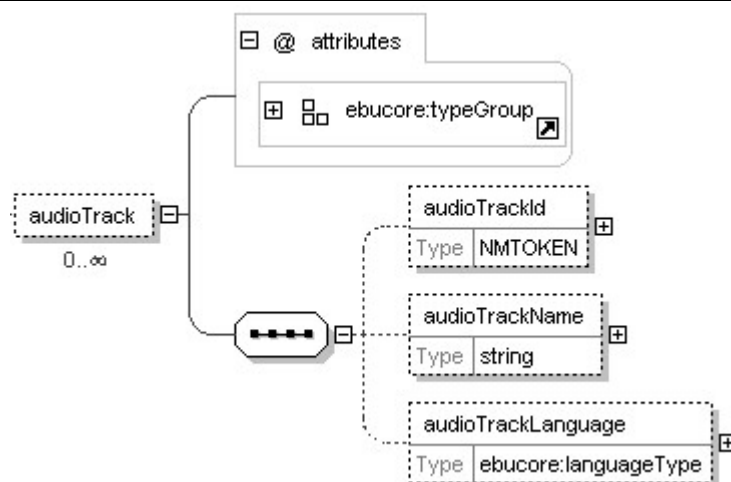


Name	Format Audio Format
Cardinality	Unique per Encoding
Requirement	Optional
Definition	To provide information on the Audio Format
Format	Complex type
Schema	/ebucore:coreMetadataType/ebucore:format/ebucore:audioFormat



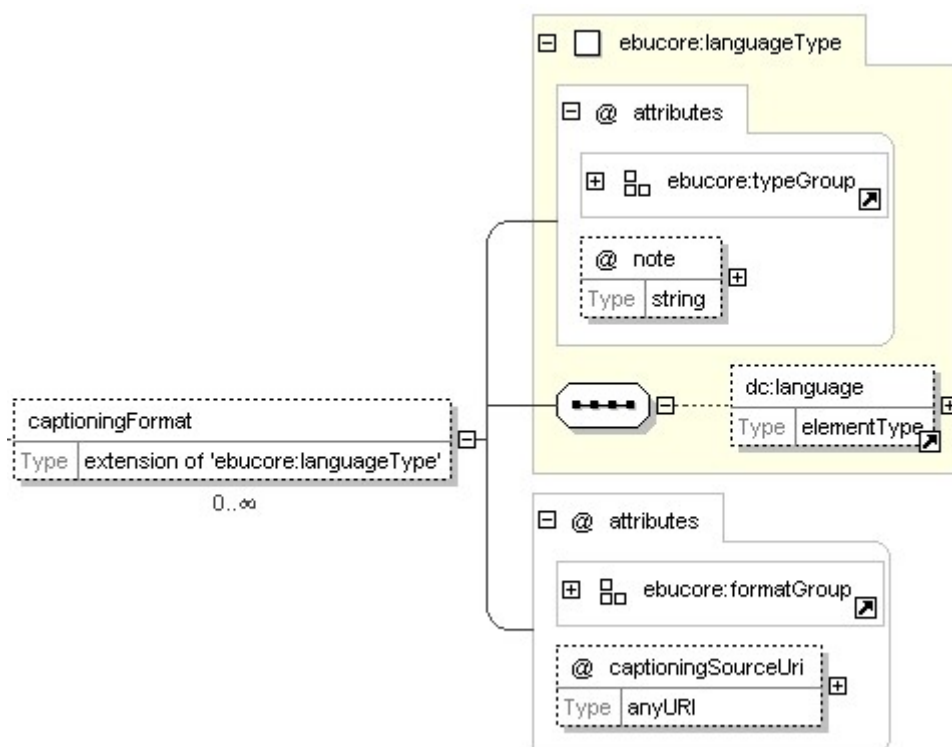
@ typeLabel	Free text. Example: 'MPEG-4 AAC Profile @ Level 1'
@ typeLink	Link to a classification scheme. Reference data: ebu_AudioCompressionCodeCS . Example: http://www.ebu.ch/metadata/cs/ebu_AudioCompressionCodeCS.xml#10.9.1
@ typeDefinition	Free text for an optional definition. Example: 'the audio compression scheme MPEG4, AAC profile, level1 as specified by ISO/IEC'
audioTrackConfiguration	To describe the audio track configuration. Used to express the arrangement or audio tracks e.g. 'stereo', '2+1', 'surround', 'surround (7+1)'
@ typeGroup	A group of attributes to describe the audio track configuration.
@ typeLabel	Free text. Example: 'surround'
@ typeLink	Link to a classification scheme. Reference data: ebu_AudioFormatCodeCS
@ typeDefinition	Free text for an optional definition.
audioTrack	To describe the track allocation e.g. in conformance with EBU R123 See Audio Track below
audioTechnicalAttribute String	To provide a user defined technical attribute. See Technical Attribute String below.
audioTechnicalAttribute Integer	To provide a user defined technical attribute. See Technical Attribute Integer below.
audioTechnicalAttribute Float	To provide a user defined technical attribute. See Technical Attribute Float below.
videoTechnicalAttribute Flag	To provide a user defined technical attribute. See Technical Attribute Flag below.

Name	Format Audio Format Audio Track
Cardinality	Multiple per Audio Format
Requirement	Optional
Definition	A description of some or all of the audio tracks part of the audio track configuration: track type, track ID, track name and language (for what purpose) used if relevant
Format	Complex type
Schema	/ebucore:coreMetadataType/ebucore:format/ebucore:audioFormat/ebucore:audioTrack



audioTrackId	An optional identifier applied to each track.
audioTrackName	An optional name given to each track.
audioTrackLanguage	The language used in the audio track and possible purpose refinement using languageType's typeGroup attributes.
@ typeGroup	To define the purpose of the track.
@ typeLabel	Free text. Reference data: ebu_AudioChannelPurposeCodeCS Example: 'dubbing'
@ typeLink	Link to a classification scheme.
@ typeDefinition	Free text for an optional definition.

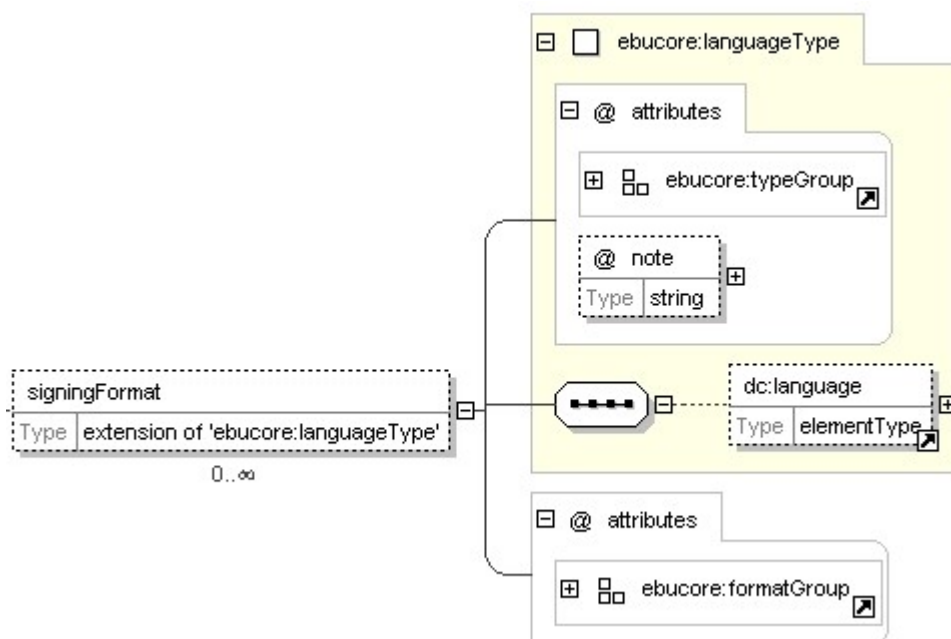
Name	Format Captioning Format
Cardinality	Multiple per format
Requirement	Optional
Definition	To provide information on the language, purpose and format of signing if used in the resource.
Format	Complex type
Schema	/ebucore:coreMetadataType/ebucore:format/ebucore:captioningFormat



dc:language	The language in which the caption is delivered. Example: en-UK
@ typeGroup	To define the purpose of the captioning information
@ typeLabel	Free text. Example: dubbing
@ typeLink	Link to a classification scheme.
@ typeDefinition	Free text for an optional definition.
@note	A note to add contextual additional information.
@ formatGroup	To define the format of captioning use
@ formatLabel	Example: close caption

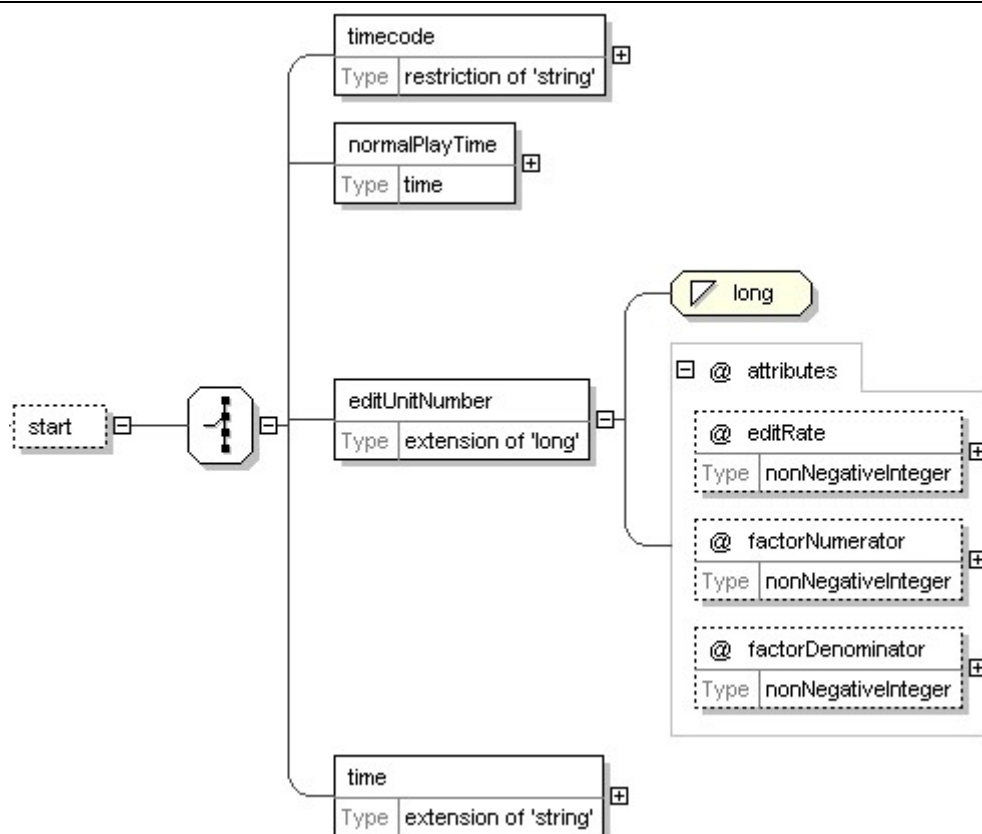
@ formatLink	Link to a classification scheme.
@ formatDefinition	Free text for an optional definition.
@captioningSourceUri	An optional URI from which the captioning material can be accessed

