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Information and documentation — Bibliographic reference model and serialization

Published Standard

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Abstract

This document provides information models in support of the guidelines specified in ISO 690, including models for the citation of information resources, bibliographic references to information resources, and bibliographic reference lists. The models are intended to facilitate data encoding and interchange of citation and bibliographic information, and machine-readable bibliographic references and citations.

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Foreword

The Calendaring and Scheduling Consortium (“CalConnect”) is a global non-profit organization with the aim to facilitate interoperability of collaborative technologies and tools through open standards.

CalConnect works closely with international and regional partners, of which the full list is available on our website (https://www.calconnect.org/about/liaisons-and-relationships).

The procedures used to develop this document and those intended for its further maintenance are described in the CalConnect Directives.

In particular the different approval criteria needed for the different types of CalConnect documents should be noted. This document was drafted in accordance with the editorial rules of the CalConnect Directives.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CalConnect shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be provided in the Introduction.

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

This document was prepared by Technical Committee *VCARD*.

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Introduction

ISO 690 has been the International Standard for citations and bibliographic referencing since the publication of its first edition in 1975. Since then, a multitude of electronic referencing tools and conventions has evolved; many of them can be used to encode a subset of the bibliographic information captured in ISO 690.

However, there has not been an information model that allows faithful representation of the full guidelines provided in ISO 690 in an electronic manner.

The lack of an information model meant that:

— existing electronic referencing tools cannot be surveyed rigorously, to determine the extent to which they comply with the requirements of ISO 690, either with regard to content coverage or with the base rendering requirements of the specification;
— existing electronic referencing tools cannot easily draw on the guidelines provided by ISO 690 in order to fully cover the requirements of ISO 690.

With the latest edition of ISO 690 recently published, it is necessary to supplement the guidelines with information models that can rigorously express the needs of the guidelines specified in ISO 690.

This document provides information models and a serialisation syntax for ISO 690. The serialisation can be used to represent references compliant to ISO 690; being formalised and complete, it can also be used to evaluate existing bibliographic tools for coverage of the standard, and to identify any issues they may have.

The BibTeX tool Clause 8.2.1.1, Example 1 has been used as a representative bibliographic tool in [AnnexB] to illustrate comparison against a reference model, because of its popularity and relative completeness.

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Information and documentation — Bibliographic reference model and serialization

1. Scope

This document provides information models in support of guidelines specified in ISO 690, including models for:

— citation of information resources;
— bibliographic references to information resources;
— bibliographic reference lists.

These information models are intended to facilitate, but are not limited to, the following cases:

— data encoding of citation and bibliographic information suitable for usage according to ISO 690;
— interchange of citation and bibliographic information suitable for usage according to ISO 690;
— machine-readable bibliographic references and citations enabling improved data reuse;
— generation of bibliographic reference lists (ISO 690, Clause Annex A).

The following topics are out of scope of this document:

— information models for legal citations, such as for references to cases, statutes or treatises;
— recommendations on citing particular types of information resources; and
— preference of bibliographic reference and citation styles.

2. Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 639, International Organization for Standardization (committee). *Code for the representation of names of languages*. First edition. Geneva: International Organization for Standardization. https://www.iso.org/standard/4766.html.

ISO 690[1] , International Organization for Standardization (committee). *Information and documentation — Guidelines for bibliographic references and citations to information resources*. Third edition. Geneva: International Organization for Standardization. https://www.iso.org/standard/43320.html.

ISO 4217, International Organization for Standardization (committee). *Codes for the representation of currencies*. Eighth edition. Geneva: International Organization for Standardization. https://www.iso.org/standard/64758.html.

ISO 8601-1, International Organization for Standardization (committee). *Date and time — Representations for information interchange — Part 1: Basic rules*. First edition. Geneva: International Organization for Standardization. https://www.iso.org/standard/70907.html.

ISO 8601-2, International Organization for Standardization (committee). *Date and time — Representations for information interchange — Part 2: Extensions*. First edition. Geneva: International Organization for Standardization. https://www.iso.org/standard/70908.html.

[1]Under preparation. (Stage at the time of publication ISO/DIS 690)

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ISO 15924, International Organization for Standardization (committee). *Information and documentation — Codes for the representation of names of scripts*. First edition. Geneva: International Organization for Standardization. https://www.iso.org/standard/29546.html.

ISO 24229, ISO. , *Information and documentation — Codes for the representation of script conversion systems*.

ISO 4, International Organization for Standardization (committee). *Information and documentation — Rules for the abbreviation of title words and titles of publications*. Third edition. Geneva: International Organization for Standardization. https://www.iso.org/standard/3569.html.

ISO 216, International Organization for Standardization (committee). *Writing paper and certain classes of printed matter — Trimmed sizes — A and B series, and indication of machine direction*. Second edition. Geneva: International Organization for Standardization. https://www.iso.org/standard/36631.html.

ISO 639-1, International Organization for Standardization (committee). *Codes for the representation of names of languages — Part 1: Alpha-2 code*. First edition. Geneva: International Organization for Standardization. https://www.iso.org/standard/22109.html.

ISO 832, International Organization for Standardization (committee). *Information and documentation — Bibliographic description and references — Rules for the abbreviation of bibliographic terms*. Second edition. Geneva: International Organization for Standardization. https://www.iso.org/standard/5195.html.

ISO 3166-1, International Organization for Standardization (committee). *Codes for the representation of names of countries and their subdivisions — Part 1: Country codes*. Third edition. Geneva: International Organization for Standardization. https://www.iso.org/standard/63545.html.

ISO 3166-2, International Organization for Standardization (committee). *Codes for the representation of names of countries and their subdivisions — Part 2: Country subdivision code*. Third edition. Geneva: International Organization for Standardization. https://www.iso.org/standard/63546.html.

3. Terms and definitions

For the purposes of this document, the terms and definitions given in [iso690] and the following apply.

3.1.
bibliographer
entity responsible for creating a reference

3.2.
citer
entity responsible for creating a citation

4. Common information models

4.1. General

This clause provides common information models that are used by the citation and bibliographic information models provided in this document.

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4.2. Data elements

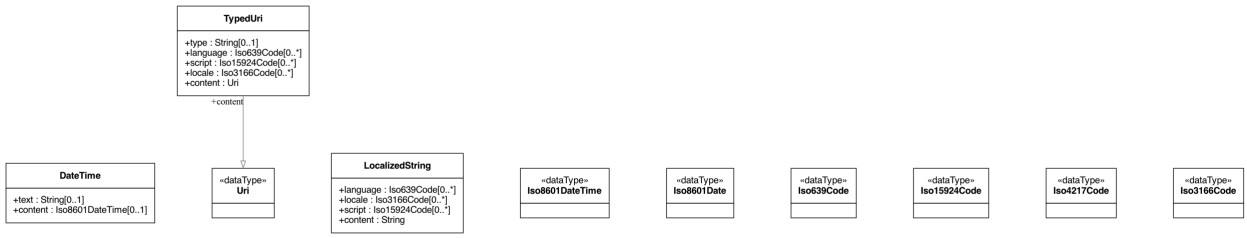

Figure 1 — Common data elements in UML

Uri	Container for URIs, as defined by Clause 8.2.1.1, Example 1.
Iso8601Date	Gregorian date, as specified in ISO 8601-1 and ISO 8601-2.
Iso8601DateTime	Gregorian date and time, as specified in ISO 8601-1.
Iso639Code	Code for language or language family, as specified in the ISO 639 series. Both ISO 639 two-letter and three-letter codes may be used.
Iso4217Code	Code for currency, as specified in ISO 4217.
Iso15924Code	Code to specify the written script, as specified in ISO 15924.
Iso24229Code	Code to specify the script conversion system, as specified in ISO 24229.
DateTime	Type which allows date and time to be specified as either a Gregorian date and time, as specified in ISO 8601-1, as text, or as both.
TypedUri	URI associated with a type. The types of URI are open-ended, but include the IANA link relations specified in Clause 8.2.1.1, Example 1.
FormattedString	String which is formatted according to conventions specified in a named MIME type specified in Clause 8.2.1.1, Example 1.
LocalizedString	FormattedString with optionally specified language, script and writing system.