Name	Format Signing Format
Cardinality	Multiple per format
Requirement	Optional
Definition	To provide information on the language, purpose and format of signing if used in the resource.
Format	Complex type
Schema	/ebucore:coreMetadataType/ebucore:format/ebucore:signingFormat



dc:language	The language in which the signing is delivered. Example: en-UK
@ typeGroup	To define the purpose of the signing
@ typeLabel	Free text. Example: dubbing
@ typeLink	Link to a classification scheme.
@ typeDefinition	Free text for an optional definition.
@note	A note to add contextual additional information.
@ formatGroup	To define the format of captioning use
@ formatLabel	Free text Example: English sign language
@ formatLink	Link to a classification scheme. Reference data: ebu_SignLanguageCodeCS Example: ebu_SignLanguageCodeCS#sgn-en-GB
@ formatDefinition	Free text for an optional definition.

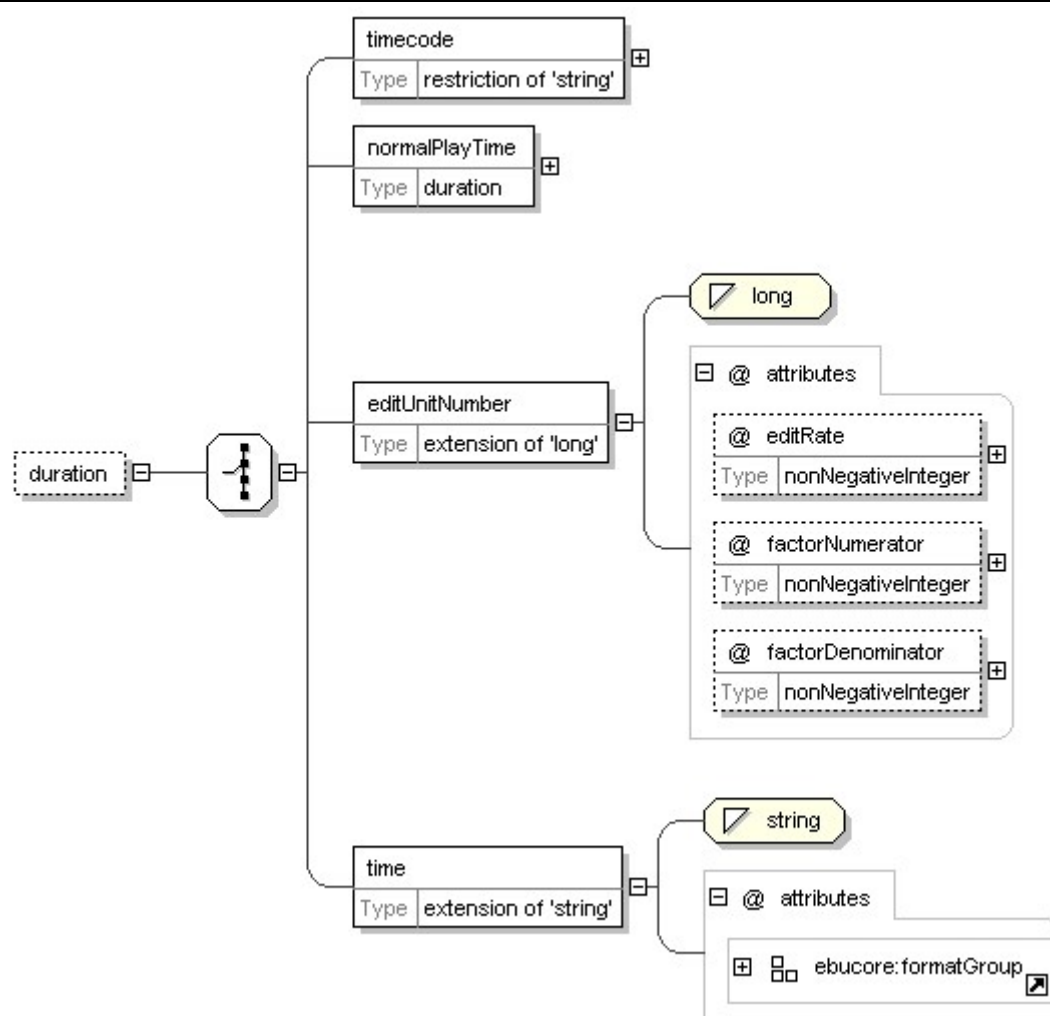
Name	Format Start
Cardinality	Unique per Medium
Requirement	Optional
Definition	<p>The beginning point for playback of a time-based resource, such as within a digital video or audio track. Used in combination with Duration to identify a sequence or segment of a resource that has a fixed start time and end time.</p> <p>The start time can be expressed in different time forms inc. a timecode, normal play time, a number of edit units or user custom time references.</p> <p>The Edit Unit is either the fraction of a second calculated as an inverse to the editRate (video frame rate or audio sample rate) of the resource, possibly corrected by a factor provided in the denominator and numerator attributes, or the smallest amount of time per unit (e.g. a second or millisecond).</p> $\text{editUnit} = 1 / (\text{editRate} * (\text{factorNumerator} / \text{factorDenominator}))$ <p>The start time is in this case an integer indicating a number of Edit Units, i.e. the corresponding editUnitNumber.</p> <p>Example: $\text{editUnit} = 1 / (60 * (1000 / 1001))$</p>
Format	Complex type
Schema	/ebucore:coreMetadataType/ebucore:format/ebucore:start



timecode	<p>A start time expressed in timecode using the ANSI/SMPTE 12M-1986 (Timecode) format</p> <p>Example: 01:23:10:24</p>
normalPlayTime	A start time using usual time representation: RFC 2326, ISO 8601
editUnitNumber	The number of edit units from the beginning of the material to the start time of the resource
@editRate	The base reference for the material, i.e. the frame rate for video or sample rate for audio
@factorNumerator	The numerator of the correction factor if applicable
@factorDenominator	The denominator of the correction factor if applicable

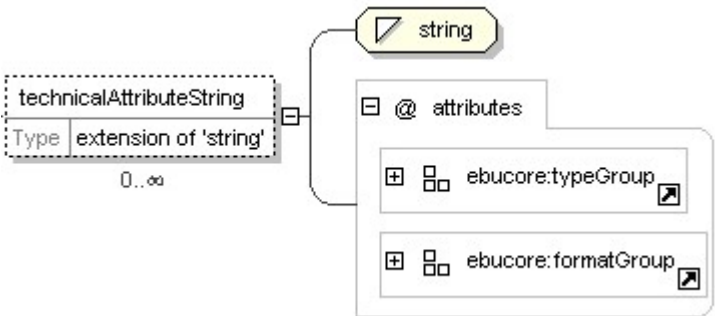
time	A start time expressed as a value of time, which format can be defined using the formatGroup attributes
@formatGroup	To define the format, possibly custom, in which the time will be expressed
@formatLabel	Free text to express a time format e.g. 'seconds', 'milliseconds', etc.
@formatLink	A link to a classification scheme
@formatDefinition	An option free text field for a definition

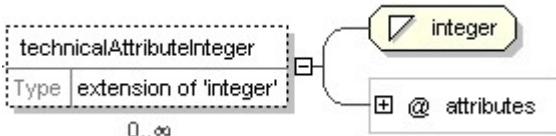
Name	Format Duration
Cardinality	Unique per physical realisation of an item
Requirement	Optional
Definition	Time-based duration (extent) of the resource. The duration can be expressed in different time forms inc. a timecode, normal play time, a number of edit units or user defined time references.
Format	Complex type
Schema	/ebucore:coreMetadataType/ebucore:format/ebucore:duration

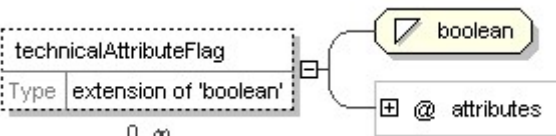


timecode	A duration expressed in timecode using the ANSI/SMPTE 12M-1986 (Timecode) format. Example: 00:00:10:24
normalPlayTime	A duration expressed using usual time representation: RFC 2326, ISO 8601. Example: PT1H31M25S
editUnitNumber	The number of edit units from the the start time to the end of the resource.
@editRate	The base reference for the material, i.e. the frame rate for video or sample rate for audio.

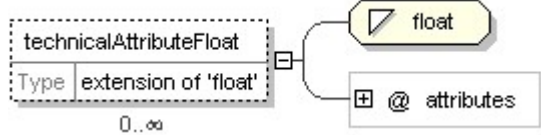
@factorNumerator	The numerator of the correction factor if applicable.
@factorDenominator	The denominator of the correction factor if applicable.
time	A duration expressed as a value of time, which format can be defined using the formatGroup attributes.
@formatGroup	To define the format, possibly custom, in which the time will be expressed.
@formatLabel	Free text to express a time format e.g. 'seconds', 'milliseconds', etc.
@formatLink	A link to a classification scheme.
@formatDefinition	An option free text field for a definition.

Name	Format Technical AttributeString
Cardinality	Multiple per Format or Video Format or Audio Format
Requirement	Optional
Definition	Allows users / implementers to define their own technical parameters as 'string' for which a format can be defined to restrict the string format.
Format	Complex type
Schema	/ebucore:coreMetadataType/ebucore:format/ebucore:TechnicalAttributeString /ebucore:coreMetadataType/ebucore:format/ebucore:videoFormat/ ebucore:videoTechnicalAttributeString /ebucore:coreMetadataType/ebucore:format/ebucore:audioFormat/ ebucore:audioTechnicalAttributeString
	
TechnicalAttributeString	A string containing the value of the string technical attribute, which format may be further specified using the formatGroup attributes. This applies to all technicalAttributeString inc. audio and video Example: 'B&W' or '50'
@ typeGroup	To define the attribute
@ typeLabel	Free text Example: 'colour mode' or 'frame rate'
@ typeLink	A link to a classification scheme Reference Data: ebu_ColourCodeCS ; ebu_VideoFrameRateCS Examples: http://www.ebu.ch/metadata/cs/ebu_ColourCodeCS.xml#4 http://www.ebu.ch/metadata/cs/ebu_VideoFrameRateCS.xml#3
@ typeDefinition	An optional definition
@ formatGroup	To define a structure for use in the string field, if required
@ formatLabel	Free text Example: 'free text'
@ formatLink	A link to a classification scheme
@ formatDefinition	An optional definition

Name	Format Video Format Video Technical Attribute Integer
Cardinality	Multiple per Video Format
Requirement	Optional
Definition	Allows users / implementers to define their own technical parameters as 'integer'.
Format	Complex type
Schema	/ebucore:coreMetadataType/ebucore:format/ebucore:TechnicalAttributeInteger /ebucore:coreMetadataType/ebucore:format/ebucore:videoFormat/ ebucore:videoTechnicalAttributeInteger /ebucore:coreMetadataType/ebucore:format/ebucore:audioFormat/ ebucore:audioTechnicalAttributeInteger
	
TechnicalAttribute Integer	A string containing the value of the string technical attribute, which format may be further specified using the formatGroup attributes. This applies to all technicalAttributeString inc. audio and video Example: 12000
@ typeGroup	To define the attribute
@ typeLabel	Free text Example: bitrate
@ typeLink	A link to a classification scheme
@ typeDefinition	Free text Example: 'the video bitrate in bytes'

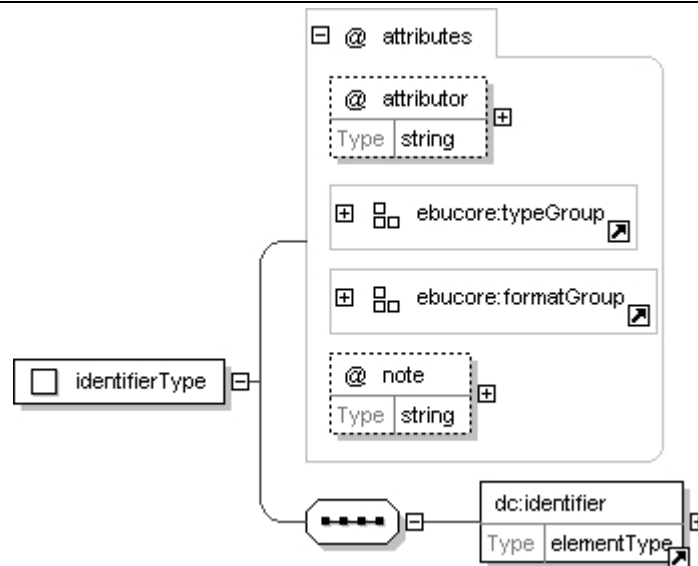
Name	Format Video Format Video Technical Attribute Flag
Cardinality	Multiple per Video Format
Requirement	Optional
Definition	Allows users / implementers to define their own technical parameters as 'boolean'.
Format	
Schema	/ebucore:coreMetadataType/ebucore:format/ebucore:TechnicalAttributeFlag /ebucore:coreMetadataType/ebucore:format/ebucore:videoFormat/ ebucore:videoTechnicalAttributeFlag /ebucore:coreMetadataType/ebucore:format/ebucore:audioFormat/ ebucore:audioTechnicalAttributeFlag
	
TechnicalAttribute Flag	A string containing the value of the string technical attribute, which format may be further specified using the formatGroup attributes. This applies to all technicalAttributeString inc. audio and video Example: 'true'
@ typeGroup	To define the type of Attribute
@ typeLabel	Free text Example: 'HD flag'

@ typeLink	A link to a classification scheme
@ typeDefinition	Free text Example: 'This resource is high definition'

Name	Format Video Format Video Technical Attribute Float
Cardinality	Multiple per Video Format
Requirement	Optional
Definition	Allows users / implementers to define their own technical parameters as 'float'.
Format	Complex type
Schema	/ebucore:coreMetadataType/ebucore:format/ebucore:TechnicalAttributeFloat /ebucore:coreMetadataType/ebucore:format/ebucore:videoFormat/ ebucore:videoTechnicalAttributeFloat /ebucore:coreMetadataType/ebucore:format/ebucore:audioFormat/ ebucore:audioTechnicalAttributeFloat
	
TechnicalAttribute Float	A string containing the value of the string technical attribute, which format may be further specified using the formatGroup attributes. This applies to all technicalAttributeString inc. audio and video Example: -1.2
@ typeGroup	To define the attribute
@ typeLabel	Free text Example: 'loudness level'
@ typeLink	A link to a classification scheme
@ typeDefinition	Free text Example: 'the value of the loudness level in dB'

Identifier

Name	Identifier
Cardinality	Multiple
Requirement	Mandatory
Definition	<p>A unique, unambiguous reference or identifier for a resource within a given context. Best practice is to identify the resource (whether analogue or digital) by means of a string or number corresponding to an established or formal identification system if one exists. Otherwise, use an identification method that is in use within your agency, station, production company, office, or institution.</p> <p>It is also possible to enter more than one, different but still unique, identifier for the same resource.</p>
Format	ebucore:identifierType
Schema	/ebucore:coreMetadataType/ebucore:identifier/dc:identifier



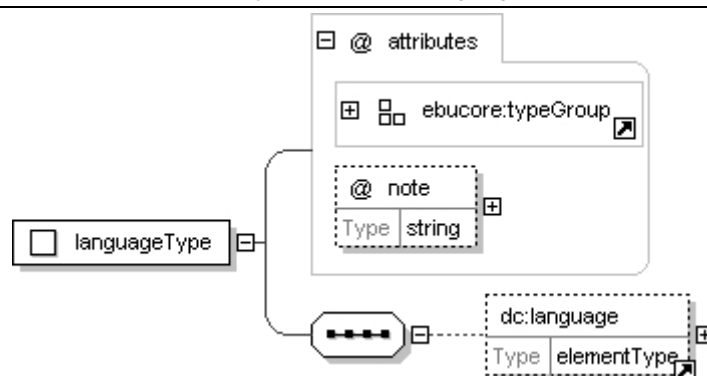
dc:identifier	Free text to provide an identifier. Example: 06.0A.2B.34.01.01.01.01
@attributor	To identify the source of attribution of the identifier
@ typeGroup	Used to define the type of Identifier used e.g. 'main' or 'secondary'.
@ typeLabel	Free text Example: 'main'
@ typeLink	A link to a classification scheme
@ typeDefinition	Free text Example: 'main identifier attributed to the resource'
@ formatGroup	Use to define the format and possibly syntax of the identifier. Used in combination with the resource Identifier. It can denote the agency or institution which specified or assigned it.
@formatLabel	Free text Example: SMPTE Unique Material Identifier (UMID)
@ formatLink	A link to a classification scheme Reference data: ebu_IdentifierTypeCodeCS , URI - Unique Resource Identifier: http://tools.ietf.org/html/rfc3986 Example: http://www.ebu.ch/metadata/cs/ebu_IdentifierTypeCodeCS.xml#1.1
@ formatDefinition	Free text Example: 'a unique identifier as defined by SMPTE 330M'

Source

Name	Source
Cardinality	Multiple
Requirement	Optional
Definition	<p>Reference to the resource (s) from which the current resource is derived in whole or in part.</p> <p>If no label or number is available, the title and/or the statement of responsibility etc. of the digitized recording is recorded here. For a digitized radio programme the production number is normally given here.</p> <p>The Recommended best practice is to use a unique identifier to identify the physical source that has been used to create the digital resource. In the case of a digitized analogue recording, it is the recording used for digitization which is the source. For commercial recordings the label and number is normally given here.</p> <p>Example: Eurovision feed 2007-07-16T19:20:30.45+01:00</p>
Format	elementType
Schema	/ebucore:coreMetadataType/dc:source

Language

Name	Language
Cardinality	Multiple
Requirement	Optional
Definition	<p>Identifies languages and their use in the intellectual content of the resource.</p> <p>Recommended best practice for the values of the Language element is defined by RFC 1766, which includes a two-letter Language Code (taken from the ISO Standard 639), followed optionally, by a two-letter Country Code (taken from the ISO Standard 3166). For example, 'en' for English, 'fr' for French, or 'en-uk' for English used in the United Kingdom.</p> <p>More contextual information can be provided using the "note" attribute.</p>
Format	languageType
Schema	/ebucore:coreMetadataType/ebucore:language

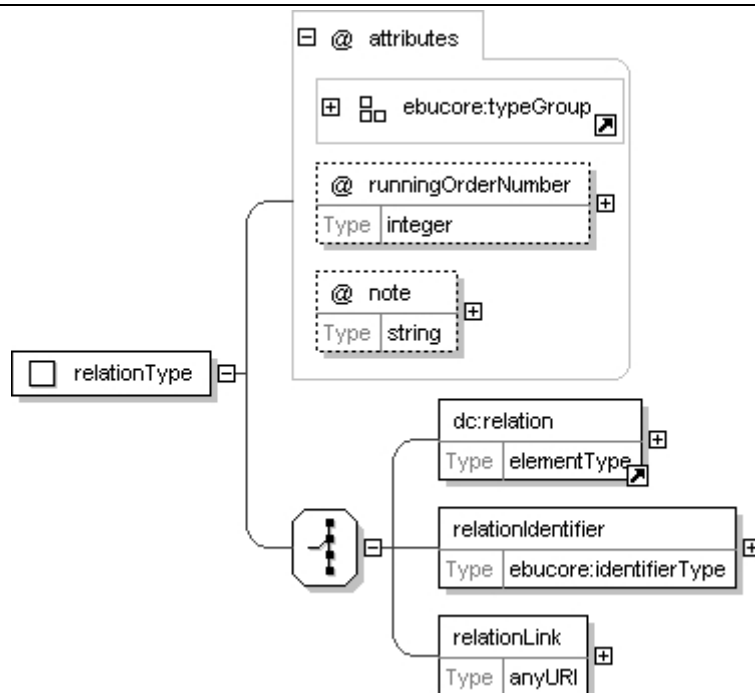


dc:language	<p>Use to identify the language.</p> <p>Reference data: ebu Iso639 1LanguageCodeCS, ebu Iso639 2LanguageCodeCS, ebu Iso3166CountryCodeCS</p>
@ typeGroup	Used to identify the purpose of use of the language.
@ typeLabel	<p>Free text</p> <p>Example: 'main original language'</p>
@ typeLink	<p>A link to a classification scheme</p> <p>Reference data: ebu LanguagePurposeCodeCS</p> <p>Example: http://www.ebu.ch/metadata/cs/ebu_LanguagePurposeCodeCS.xml#1.1</p>

@ typeDefinition	Free text
	Example: 'the main language as originally created/captured for the resource'
@note	A note for additional contextual information.