5. Data types

Common data types used within this document are provided below.

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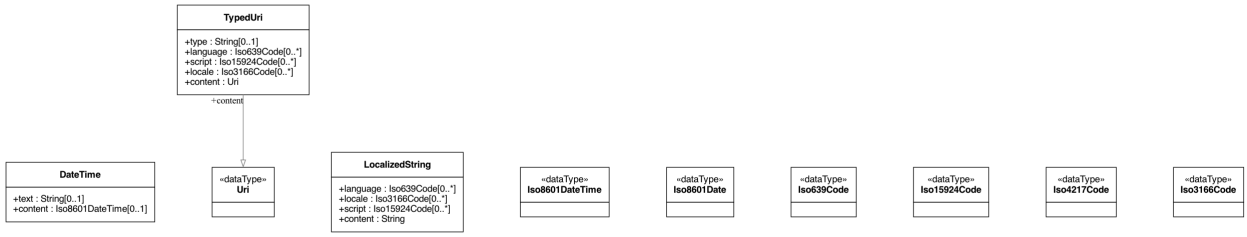

Figure 2

Uri	Container for URIs, as defined by Clause 8.2.1.1, Example 1.
Iso8601Date	Gregorian date, as specified in ISO 8601-1.
Iso8601DateTime	Gregorian date and time, as specified in ISO 8601-1.
Iso639Code	Code for language or language family, as specified in ISO 639. The specification is open as to whether the two-letter code or the three-letter code for languages is used.
Iso15924Code	Code for scripts (writing scripts), as specified in ISO 15924.
DateTime	Type which allows date and time to be specified as either a Gregorian date and time, as specified in ISO 8601-1, as text, or as both.
TypedUri	URI associated with a type. The types of URI are open-ended, but include the IANA link relations specified in Clause 8.2.1.1, Example 1.
FormattedString	String which is formatted according to conventions specified in a named MIME type (Clause 8.2.1.1, Example 1).
LocalizedString	FormattedString which optionally specifies its language and/or script. Multiple variants of the same string can be stored, tagged with `variant` for each variant.

6. Bibliographic Item Model

This clause provides information models that collectively provide the necessary data elements for creation of citations and bibliographic references in accordance with ISO 690.

In this document, the model is discussed with reference to ISO 690, with the rendered bibliographic references of each clause in ISO 690 serialised according to [serialisation].

Each aspect of the model is given with a cross-reference to ISO 690; a listing of the relevant model components; and a listing of the corresponding components of Clause 8.2.1.1, Example 1.

The following is a UML model intended to capture the structures represented in ISO 690, and is intended as a reference model for ISO 690. The various elements of the model are discussed below, with illustrations using the sample serialisation ([serialisation]).

The reference model for citations is provided in Clause 7.

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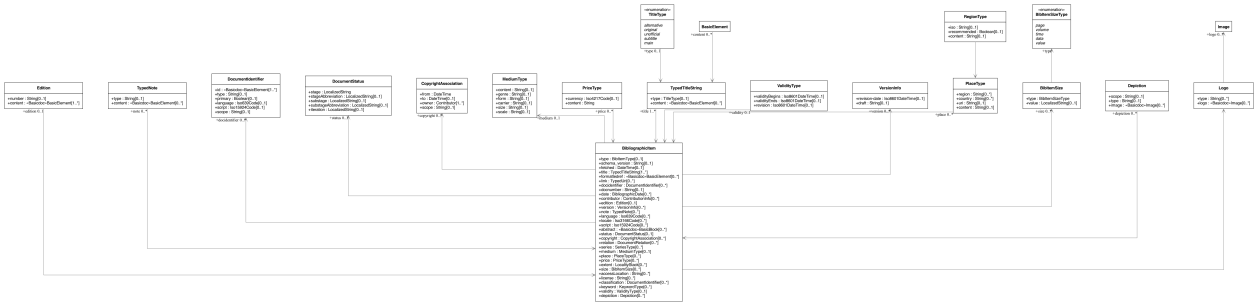

Figure 3 — BibliographicItem model

BibliographicItem/type	The type of the bibliographic item.
BibliographicItem/fetched	The date at which the bibliographic item was last updated.
BibliographicItem/title	The title(s) of the bibliographic item.
BibliographicItem/title/type	The type for the given title of the bibliographic item.
BibliographicItem/uri	The URI(s) associated with the bibliographic item.
BibliographicItem/docIdentifier	The identifier(s) of the bibliographic item in an international standard scheme.
BibliographicItem/docIdentifier/type	The scheme of the identifier
BibliographicItem/docIdentifier/scope	The scope of the identifier (in case the identifier is not for the document but for a superset or subset of entities; or in case the identifier is for a particular instance of the document, e.g. for a particular format or edition of the document)
BibliographicItem/docIdentifier/id	The identifier itself within the international standard scheme.
BibliographicItem/date	One or more date-times associated with the production of or access to the bibliographic item.
BibliographicItem/contributor	A contributor the production of the bibliographic item.
BibliographicItem/edition	The edition of the bibliographic item.
BibliographicItem/edition/number	A numeric equivalent to the edition, if the edition is given as discursive text.
BibliographicItem/version	The version of the bibliographic item (within an edition).
BibliographicItem/version/revision-date	The date at which the current version of the bibliographic item was produced.

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BibliographicItem/version/draft	The identifier for the current draft of the bibliographic item.
BibliographicItem/note	Note(s) associated with the bibliographic item.
BibliographicItem/note/type	The class of the note associated with the bibliographic item.
BibliographicItem/language	The language(s) in which the bibliographic item is expressed.
BibliographicItem/script	The script(s) in which the bibliographic item is written.
BibliographicItem/formattedRef	A pre-formatted version of the bibliographic item reference, used to sidestep the rendering of the reference out of its component parts.
BibliographicItem/abstract	The abstract of the bibliographic item.
BibliographicItem/status	The publication or preparation status of the bibliographic item.
BibliographicItem/status/stage	The stage of the document status (mandatory component).
BibliographicItem/status/substage	The substage of the document status (optional component).
BibliographicItem/status/iteration	The iteration of the given status that the document is currently in (e.g. 3 for a third draft).
BibliographicItem/copyright	The copyright status of the bibliographic item.
BibliographicItem/copyright/from	The copyright date of the bibliographic item.
BibliographicItem/copyright/to	The date when the copyright of the bibliographic item expires.
BibliographicItem/copyright/owner	The copyright owner for the bibliographic item.
BibliographicItem/relation	The relation of the bibliographic item to another bibliographic item.
BibliographicItem/series	The series of the bibliographic item.
BibliographicItem/medium	Information about the medium and transmission of the bibliographic item.
BibliographicItem/medium/content	The content type of the bibliographic item, reflecting the form of communication with which it is expressed and perceived.
BibliographicItem/medium/genre	The genre of the bibliographic item, as a classification of the type of communication it represents that is more specific than `BibliographicItem/medium/content` or `BibliographicItem/type`.

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BibliographicItem/medium/form	The media type of the bibliographic item, used to access the content of the item, including file format for electronic media.
BibliographicItem/medium/carrier	The storage medium of the physical medium of the bibliographic item.
BibliographicItem/medium/size	The size of the physical medium of the bibliographic item.
BibliographicItem/medium/scale	The scale of the cartographic material in the bibliographic item.
BibliographicItem/place	The geographic location associated with the production of the bibliographic item.
BibliographicItem/extent	The extent of the bibliographic item. Repeats for different levels of granularity (e.g. volume number, page number), or for discontinuous ranges (e.g. multiple page ranges)
BibliographicItem/extent/type	The type of extent (e.g. section, clause, page)
BibliographicItem/extent/referenceFrom	The starting value of the extent
BibliographicItem/extent/referenceTo	The end value of the extent as a range, if applicable
BibliographicItem/accessLocation	The location where the bibliographic item may be accessed.
BibliographicItem/license	A license under which the bibliographic item has been issued. Preferably a URI or short identifier, rather than descriptive text.
BibliographicItem/classification	The classification of the bibliographic item according to a standard classification scheme.
BibliographicItem/keyword	A keyword for the bibliographic item.
BibliographicItem/keyword/vocabid	An item in a controlled vocabulary corresponding to the keyword
BibliographicItem/keyword/vocabid/type	A label for the controlled vocabulary.
BibliographicItem/keyword/vocabid/uri	A URI for the controlled vocabulary item.
BibliographicItem/keyword/vocabid/code	The code for the controlled vocabulary item.
BibliographicItem/keyword/vocabid/term	The term itself for the controlled vocabulary item.
BibliographicItem/keyword/taxon	A sequence of taxa presenting a keyword in a hierarchical context.
BibliographicItem/validity	Information about how long the current description of the bibliographic item is valid for.

The foregoing elements map to the overall structure of ISO 690 as follows:

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— `BibliographicItem/contributor`: 4.1 Creator
— `BibliographicItem/title`: 4.2 Title
— `BibliographicItem/extent`: 4.3 Component parts
— `BibliographicItem/medium`: 4.4 Medium designation
— `BibliographicItem/edition`: 4.5 Edition and version
— `BibliographicItem/version`: 4.5 Edition and version
— `BibliographicItem/status`: 4.5 Edition and version
— `BibliographicItem/date`: 4.6 Production
— `BibliographicItem/place`: 4.6 Production
— `BibliographicItem/contributor`: 4.6 Production
— `BibliographicItem/extent`: 4.7 Numeration and pagination
— `BibliographicItem/series`: 4.8 Series title and identifier
— `BibliographicItem/docIdentifier`: 4.9 Identifier
— `BibliographicItem/accessLocation`: 4.10 Location
— `BibliographicItem/uri`: 4.10 Location
— `BibliographicItem/note`: 4.11 Other elements
— `BibliographicItem/language`: 4.11 Other elements
— `BibliographicItem/script`: 4.11 Other elements
— `BibliographicItem/abstract`: 4.11 Other elements
— `BibliographicItem/copyright`: 4.11 Other elements
— `BibliographicItem/license`: 4.11 Other elements
— `BibliographicItem/classification`: 4.11 Other elements
— `BibliographicItem/keyword`: 4.11 Other elements
— `BibliographicItem/type`: 5. Resource Types
— `BibliographicItem/relation`: 5. Resource types
— `BibliographicItem/formattedRef`: (presentation)
— `BibliographicItem/fetched`: (record metadata)
— `BibliographicItem/validity`: (record metadata)

6.1. Validity

The representation of a bibliographic item can optionally include information on the time interval where this bibliographic item is determined valid, and the revision number (represented as a date). Each of such is represented as a `Iso8601DateTime` object.

ValidityInfo/ validityBegins	the date and time when this object becomes valid. The value type is `Iso8601DateTime`.
ValidityInfo/ validityEnds	the date and time when this object becomes invalid. The value type is `Iso8601DateTime`.
ValidityInfo/revision	issuance date/time of this object. The value type is `Iso8601DateTime`.

Serialization of `ValidityInfo` is demonstrated below.

EXAMPLE

```
<bibitem>
  <validity>
    <validityBegins type="validityBegins">2018-01-01</validityBegins>
    <validityEnds type="validityEnds">2118-01-01</validityEnds>
    <revision type="revision">2017-01-01</revision>
  </validity>
```