Relation

Name	Relation
Cardinality	Multiple per relation
Requirement	Optional
Definition	<p>Recommended best practice is to reference the resource (to which the current resource under description is related) by means of a string or number conforming to a formal identification system.</p> <p>Relation is used to show the relation in content to another resource. For example, "IsPartOf" is used to show the relation between a part of a radio programme and the whole programme or between a track and a record album. A resource can be identified by its title, or an identifier (possibly a URI). The related item has its own separate Metadata record. Relation is used to provide a name, an identification number or ID, or a locator where the related item can be found.</p>
Format	relationType
Schema	/ebucore:coreMetadataType/ebucore:relation

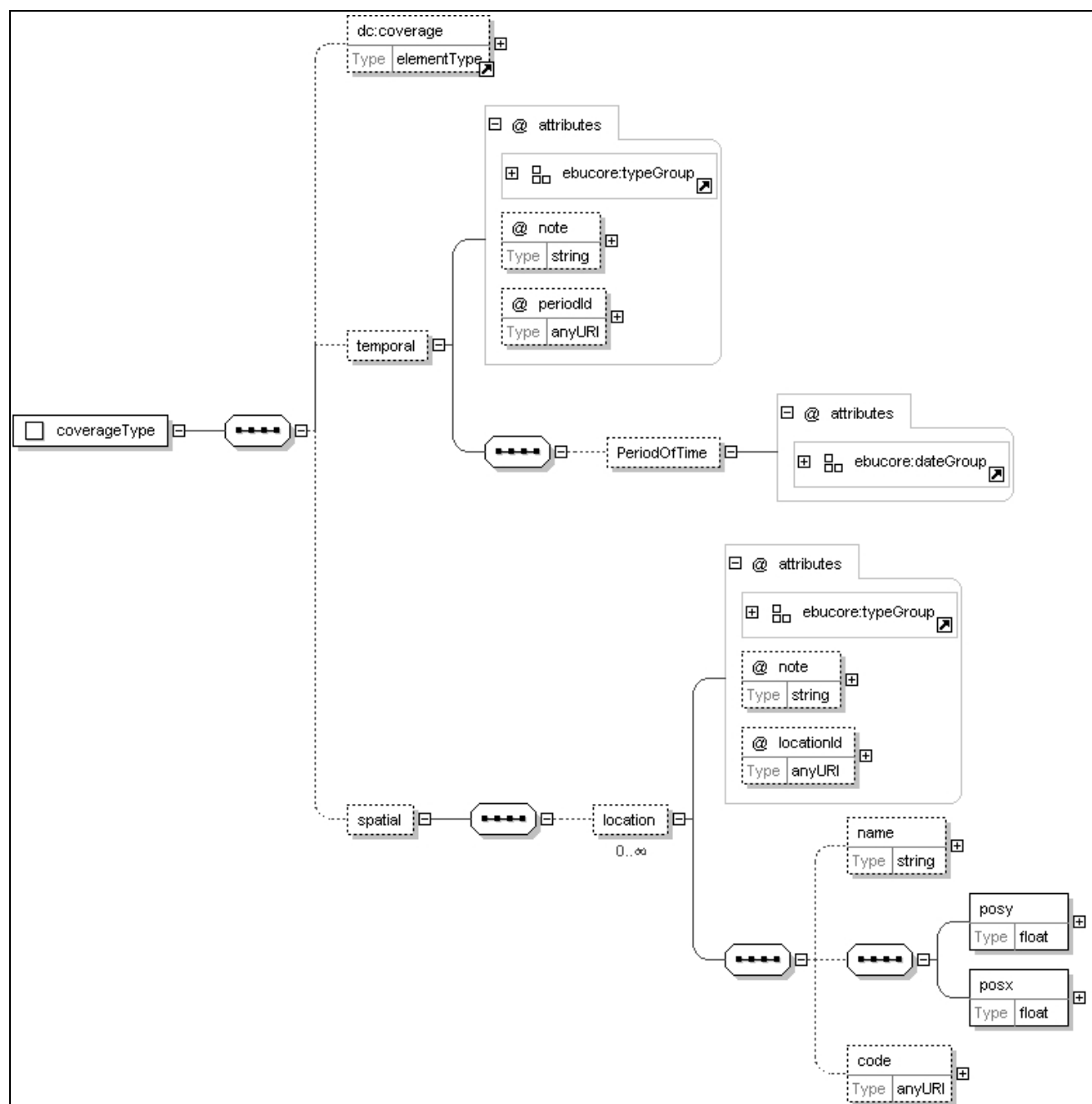


dc:relation	Free text to provide the identification of the resource linked by the relation
relationIdentifier	See identifierType Example : 06.0A.2B.34.01.01.01,
relationLink	A URI to identify a link to a resource Example: http://www.etf.zk/EbuCoreVideo.mpg

@ typeGroup	Used to identify the nature of the relationship to another resource, e.g. identifies ways in which the resource is related by intellectual content to some other resource. The relation type shall be used if none of the following predefined relations can be used: isVersionOf / hasVersion isReplacedBy / replaces isRequiredBy / requires isPartOf / hasPart isReferencedBy / references isFormatOf / hasFormat
@ typeLabel	Free text Example: 'IsTrailerOf'
@ typeLink	A link to a classification scheme Reference data: tva_HowRelatedCS , ebu_HowrelatedCS Example: http://www.ebu.ch/metadata/cs/tva_HowRelatedCS.xml#1.2
@ typeDefinition	Free text Example: 'the current resource is a trailer of the resource identified by one of the relation elements: dc:relation or relationidentifier or relationLink'
@runningOrder	If set (true), optional field to indicate that the relation is hierarchical and that there is an order in which content is chronologically related, which would be described in a Description element.
@note	A note for additional contextual information

Coverage

Name	Coverage
Cardinality	Unique
Requirement	Optional
Definition	Coverage is used to show various time and place aspects of the subject of the content. Coverage will typically include spatial location (a place name or geographic coordinates), temporal period (a period label, date, or date range) or jurisdiction (such as a named administrative entity). Recommended best practice is to select a value from a controlled vocabulary (for example, the Thesaurus of Geographic Names) and that, where appropriate, named places or time periods be used in preference to numeric identifiers such as sets of coordinates or date ranges.
Format	coverageType
Schema	/ebucore:coreMetadataType/ebucore:coverage

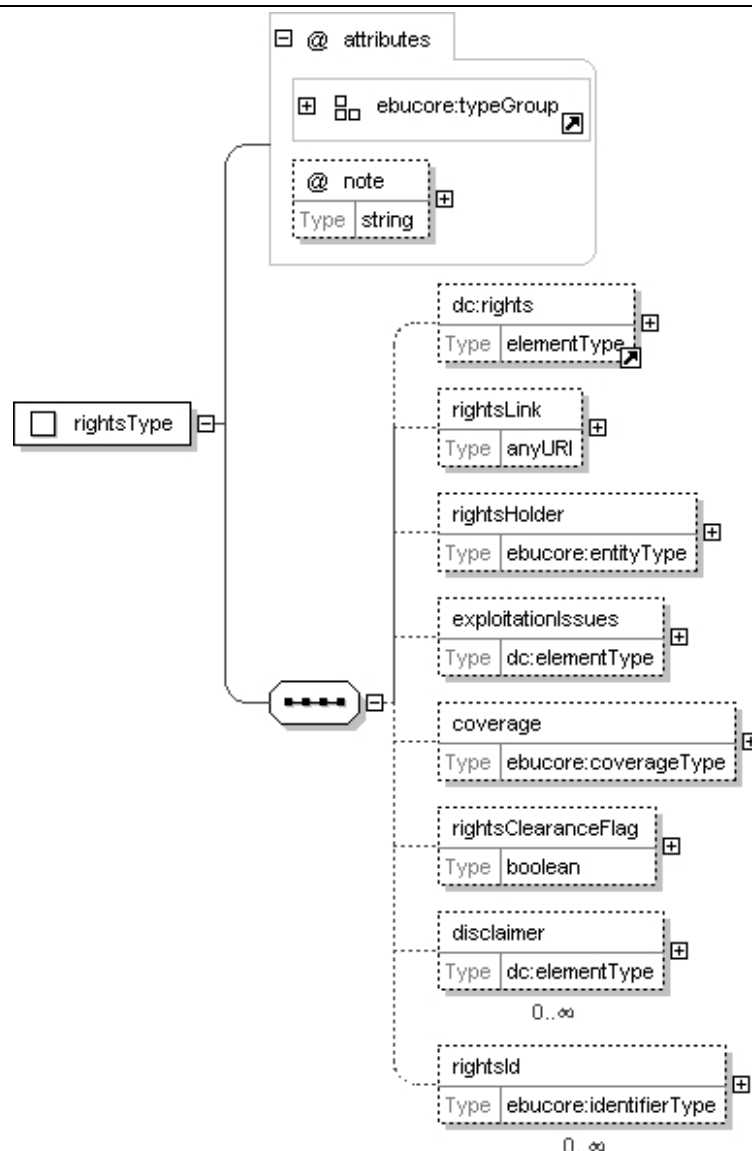


dc:coverage	Free text to provide temporal or spatial / geographical information about what is shown in the resource
temporal	Temporal characteristics of the content of the resource. To indicate e.g. dates, times or periods specific to the resource in complement to Description.
periodOfTime	The period of time depicted in the resource.
@ dateGroup	See ebucore:dateGroup.
@ typeGroup	To precise the type of temporal information provided.
@ typeLabel	Free text Example: 'Fictional action date'
@ typeLink	A link to a classification scheme
@ typeDefinition	Free text Example: 'the date at which the event presented is supposed to take place'
@note	A note to provide additional contextual information
@periodId	An attribute to identify the time period.

spatial	Spatial characteristics of the content of the resource.
location	To indicate e.g. specific place and location aspects of the resource in complement to Description.
name	The name of the place or location Reference data: Thesaurus of Geographic Names, ebu:cityCodeCS Example: 'London'
posx	The longitude of the place or location Example: -015
posy	The latitude of the place or location Example: 51.49
code	The code under the which the place or location may be known / referenced Reference data: ebu:UNTerritoryCodeCS , ebu:Iso3166CountryCodeCS . Example: 'W1AA 4WW'
@ typeGroup	To precise the type of place and location information provided.
@ typeLabel	Free text Example: 'city'
@ typeLink	A link to a classification scheme
@ typeDefinition	Free text Example: 'to provide a name of a city'
@note	A note to provide additional contextual information
@locationId	An attribute to identify the place or location.