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```
</bibitem>
```

6.2. Series

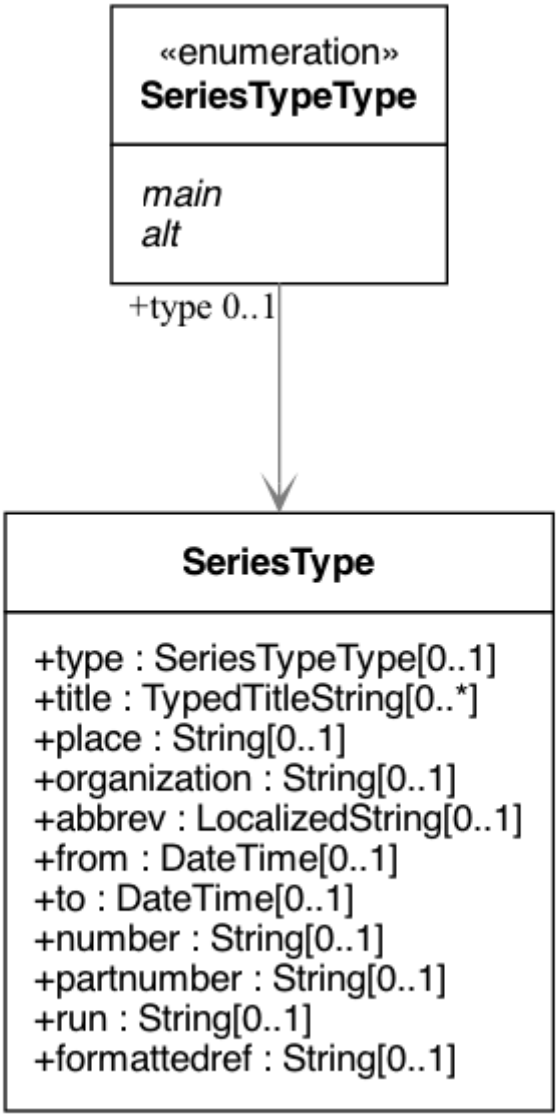

Figure 4 — BibliographicSeries model

SeriesType/type	The type of series description expressed in this container. The main type (which is the default) is the current, authoritative series description; “alt” includes alternative (historical) series descriptions.
SeriesType/title	The title of the series.
SeriesType/place	The place where the series is issued; used for disambiguation.
SeriesType/ organization	The organization issuing the series; used for disambiguation.

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Series/ formattedTitle	A pre-formatted version of the series description, incorporating all needed disambiguating information in proper format.
Series/abbrev	The abbreviation under which the series is known.
Series/dateFrom	The start of the date range when the series has been known under the given title.
Series/dateTo	The end of the date range when the series has been known under the given title.
Series/number	The number of the bibliographic item within the series.
Series/ partnumber	The part-number of the bibliographic item within the series.

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6.3. Bibliographic Dates

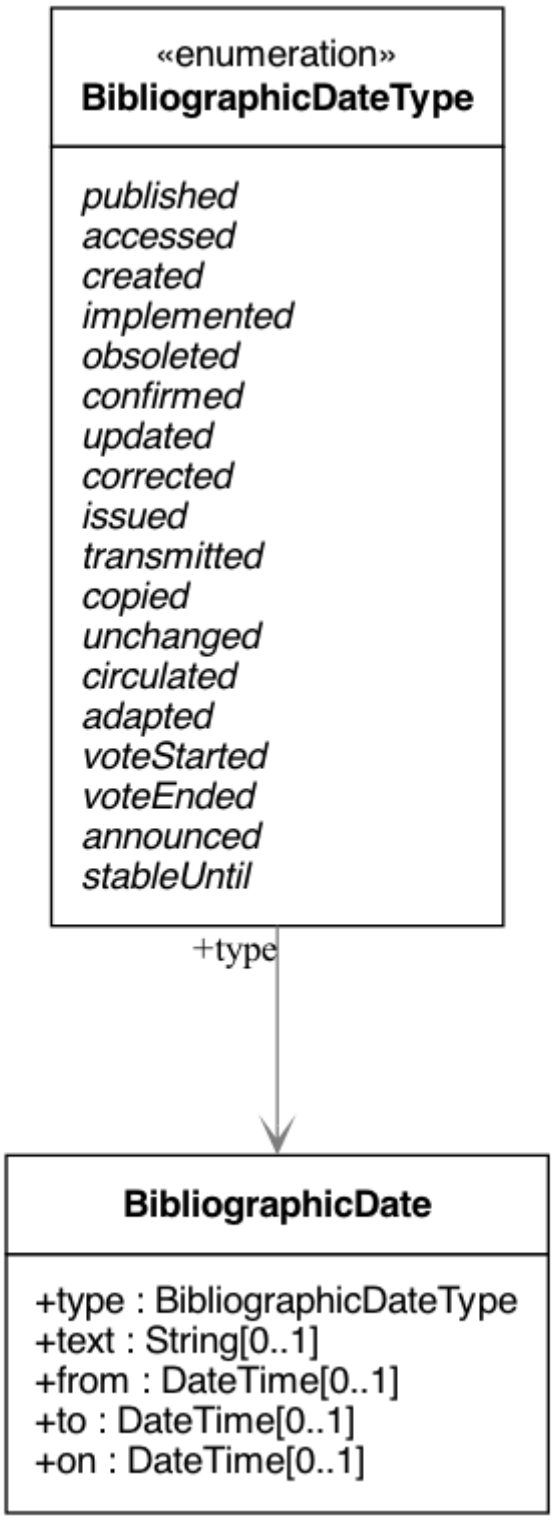

Figure 5 — BibliographicDate model

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BibliographicDate	Date associated with the production of or access to a bibliographic item.
BibliographicDate/type	The phase of the production of or access to a bibliographic item.
BibliographicDate/from	The start of the date range described.
BibliographicDate/to	The end of the date range described.
BibliographicDate/on	The point date described (mutually exclusive with date range).

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6.4. Bibliographic Item Types

Figure 6 — BibliographicItemTypes

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BibItemType The range of possible bibliographic items covered by this model. Note that legal documents are expressly outside the scope of ISO 690.

6.5. Keywords

Keywords may optionally be aligned to one or more items in controlled vocabularies. That alignment involves an identifier for the controlled vocabulary item, and a label or namespace for the controlled vocabulary. The item identifier may be a keyword, a code for the keyword, or a URI for the keyword: the basic Relaton model does not differentiate between these. The controlled vocabulary item may be presented in isolation, or as a hierarchy of terms (taxons).

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7. Citation Model

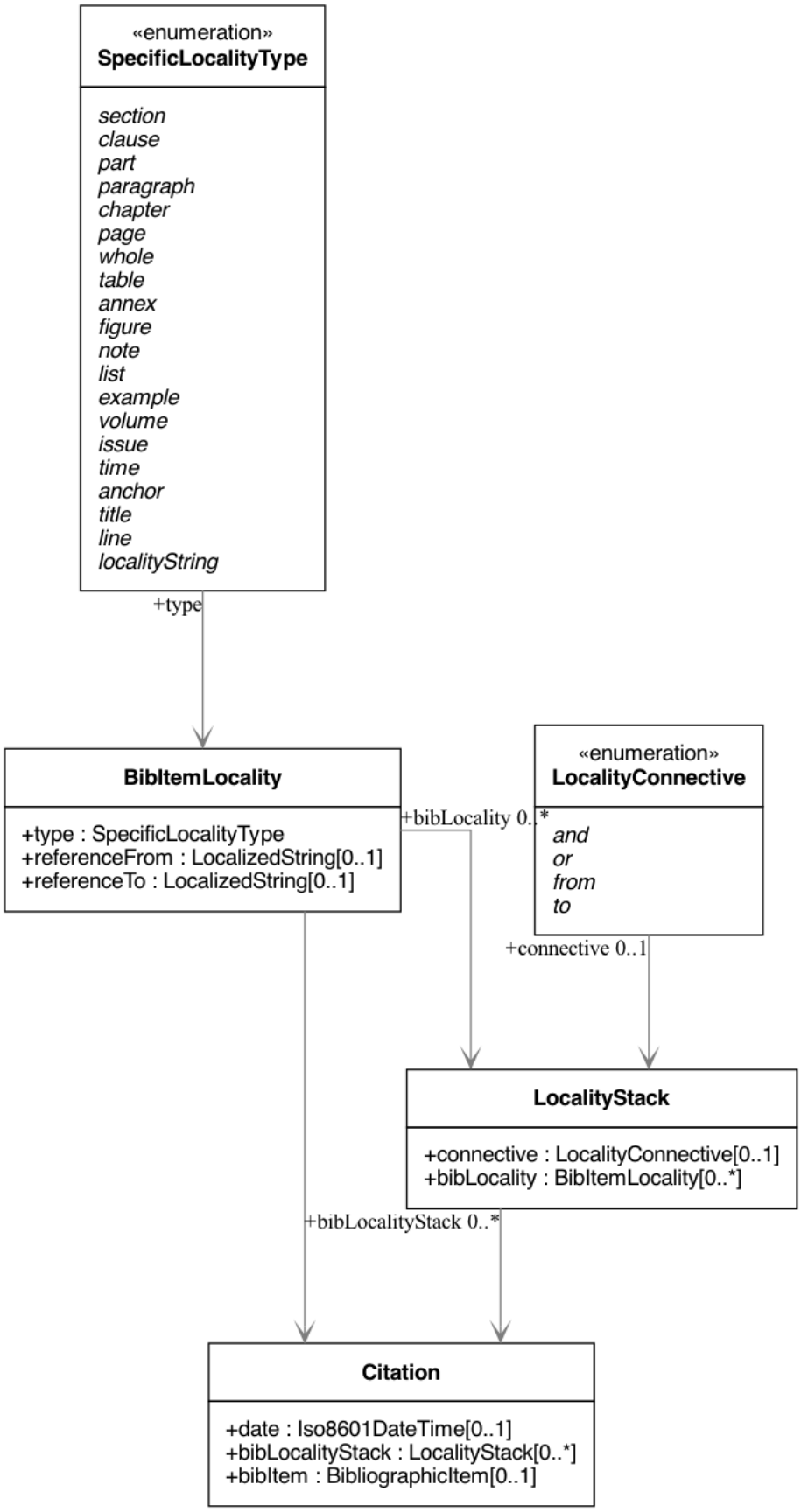

Figure 7 — Reference Model, ISO 690 Citations

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A citation in Relaton consists of the following components:

— An identifier `bibitemid` for the cited source. This identifier corresponds to the identifier (`id`) of a Relaton record describing the cited source.
— An optional date, in ISO 8601 format. This date is not intended for disambiguation, since `bibitemid` already identifies the source unambiguously; it is added for ease of processing, in case author-date citations cannot straightforwardly extract the date from the bibliographic source.
— A specification of the locality or localities in the source being cited.

A locality is a hierarchical specification of a location in a source. It is specified as a sequence of named components of the source, each hierarchically refining its predecessor, from greater to smaller:

— `type` is the component of the source being specified; in the Relaton grammar, there is a sequence of predefined types, and a user-specified type can be added with the prefix `locality:`. The predefined types are:
  — whole (i.e. entire document)
  — section
  — clause
  — part
  — paragraph
  — chapter
  — page
  — table
  — annex
  — figure
  — note
  — list
  — example
  — volume
  — issue
  — time

— `referenceFrom` specifies the instance of the source component being cited; or, if a range of components is being cited, the beginning of the range.
— `referenceTo` specified the end of the range, if a range of components is being cited. A range is only expected as the last (most granular) element in a hierarchical sequence of components.

So for example, the hierarchical specification “Part IV, Chapter 3, Paragraphs 22-24” is cited as:

```
<locality type="part"><referenceFrom>IV</referenceFrom></locality>
<locality type="chapter"><referenceFrom>3</referenceFrom></locality>
<locality type="paragraph">
  <referenceFrom>22</referenceFrom>
  <referenceTo>22</referenceTo>
</locality>
```

Figure 8

NOTE if the type of the component is `whole`, no `referenceFrom` or `referenceTo` is given.

7.1. Discontinuous citations

If two localities occurs in sequence, and have the same type, then they are interpreted as being a discontinuous repference. So “pp. 32, 57, 99” can be specified as:

```
<locality type="page"><referenceFrom>32</referenceFrom></locality>
<locality type="page"><referenceFrom>57</referenceFrom></locality>
```

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```
<locality type="page"><referenceFrom>99</referenceFrom></locality>
```

Figure 9

Alternatively, a sequence of discontinuous references can be specified through the `localityStack` element. Each `localityStack` consists of a hierarchical sequence of `locality` elements, as above; a sequence of `locality` elements can thus be treated as a single `localityStack`, with the `localityStack` wrapper left out.

So for example, the hierarchical specification “Part IV, Chapter 3, Paragraphs 22-24; Part VII, Chapter 2, Paragraph 130” is cited as:

```
<localityStack>
  <locality type="part"><referenceFrom>IV</referenceFrom></locality>
  <locality type="chapter"><referenceFrom>3</referenceFrom></locality>
  <locality type="paragraph">
    <referenceFrom>22</referenceFrom>
    <referenceTo>22</referenceTo>
  </locality>
</localityStack>
<localityStack>
  <locality type="part"><referenceFrom>VII</referenceFrom></locality>
  <locality type="chapter"><referenceFrom>2</referenceFrom></locality>
  <locality type="chapter"><referenceFrom>130</referenceFrom></locality>
</localityStack>
```

Figure 10

8. Data elements

8.1. General

8.1.1. Types of data elements

Generally, there are three types of data elements in a reference, ordered according to the following preferred manner:

— Attributes of the cited information resource;
EXAMPLE 1

Creator, title, medium, date of publication.

— Relations of the cited information resource with other information resources;
EXAMPLE 2

Translated from, Catalogued in.

— Attributes of the citation.
EXAMPLE 3

Date of citation.

8.1.2. Common rules

8.1.2.1. General

This clause specifies common rules that apply to all data elements.

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Common data types used within this document are provided below.

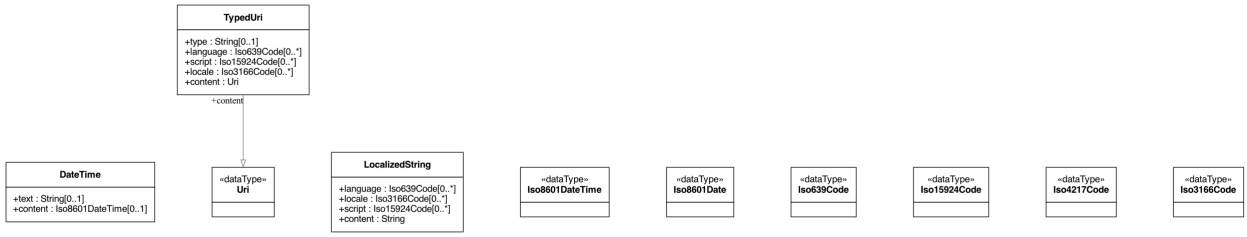

Figure 11 — TypedUri

Uri Container for URIs, as defined by Clause 8.2.1.1, Example 1.

TypedUri URI associated with a type. The types of URI are open-ended, but include the IANA link relations specified in Clause 8.2.1.1, Example 1.

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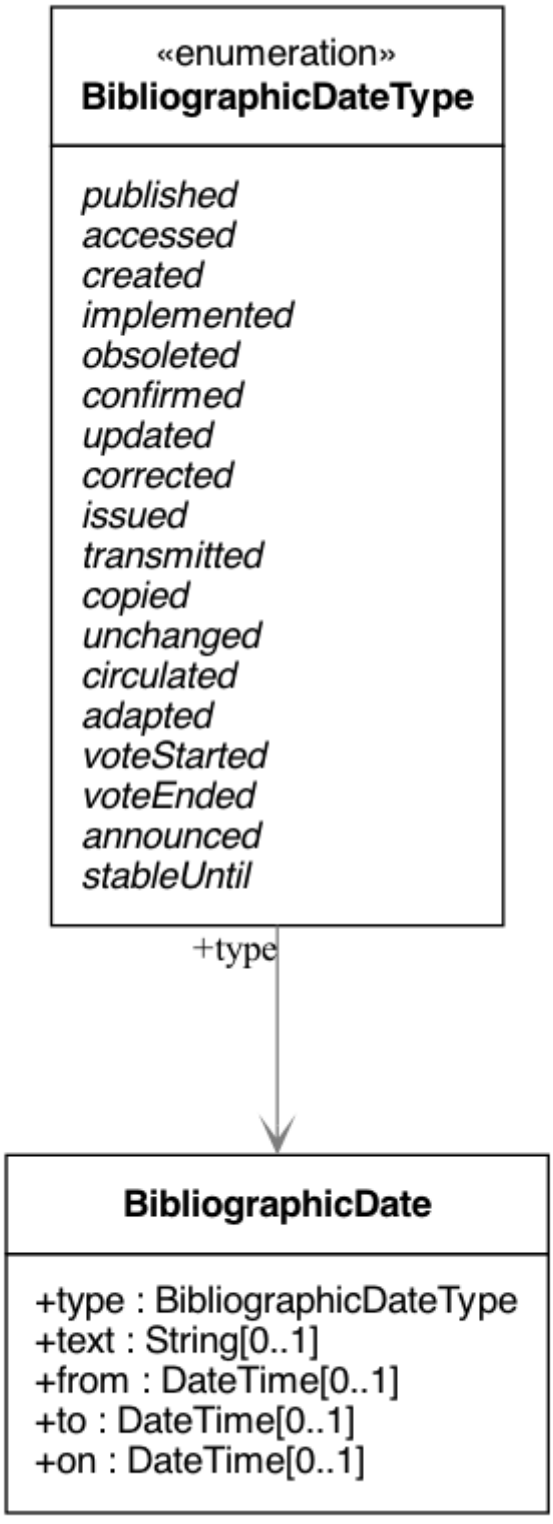

Figure 12 — DateTime

DateTime	Type which allows date and time to be specified as either a Gregorian date and time, as specified in ISO 8601-1, as text, or as both.