Rights

Name	Rights
Cardinality	Multiple
Requirement	Optional
Definition	<p>An all-purpose field to identify information (rights management statement or reference to a service providing such information e.g. via a URL) about copyright, intellectual property rights or other property rights held in and over a resource, stating whether access is open or restricted in some way. If dates, times, territories and availability periods are associated with a right, they should be included.</p> <p>If the Rights element is absent, no assumptions can be made about the status of these and other rights with respect to the resource.</p>
Format	ebucore:rightstype
Schema	/ebucore:coreMetadataType/ebucore:rights



dc:rights	An element to express any form of rights related matters.
@typeGroup	Used to define the type of rights expressed.
@typeLabel	Free text definition of the type or rights expressed in dc:rights. Example: 'Licence'
@typeLink	A link to a term or only identify a classification scheme. Reference data: ebu_RightsTypeCodeCS

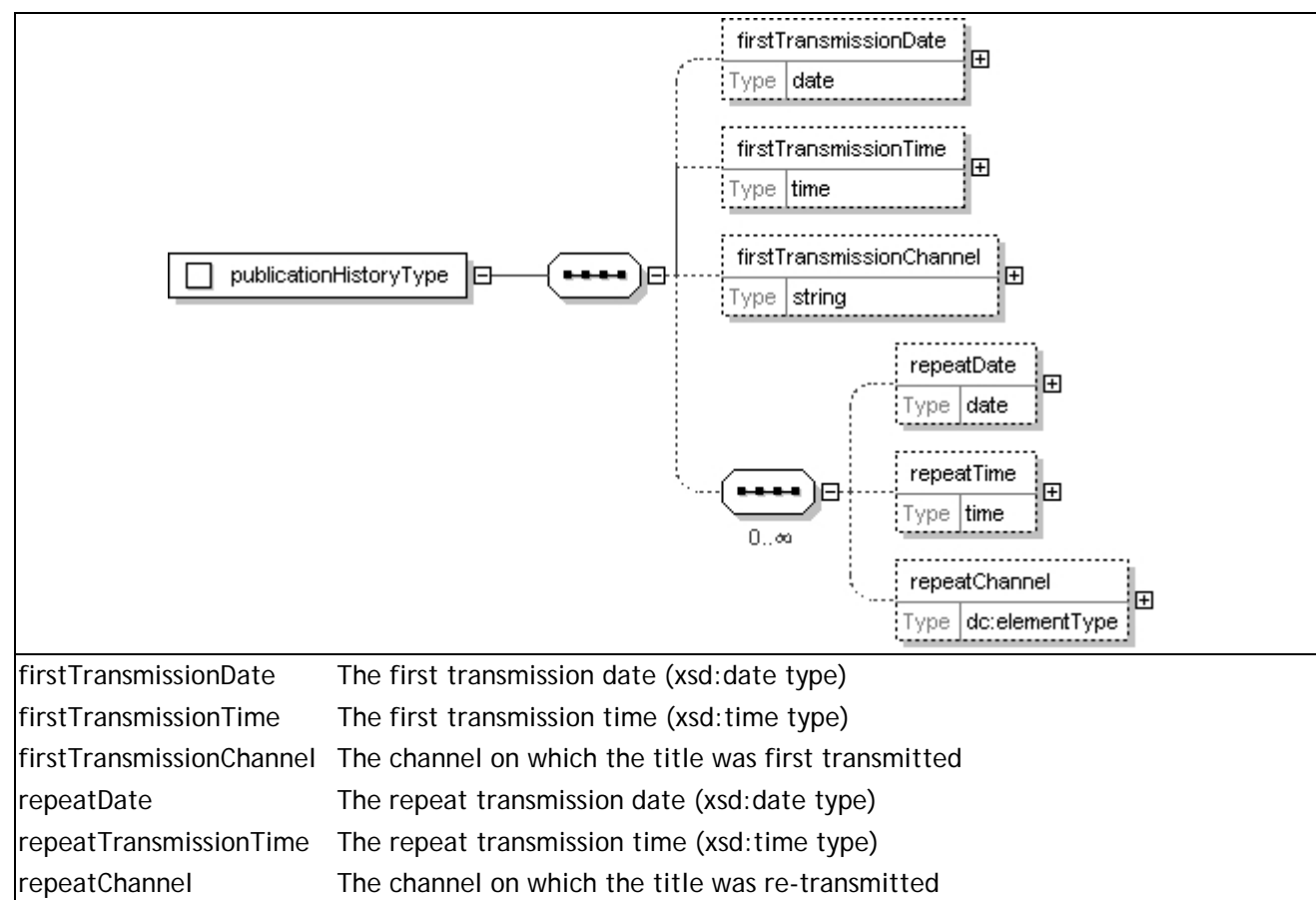
@typeDefinition	A optional definition of the type. Example: 'the terms and conditions under which the resource can be used'
@note	A note for additional contextual information.
rightsHolder	To identify the person or organisation holding or managing the rights related to the resource. See ebucore:entityType
exploitationIssues	Use to state any other restrictions, such as non-rights ones, e.g. legal. State by media, territory, scope (restriction on whole item or extracts) and possibly language. The presence of this information can be used by asset management system implementing traffic lights like mechanism to signal that content may be subject to particular restrictions to be clarified before exploitation.
coverage	To express temporal and spatial domains of application of the rights. Specifies e.g. a specific start date, end date or period for the availability of the item or the date from which the rights or exploitation issues apply. It may refer to start dates for the availability of an item that is used within a particular geographical area e.g. broadcast locally, regionally, nationally or internationally, or for web-based distribution. A specific time may also be associated with the date. See ebucore:coverageType
rightsClearanceFlag	A flag ('true' or 'false') to signal is rights have been cleared and the resource can be exploited or not.
disclaimer	An element to express a disclaimer on liabilities.
rightsId	A identifier attributed by a third party authority such as after exploitation clearance. see ebucore:identifierType

Version

Name	Version
Cardinality	Unique
Requirement	Optional
Definition	Expresses the version type of the resource. Example: 'UK version', 'home video version'
Format	Free text possibly in different languages identified by element type's 'lang' attribute.
Schema	/ebucore:coreMetadataType/ebucore:version

Publication History

Name	Publication History
Cardinality	Unique
Requirement	Optional
Definition	To provide information about the publication history.
Schema	/ebucore:coreMetadataType/ebucore:publicationHistory

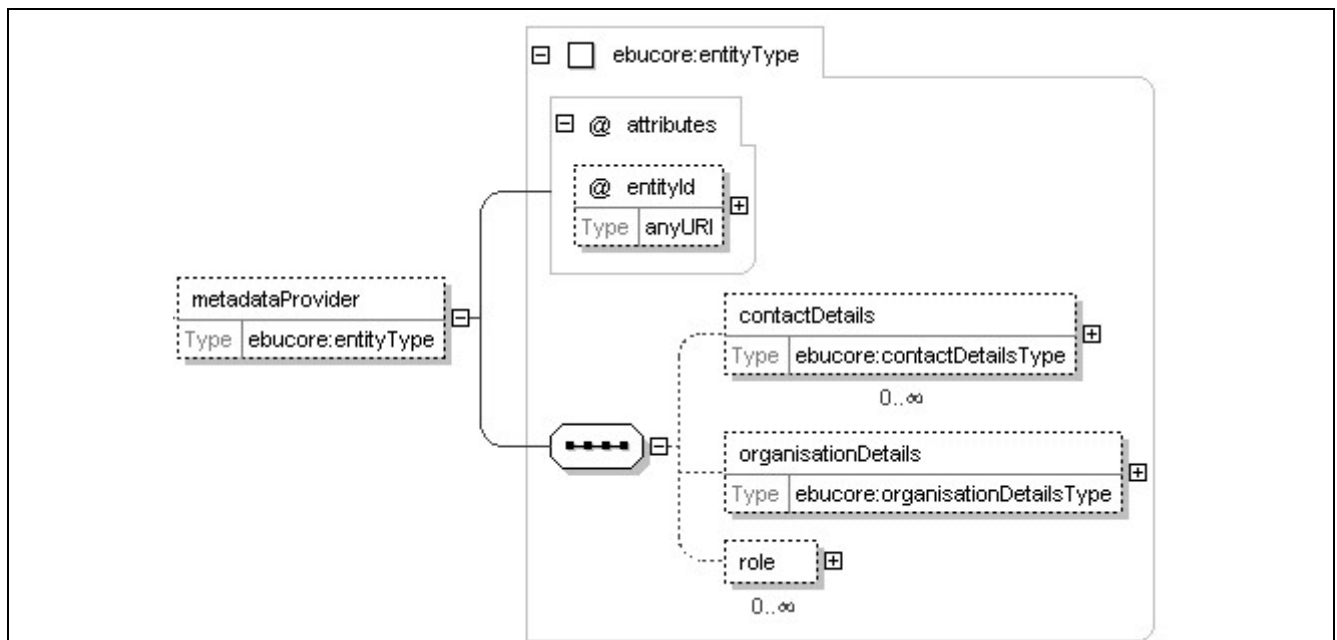


Part

Name	Part
Cardinality	Multiple
Requirement	Optional
Definition	To identify parts/segments/fragments within the resource.
Format	ebucore:coreMetadataType
Schema	/ebucore:coreMetadataType/ebucore:part