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Iso8601Date Gregorian date, as specified in ISO 8601-1.

Iso8601DateTime Gregorian date and time, as specified in ISO 8601-1.

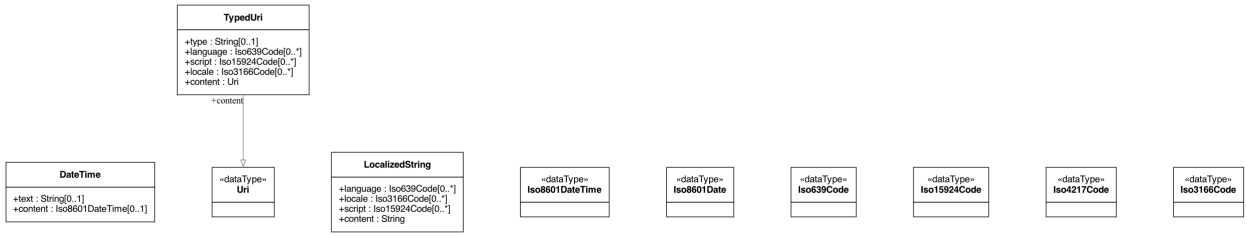

Figure 13 — LocalizedString

Iso639Code Code for language or language family, as specified in ISO 639. The specification is open as to whether the two-letter code or the three-letter code for languages is used.

Iso15924Code Code for scripts (writing scripts), as specified in ISO 15924.

Iso24229Code Code for script conversion systems, as specified in ISO 24229.

FormattedString String which is formatted according to conventions specified in a named MIME type (Clause 8.2.1.1, Example 1).

LocalizedString FormattedString which optionally specifies its language and/or script.

8.1.2.2. Adhere to language of publication

Language of phrases such as “In:” or “Available from:” should be based on the language and script of the publication rather than the contents of the citation.

EXAMPLE

In an article written in Finnish, it is better to use phrases “Julkaisussa” (“In” in Finnish) and “Saatavissa” (“Available from” in Finnish) instead of “In” and “Available from”.

NOTE The language and script of the publication refers to the language and script of the publication containing the references. It is not the language of the cited information resource.

8.1.2.3. Transliteration and transcription

References made in a publication should adhere to the language and script of the publication. This enables the reader of the publication to understand the references.

All data elements that are not in the language and script of publication should be converted to the (main) language and script used in the publication, and presented as associated information to the cited data element, in accordance with the appropriate international or national standard or other technical specification on transliteration or transcription.

The script of a data element, and the script conversion system used, are serialised in the script attributes of localized strings (see Clause 8.1).

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EXAMPLE 1

For a publication written in Latin script, any data element in a non-Roman alphabet in the cited information resource is Romanized, with the Romanized portion appended to the data element as associated information.

EXAMPLE 2

For a publication not written in Latin script, any data element in a Roman alphabet in the cited information resource is transliterated or transcribed to the script used, with the converted portion appended to the data element as associated information.

NOTE Recommending specific transliteration, transcription or Romanization systems is outside the scope of this document. There can be multiple choices (for instance, ISO 3602, ISO 3602 Strict, Hepburn, JSL, ALA-LC and Wapuro are Romanization systems for Japanese) and publishers can ask the authors to use any of them.

8.1.2.4. Abbreviation

Generally accepted bibliographic terms should be abbreviated in accordance with the rules established in ISO 832.

Additional abbreviation rules are available for specific resource types are provided in [resource_types], as well as in [series_abbreviation] for series titles.

Other abbreviations should be avoided unless specified in this document.

8.1.2.5. Punctuation and typography

A consistent system of punctuation and typography should be used throughout a list of references and between data elements. Each data element within a reference should be clearly separated from subsequent elements by punctuation or change of typeface.
NOTE In order to emphasize the importance of consistency, a uniform scheme of punctuation is used in the examples in this document. The scheme is purely illustrative and does not form part of the recommendations.

8.1.2.6. Associated information

Associated information of a data element includes:

— optional information defined in Clause 8 for each data element,
— optional information defined in [resource_types] specifically for resource types,
— additional information supplied by the citer.

Associated information is usually represented within square brackets: “[” and “]”.

In cases where square brackets may cause confusion, a separate sentence may be added to the reference to express the associated data (such as in [patent-inventors]).

8.2. Creator

8.2.1. Data models

This clause provides data models that satisfy the guidelines stated in ISO 690, Clause 7.1.

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8.2.1.1. Contribution information

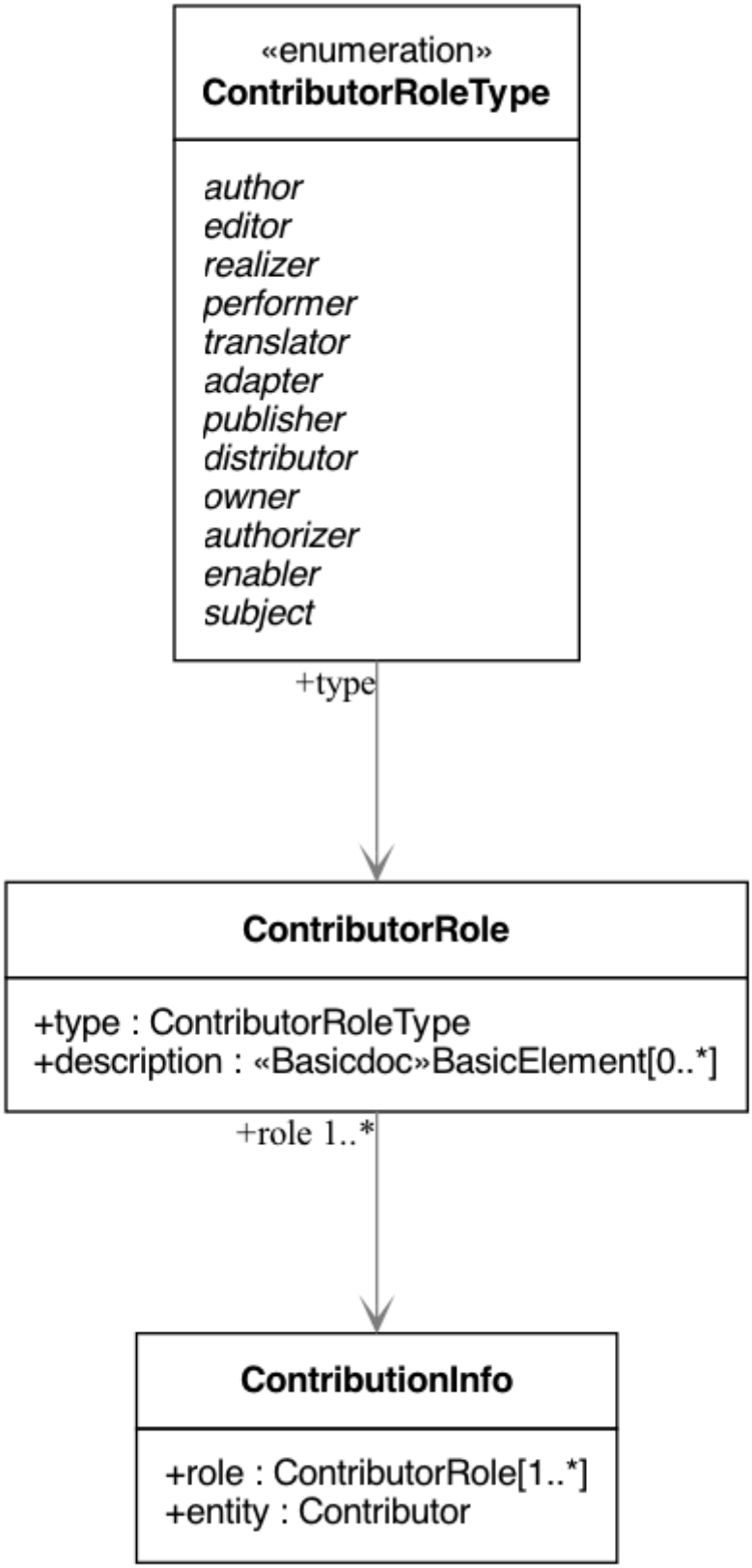

Figure 14 — Contribution model

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ContributionInfo/role	A description of the role of the contributor in the production of the bibliographic item.
ContributionInfo/role/ type	The broad class of role of the contributor. The breakdown used in ISO 690 is recommended as such a classification: author, performer, editor, adapter, translator, publisher, distributor.
ContributionInfo/role/ description	A more detailed description of the role of the contributor.
ContributionInfo/ entity	The contributor involved in the production of the bibliographic item; may be either a person or an organization.

EXAMPLE 1

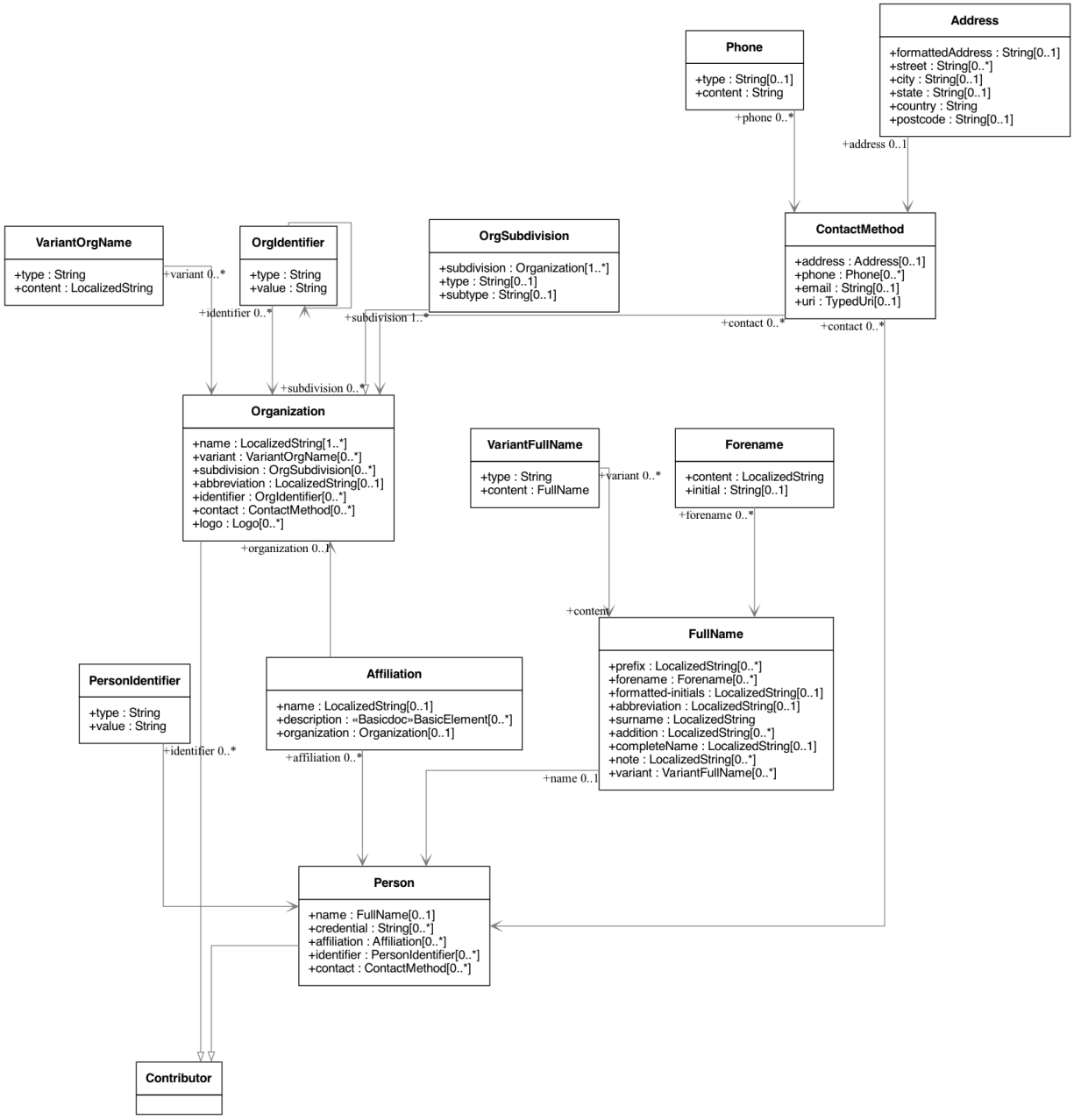

Figure 15

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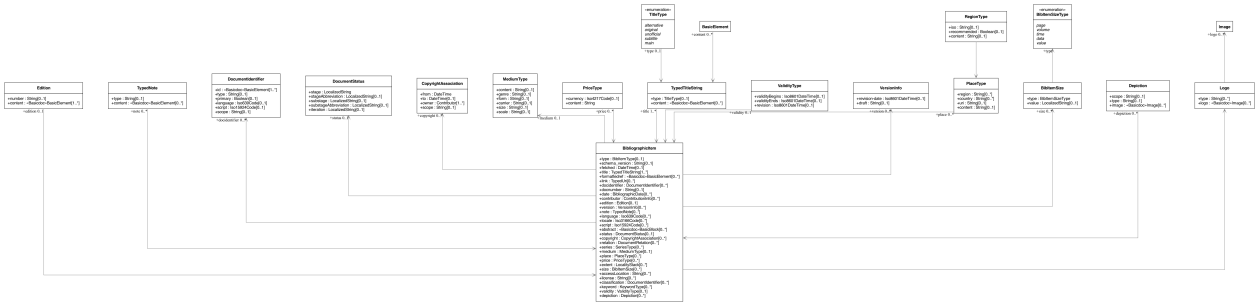

Figure 16

==== Roles

— Serialisation: `bibitem/contributor`, `Person, Organization, Affiliation`

==== Selection

==== Personal names

===== General

===== Variant forms

===== Additions

==== Organization or group names

===== Form of name

===== Disambiguation of names

===== Subordinate body

===== Parent body

==== Multiple creators

===== Title first

===== Conferences

===== Subsidiary creator

===== Originators of multiple editions

===== Derivative work creator

==== Pseudonyms

==== Anonymous works

ISO 690, Clause 4.1 classifies the various possible roles a creator can have with regard to a resource into six broad categories in order of priority, with more refined classifications typically named for the creator. These classifications are retained in the model: `bibitem/contributor/role@type` provides the broad category of role (author, performer, compiler, adaptor, publisher,

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distributor), while `bibitem/contributor/role/description` contains one or more specific descriptions of the role of the contributor.