Metadata Provider

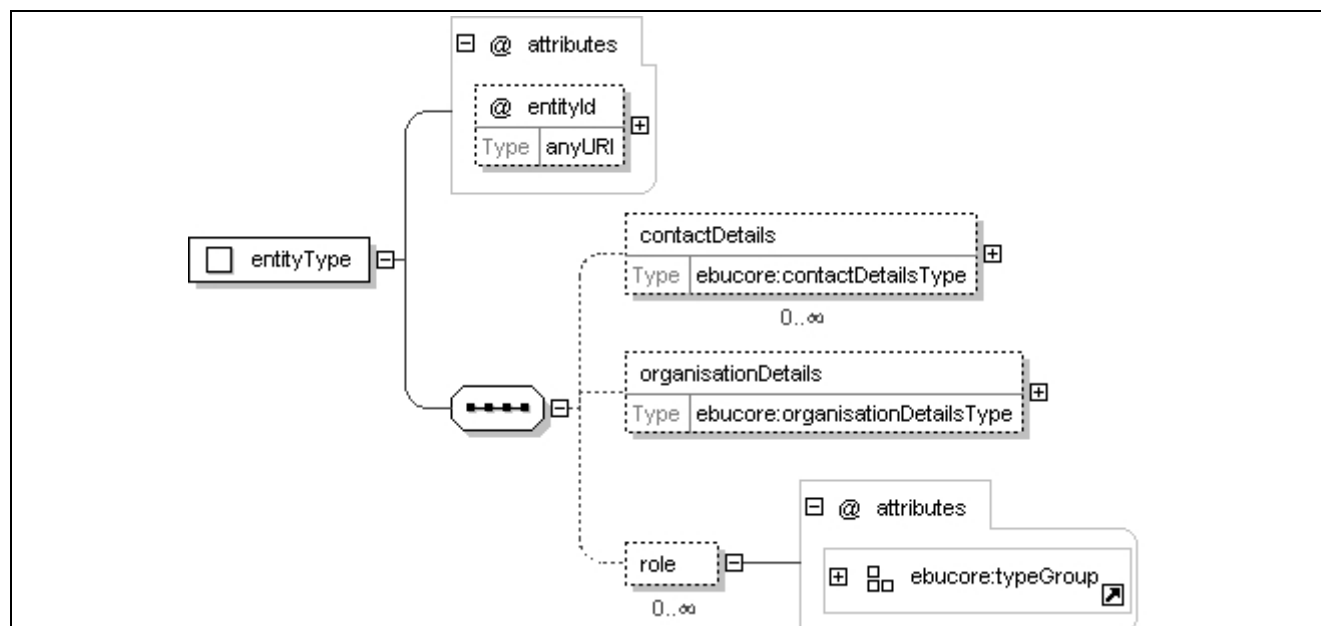
Name	Metadata Provider
Cardinality	Unique per Metadata instance
Requirement	Required
Definition	Identifies the Metadata provider, i.e. a person or organisation. The organisation Id or name would provide the archive ID or name required for OAI Metadata harvesting operation.
Format	ebucore:entityType
Schema	/ebucore:coreMetadataType/ebucore:metadataProvider



@entityId	An identifier to uniquely identify a Metadata provider
contactDetails	An element to provide contact details. See ebucore:entityType
organisationDetails	An element to provide organisation details. See ebucore:entityType
role	An element to refine the role of the Metadata provider

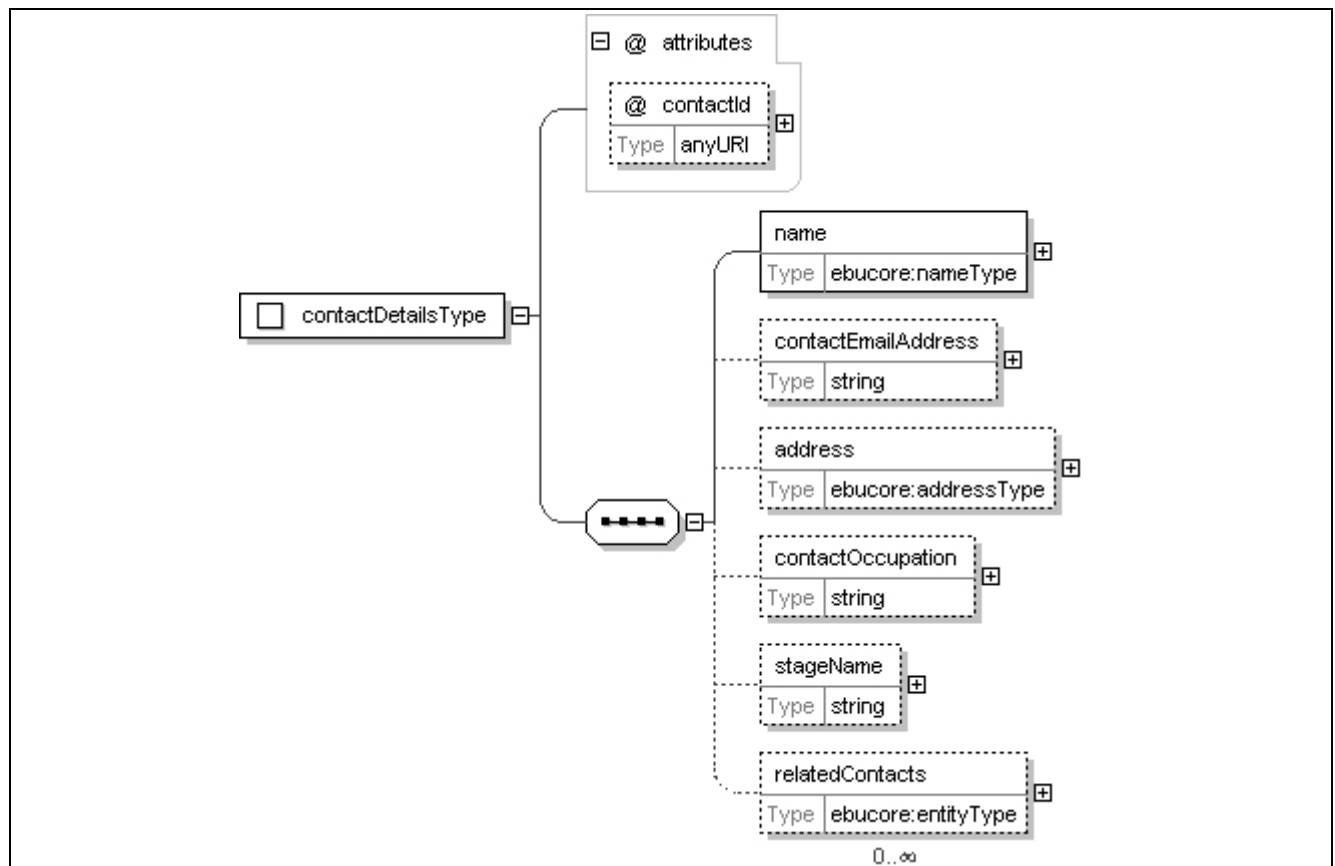
Entity (Contact Details, Organisation Details, Role), Note

Name	Entity
Cardinality	Unique
Requirement	Optional
Definition	Provides details information about a person, a group of persons, or organisation
Format	ebucore:entityType
Schema	/ebucore:coreMetadataType/ebucore:creator/ebucore:entity /ebucore:coreMetadataType/ebucore:contributor/ebucore:entity /ebucore:coreMetadataType/ebucore:publisher/ebucore:entity /ebucore:coreMetadataType/ebucore:rights//ebucore:rightsOwner/ebucore:entity /ebucore:coreMetadataType/ebucore:rights//ebucore:metadataProvider/ebucore:entity



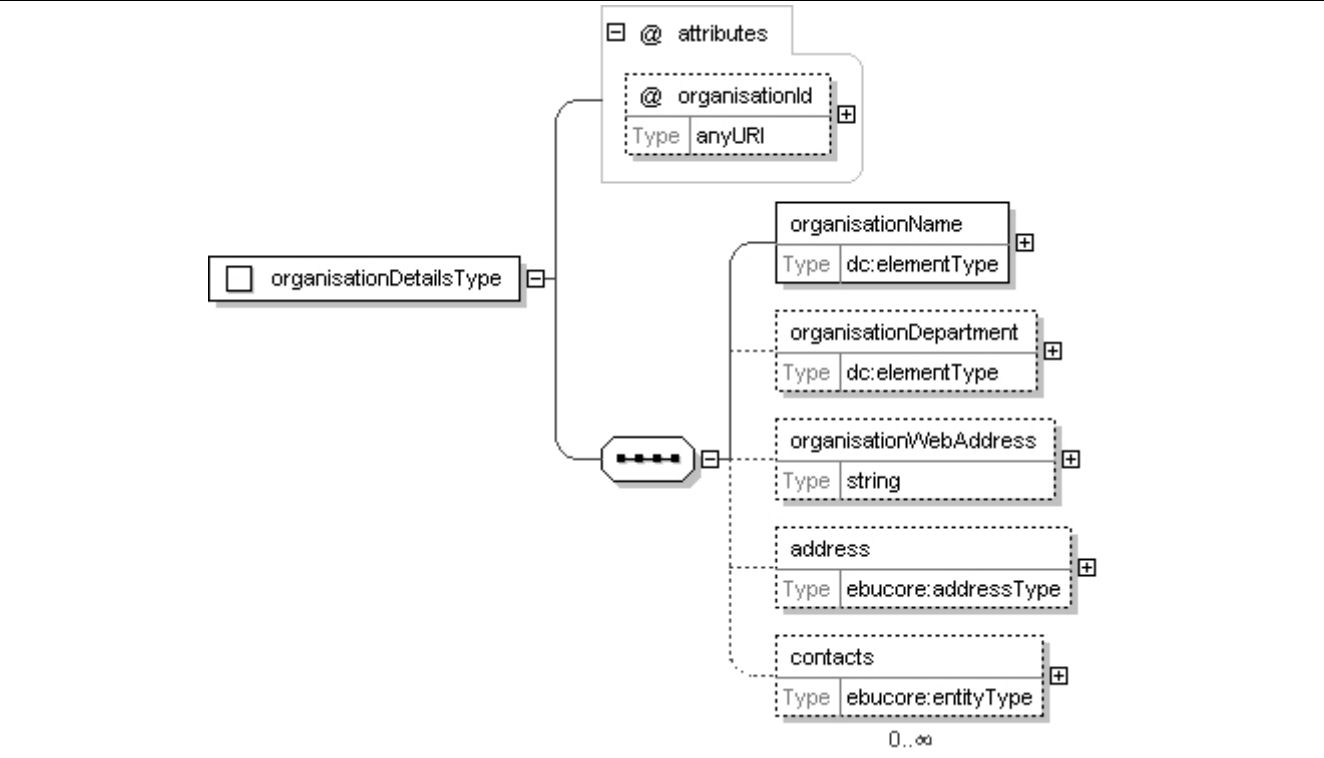
@entityId	An attribute to uniquely identify the person or organisation.
contactDetails	See contactDetailsType
organisationDetails	See organisationDetailsType
role	To define or refine the role of the entity, person or organisation
@typeGroup	Used to define the type of role.
@typeLabel	Free text definition of the type or rights expressed in dc:rights. Example: 'Director'
@typeLink	A link to a term or only identify a classification scheme. Reference data: ebu_RoleCodeCS Example: http://www.ebu.ch/metadata/cs/ebu_RoleCodeCS.xml#20.16
@typeDefinition	A optional definition of the type. Example: 'the terms and conditions under which the resource can be used'

Name	Contact Details
Cardinality	Multiple per Entity
Requirement	Optional
Definition	Minimum information providing means to further identify and contact a person.
Format	ebucore:contactDetailsType
Schema	../ebucore:entity/contactDetails



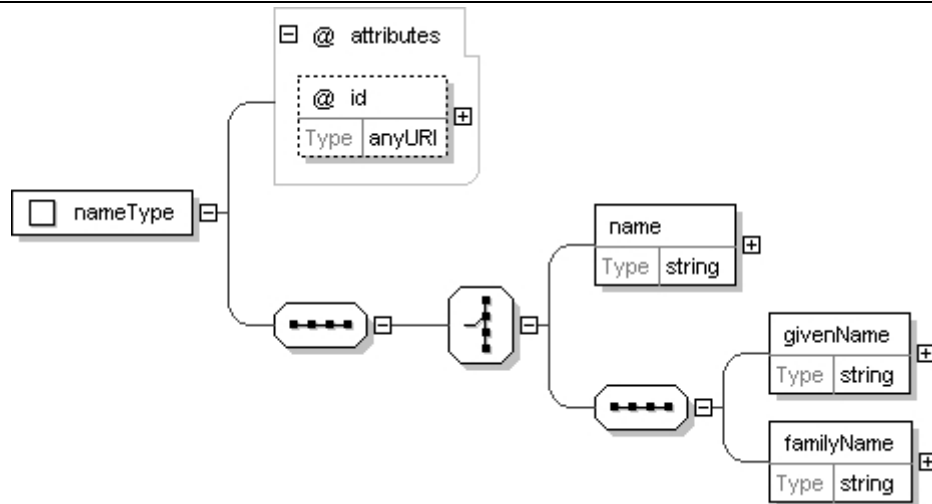
name	To provide the name of a person. See ebucore:nametype
contactEmailAddress	The email address at which the contact can be reached
address	To provide the address of a person. See ebucore:addressType
contactOccupation	To provide information on the contact job and position
stageName	To record the name that the person has been attributed on stage Examples: 'character name' or 'interviewer'
relatedContacts	To provide a list of contacts through which the person can alternatively be contacted. See ebucore:entityType.
@contactId	An attribute to uniquely identify a contact.

Name	Organisation Details
Cardinality	Unique per Entity
Requirement	Optional
Definition	Minimum information providing means to further identify and contact an organisation.
Format	ebucore:organisationDetailsType
Schema	../ebucore:entity/organisationDetails



organisationName	To provide the name of an organisation.
organisationDepartment	To identify a specific department within an organisation
organisationWebAddress	The address of the organisation website
address	To provide the address of a person. See ebucore:addressType
contactOccupation	To provide information on the contact job and position
contacts	To provide a list of contacts/persons through which the organisation can be contacted. See ebucore:entityType.
@organisationId	An attribute to uniquely identify an organisation.

Name	Name
Cardinality	Unique per Entity
Requirement	Optional
Definition	The name of a contact/person. The choice is offered to provide a compound name or separate the name into given and family names.
Format	ebucore:nameType
Schema	../ebucore:entity/ebucore:personDetails/ebucore:name



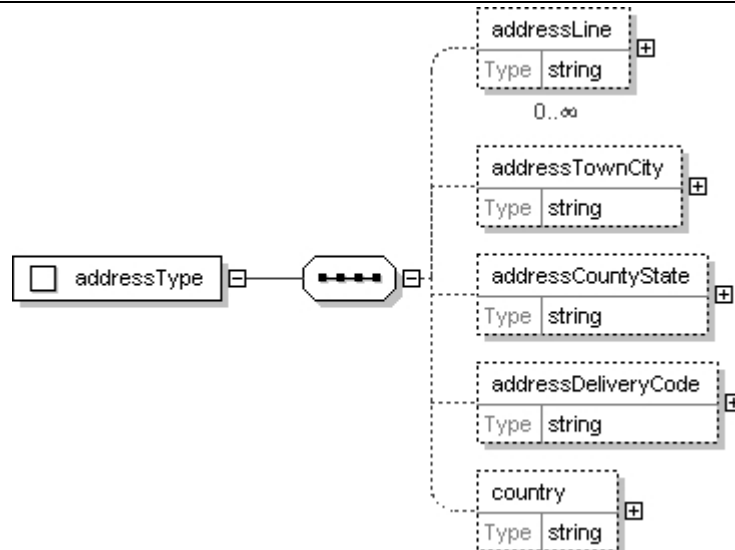
@id An attribute to uniquely identify a person.

Name The compound name of a person.

givenName The given name of a person.

familyName the family name of a person.

Name	Address
Cardinality	Unique per Entity
Requirement	Optional
Definition	the address of a contact/person or organisation
Format	ebucore:nameType
Schema	../ebucore:entity/ebucore:personDetails/ebucore:name



adressLine One or more address lines.

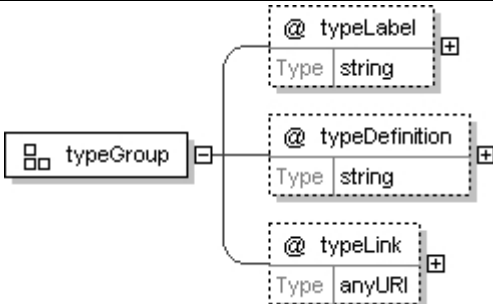
adressTownCity The name of the city/town of the address.

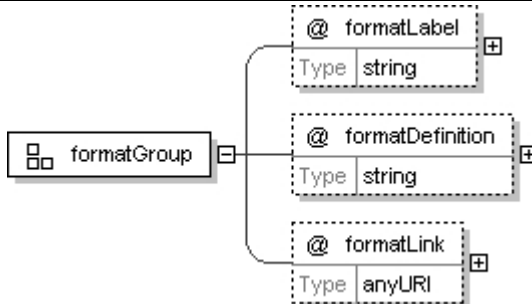
addressCountyState The optional name of the county / state of the address.

adressDeliveryCode the delivery code of the address.

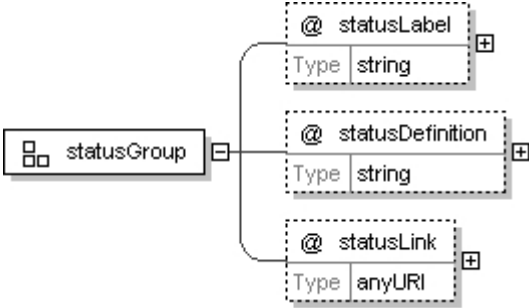
Country The country of residence.

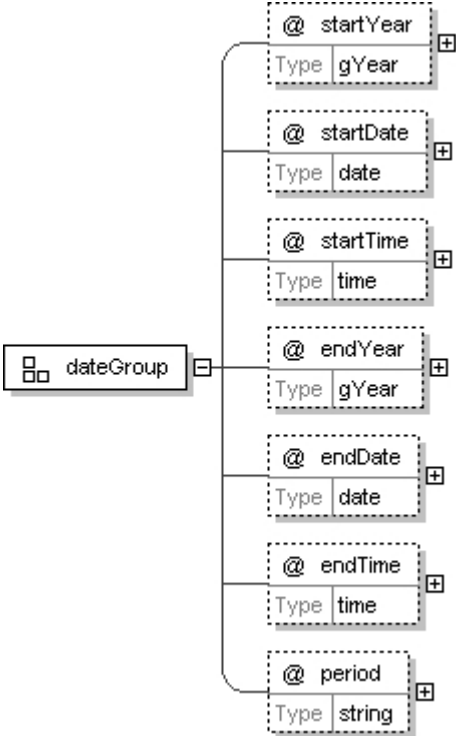
Type, Status, Format and Date attribute groups

Name	Type Group
Cardinality	Unique per element
Requirement	Optional
Definition	To define a contextual type
Format	ebucore:typeGroup (xsd:attributeGroup)
Schema	Applies to several elements in the schema
	
typeLabel	Free text.
typeDefinition	An optional definition.
typeLink	A URI to e.g. a classification scheme term.

Name	Format Group
Cardinality	Unique per element
Requirement	Optional
Definition	To define a format
Format	ebucore:formatGroup (xsd:attributeGroup)
Schema	Applies to several elements in the schema
	
formatLabel	Free text.
formatDefinition	An optional definition.
formatLink	A URI to e.g. a classification scheme term.

Name	Status Group
Cardinality	Unique per element
Requirement	Optional
Definition	To define a status
Format	ebucore:statusGroup (xsd:attributeGroup)
Schema	Applies to several elements in the schema

	
statusLabel	Free text.
statusDefinition	An optional definition.
statusLink	A URI to e.g. a classification scheme term.

Name	date Group
Cardinality	Unique per element
Requirement	Optional
Definition	To define a date and or time
Format	ebucore:dateGroup (xsd:attributeGroup)
Schema	Applies to several elements in the schema
	
startYear	To express a start year
startDate	To express a start date
startTime	To express a start time
endYear	To express an end year
endDate	To express an end date
endTime	To express an end time

3. Implementation Guidelines

3.1 General remarks

Several aspects of the specification are left to the appreciation of the implementer (e.g. regarding the mapping to pre-existing in-house Metadata schemas).

Reference data identified in the specification is proposed by default but can be extended or replaced. In order to maximise interoperability in case of e.g. exchange, it is recommended that extensions or alternative reference data be duly documented, maintained and made available to other users e.g. as open resources on the Internet.

The schema is built as an extension to the Simple Dublin Core to facilitate transformation to the Simple Dublin Core representation as required by certain applications such as the European Digital Library. For the same reason, it is recommended to use predefined 'relation' properties.

3.2 Reference data

Lists of controlled terms are handled by Classification Schemes structured to allow access to terms from a predefined hierarchical vocabulary list (thesaurus). Each list is uniquely identified by its namespace (URI¹, in the form of a URN² or URL³) and 'Alias'. EBU namespaces are expressed in accordance to RFC5174⁴. A Classification Term is defined by a unique key (termID) or a name as follows:

Example:

```
<ClassificationScheme uri="urn:ebu:metadata-cs:ContentGenreCS:2008">
  <Alias>GenreCS</Alias>
  <Term termID="3.1">
    <Name xml:lang="en">NON-FICTION / INFORMATION</mpeg7:Name>
    <Term key="3.1.1">
      <Name xml:lang="en">News</mpeg7:Name>
    </Term>
  <!--etc.-->
</ClassificationScheme>
```

It is an important implementation requirement to ensure that these resources are accessible by the Metadata recipient. Classification schemes shall preferably be available as resources on the open Internet via maintained URLs. In this case URIs shall respect the following syntax:

URL#termID e.g. http://www.ebu.ch/metadata/cs/ebu_ContentGenreCS.xml#3.1

A conforming parser uses that URI to resolve the termID reference to a resource, whether physical or logical. Once the termID has been resolved, the term name can be accessed (e.g. 'News' in the above example). The resolution method is left to the appreciation of each recipient.

¹ Unique Resource Identifier - <http://tools.ietf.org/html/rfc3986>

² Unique Resource Namespace - <http://tools.ietf.org/html/rfc3986>

³ Unique Resource Locator - <http://tools.ietf.org/html/rfc3986>

⁴ EBU Namespace - <http://tools.ietf.org/html/rfc5174>

URIs (URLs) can be replaced by aliases to provide a more concise, application-specific way of referring to classification terms as long as a look-up table is provided describing the relationship between Aliases and URIs.

If 'GenreCS' is the alias for http://www.ebu.ch/metadata/cs/ebu_ContentGenreCS.xml", in the above example 'News' will be accessed through "GenreCS#3.1".

EBU Classification Schemes are also published in the SKOS (Simple Knowledge Organisation System) format using RDF/OWL for use as linked data.

4. Maintenance

The EBU Core Metadata Set is maintained by the EBU and suggestions for corrections or additions can be made by mailing to (metadata@ebu.ch). EBU members can also provide feedback via the EBU Technical Department's website:

(<http://tech.ebu.ch/MetadataMaintenanceSpecifications>).

Contributions will be subject to peer review by the Metadata experts participating in EC-M MAG (<http://tech.ebu.ch/groups/pmag>), a specialised Project Group of the EBU Expert Community on Metadata EC-M (<http://tech.ebu.ch/groups/ecm>).

5. Download Zone

Filename	Document description	Contents
EBUCORE_20100820.zip	Schema	EBU_CORE_20100820.xsd, xml.xsd, simpledc20021212.xsd
EBU_cs_p.zip	EBU Classification Schemes	periodically updated list of EBU Classification Schemes

6. Useful links

AES (<http://www.aes.org>)

Dublin Core (<http://dublincore.org>)

EBU Metadata (<http://tech.ebu.ch/metadata/>)

PBCore (www.pbcore.org/index.html)

EDLNet (www.europeandigitallibrary.eu/edlnet)

IOC - International Olympic Committee (<http://www.olympic.org/uk/sports/>)

W3C SKOS (<http://www.w3.org/2004/02/skos/>)

ISO (<http://www.iso.org>)

ISO 4217 - Currency codes:

<http://www.iso.org/iso/en/prods-services/popstds/currencycodeslist.html>

ISO 3166-1 - Country codes (English):

<http://www.iso.ch/iso/en/prods-services/iso3166ma/02iso-3166-code-lists/list-en1.html>

ISO 3166-1 - Country codes (French):

<http://www.iso.ch/iso/en/prods-services/iso3166ma/02iso-3166-code-lists/list-fr1.html>

ISO 639 - Language codes : <http://www.loc.gov/standards/iso639-2/>

IETF

RFC 3339 (Date and time on the Internet): <http://tools.ietf.org/html/rfc3339>

RFC5174 (EBU namespace): <http://tools.ietf.org/html/rfc5174>

IANA MIME Type: <http://www.iana.org/assignments/media-types/>

Thesaurus of Geographic Names: <http://www.getty.edu/research/tools/vocabulary/tgn/index.html>

7. Bibliography

- EBU Technical Information I36-2003 - Metadata Implementation considerations for Broadcasters
- EBU Tech 3293-2001 - Core Metadata Set for Radio Archives
- EBU Tech 3295 - P-META Metadata Library

Annex A: EBUCore Metadata Set Schema

The EBUCore Metadata schema is used to generate EBUCore Metadata instances formed of an `ebuCoreMain` document.

The `ebuCoreMain` document contains several attributes required to contribute to OAI (Open Archive Initiative) for Metadata harvesting. These attributes include the name of the schema (in case the schema location urn would not be present), the version of the schema used to generate the document, the date of last modification of the document and a unique identifier associated to the document. The name of the contributing archive is given by the Metadata provider's organisation name or ID.

Resource related information is provided by the `coreMetadata` element.

The reference schema is available from the download links in § 5 (Download Zone) of this document.

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Annex B: EBUCore Mapping Table

EBUCore	Dublin Core Europeana ESE	PBCore	MovieLabs MD	W3C MAWG mediaont	EUScreen
title	title	title	titleDisplay	title	title
title@lang					original language, English
title@date			titleSort		
alternativeTitle	alternative	title	originalTitle		series title
alternativeTitle@lang	lang	lang		lang	original language, English
alternativeTitle@type		title/titleType	originalTitle		series
alternativeTitle@status					
alternativeTitle@date					
creator	creator	creator		creator	provider
creator@role		creator/role			
subject	subject	subject	keyword	keyword	keywords, thesaurus terms, topic
subject@type		subjectAuthorityused	keyword	keyword	local
description	description	description		description	description
description@lang	lang	lang		lang	original language, English,
description@type	abstract, bibliographicCitation, educationLevel, tableOfContents	descriptionType, audienceRating, audienceLevel	summary	rating (value)	summary, extended, country of production, information
publisher	publisher	publisher		publisher	publisher / broadcaster
publisher@role		publisher/role			
contributor	contributor	contributor	local people	contributor	contributor
contributor@role		contributor/role	job		
date	date				
date@type	accepted, copyrighted, submitted, available	available (start and end)			
date/created	created	dateCreated		createDate	production year
date/issued	issued	dateIssued			

date/digitised					
date/modified	modified				
type	type				
type/genre	audience	genre	genre	genre, targetAudience	genre /subgenre
type/genre@typeLink		genreAuthorityUsed			
type/objectType		formatMediaType			clip (clip title), asset type
format	format				item type
format/width				frameSize/width	
format/height				frameSize/height	
format/medium	medium	formatPhysical			
format/mimeType		formatDigital			
videoFormat/aspectRatio		formatAspectRatio			aspect ratio
videoFormat/encoding	conformsTo	formatEncoding		compression	
videoFormat/track@type		formatTrack			
videoFormat/trackId					
videoFormat/trackName					
videoFormat/technicalAttribute					
audioFormat/encoding	conformsTo	formatEncoding		compression	
audioFormat/trackConfiguration		formatChannelConfiguration			
audioFormat/track@type				numTracks	
audioFormat/trackId					
audioFormat/trackName					
audioFormat/trackLanguage					
audioFormat/technicalAttribute					asset sound
fileFormat		formatStandard		format	
captioningFormat@type					translation
captioningFormat@format					subtitle
captioningFormat@sourceId					
captioningFormat/language					subtitle language
signingFormat@type					
signingFormat@format					
signingFormat/language					
format/start/timecode		formatTimeStart			
format/start/normalPlayTime					

format/start/editUnitNumber					
format/duration/timecode	extent	formatDuration			asset duration
format/duration/normalPlayTime	extent			duration	
format/duration/editNumberUnit	extent				
format/fileName	extent	formatFileSize			
format/locator		formatLocation		locator	URI
format/technicalAttribute		formatDataRate, formatBitDepth, formatSampleRate, formatFrameSize, formatColours, formatFramerate		frameSize, samplingrate, frameRate, bitRate	asset colour
identifier	identifier	identifier		identifier	identifier
identifier@attributor		identifier/source			
identifier@type					original identifier
identifier@format					
source	source				
language	language	language	language	language	language
language@purpose					used, original, Metadata
relation	relation	relation/relationIdentifier		relation	relation
relation@type		relation/relationType			relation type
relation@runningOrder					
isVersionOf	isVersionOf				
hasVersion	hasversion	See instantiation and alternativeModes or formatId			
replaces	replaces				
isReplacedBy	isReplacedBy				
isRequiredBy	isRequiredBy				
requires	requires				
isPartOf	isPartOf				
hasPart	hasPart				
isReferencedBy	isReferencedBy				
references	references				

isFormatOf	isFormatof				
hasFormat	hasFormat				
isEpisodeOf					
isMemberOf				collection	
coverage	coverage	coverage			
coverage/temporal	temporal				
coverage/spatial	spatial				
coverage/spatial/location/name				location/name	geographical coverage
coverage/spatial/location/id					
coverage/spatial/location/long				longitude	
coverage/spatial/location/lat				latitude	
rights	rights	rightsSummary	copyrightLine		rights terms and conditions
rights@type	accessRights, licence, provenance	rightsSummary	copyrightLine	copyright, policy	IPR constriction
rights/link					
rightsHolder	rightHolder			copyrights/identifier	
rights/exploitationIssues					
rights/coverage			region		
rights/clearanceFlag					
rights/disclaimer					
rights/identifier					
version		formatGenerations	versionNotes		
publicationHistory/first/date					broadcast date
publicationHistory/first/channel					first broadcast channel
publicationHistory/repeat/date					broadcast date
publicationHistory/repeat/channel					
part (segment)				fragment, namedFragment	
part/coreMetadata/type/objectType				fragment / role	
note		annotation			
contact			peopleLocal		
contact@id			identifier		
contact/name			name		
contact/occupation			job		

contact/email					
contact/address					
organisation					
organisation@id					
organisation/name					
organisation/webAddress					
organisation/contacts					
schema					
schema/version					
schema/dateLastModified					
MetadataProvider					

The following attributes are not directly addressed by EBUCore:

- Dublin Core: accrualMethod, accrualPeriodicity, accrualPolicy, instructionalMethod, mediator
- PBCore: coverageType, instantiation (EBUCore -> relation properties), alternativeModes (EBUCore -> relation properties)
- MoviesLabs MD: artReference (EBUCore -> description and descriptionType)