The content of the `bibitem/contributor/role` element is optional, and contains a more specific expression of the creator role. The description can be strictly a noun, e.g. “librettist”, or it can be a phrase, corresponding to how it will be rendered in a citation (“libretto by”); the choice is at the discretion of the bibliographer, and is determined by how the citation is expected to be rendered (as rendering systems are unlikely to be sophisticated enough to convert the one into the other.)

Whether subsidiary creators should be included in a bibliographic item, and which creators should be included, is at the discretion of the bibliographer.

Exceptionally, “translator” is differentiated from the other “adaptor” roles, because it is so different from other adaptor roles such as engraver or photographer.

For derivative works, the creator and title of the original resource can be mentioned as a bibliographic note (`bibitem/note`); however best practice is to treat the original resource as a distinct related bibliographic item, related through the “derivedFrom” relation ([doc-relations]). Likewise, different originators of different editions should be modelled by modelling the editions as distinct related items, each with its own distinct editor as contributor. (For example, the later edition given as the main item, and the earlier edition related through a “updatedBy” relation.)

NOTE 1 Although both composer and librettist are included as authors under ISO 690, Clause 4.1, the two roles are clearly differentiated in ISO 690, Clause 5.7, with the composer given priority over the librettist.

NOTE 2 Inventor and patentee are atypical of the “performer” roles, and could arguably be regarded as author roles instead.

NOTE 3 Sponsoring organisations are conventionally included as distributors, following practice in ISO 690.

EXAMPLE 2

> Ramsey, J. K., & McGrew, W. C. (2005). Object play in great apes: Studies in nature and captivity. In A. D. Pellegrini & P. K. Smith (Eds.), *The nature of play: Great apes and humans* (pp. 89-112). New York, NY: Guilford Press.

```
<bibitem type="incollection">
  <title>Object play in great apes: Studies in nature and captivity</
title>
  <date type="published"><on>2005</on></date>
  <contributor>
    <role type="author"/>
    <person>
      <name>
        <surname>Ramsey</surname>
        <initials>J. K.</initials>
      </name>
    </person>
  </contributor>
  <contributor>
    <role type="author"/>
    <person>
      <name>
        <surname>McGrew</surname>
        <initials>W. C.</initials>
      </name>
    </person>
```

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```
    </contributor>
    <relation type="includedIn">
      <bibitem>
        <title>The nature of play: Great apes and humans</title>
        <contributor>
          <role type="editor"/>
          <person>
            <name>
              <surname>Pellegrini</surname>
              <initials>A. D.</initials>
            </name>
          </person>
        </contributor>
        <contributor>
          <role type="editor"/>
          <person>
            <name>
              <surname>Smith</surname>
              <initials>P. K.</initials>
            </name>
          </person>
        </contributor>
        <contributor>
          <role type="publisher"/>
          <organization>
            <name>Guilford Press</name>
          </organization>
        </contributor>
        <place>New York, NY</place>
      </bibitem>
    </relation>
    <extent type="page">
      <referenceFrom>89</referenceFrom>
      <referenceTo>112</referenceTo>
    </extent>
  </bibitem>
```

EXAMPLE 3

Demosthenes. *Speeches 50-59*. Translated from the Greek by Victor BERS. Austin: University of Texas Press, 2003.

```
<bibitem type="book">
  <title>Speeches 50-59</title>
  <date type="published"><on>2003</on></date>
  <contributor>
    <role type="author"/>
    <person>
      <name>
        <completename>Demosthenes</completename>
      </name>
    </person>
  </contributor>
  <contributor>
    <role type="translator"/>
    <person>
      <name>
        <surname>Bers</surname>
        <initials>Victor</initials>
      </name>
```


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```
    </person>
  </contributor>
  <contributor>
    <role type="publisher"/>
    <organization>
      <name>University of Texas Press</name>
    </organization>
  </contributor>
  <language>en</language>
  <relation type="translatedFrom">
    <bibitem>
      <title>Speeches 50-59</title>
      <language>grc</language>
    </bibitem>
  </relation>
  <place>Austin</place>
</bibitem>
```

EXAMPLE 4

ROGET, Peter Mark. *Roget's Thesaurus*. Revised by Susan M. LLOYD. Burnt Mill, Harlow, Essex: Longman Group Limited, 1982 [1852].

```
<bibitem type="book">
  <title>Roget's Thesaurus</title>
  <date type="created"><on>1852</on></date>
  <date type="updated"><on>1982</on></date>
  <date type="published"><on>1982</on></date>
  <contributor>
    <role type="author"/>
    <person>
      <name>
        <surname>Roget</surname>
        <forename>Peter</forename>
        <forename>Mark</forename>
      </name>
    </person>
  </contributor>
  <contributor>
    <role type="editor">revised</role>
    <person>
      <name>
        <surname>Lloyd</surname>
        <forename>Susan</forename>
        <forename>M.</forename>
      </name>
    </person>
  </contributor>
  <contributor>
    <role type="publisher"/>
    <organization>
      <name>Longman Group Limited</name>
    </organization>
  </contributor>
  <place>Burnt Mill, Harlow, Essex</place>
</bibitem>
```

EXAMPLE 5

WINSBACHER KNABENCHOR. All' Lust und Freud'. Frankfurt: Bellaphon, 1983.

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```
<bibitem type="music">
  <title>All' Lust und Freud'</title>
  <date type="published"><on>1983</on></date>
  <contributor>
    <role type="performer"/>
    <organization>
      <name>Winsbacher Knabenchor</name>
    </organization>
  </contributor>
  <contributor>
    <role type="author">composer</role>
    <person><name><completename>Gastoldi, Giovanni Giacomo</
completename></name></person>
  </contributor>
  <contributor>
    <role type="author">composer</role>
    <person><name><completename>Isaak, Heinrich</completename></name>
</person>
  </contributor>
  <contributor>
    <role type="author">composer</role>
    <person><name><completename>Othmayr, Caspar</completename></name>
</person>
  </contributor>
  <contributor>
    <role type="author">composer</role>
    <person><name><completename>Demantius, Christoph</completename></
name></person>
  </contributor>
  <contributor>
    <role type="publisher"/>
    <organization>
      <name>Bellaphon</name>
    </person>
  </organization>
  <medium>
    <carrier>audio disc</carrier>
  </medium>
  <place>Frankfurt</place>
</bibitem>
```

=== Personal names

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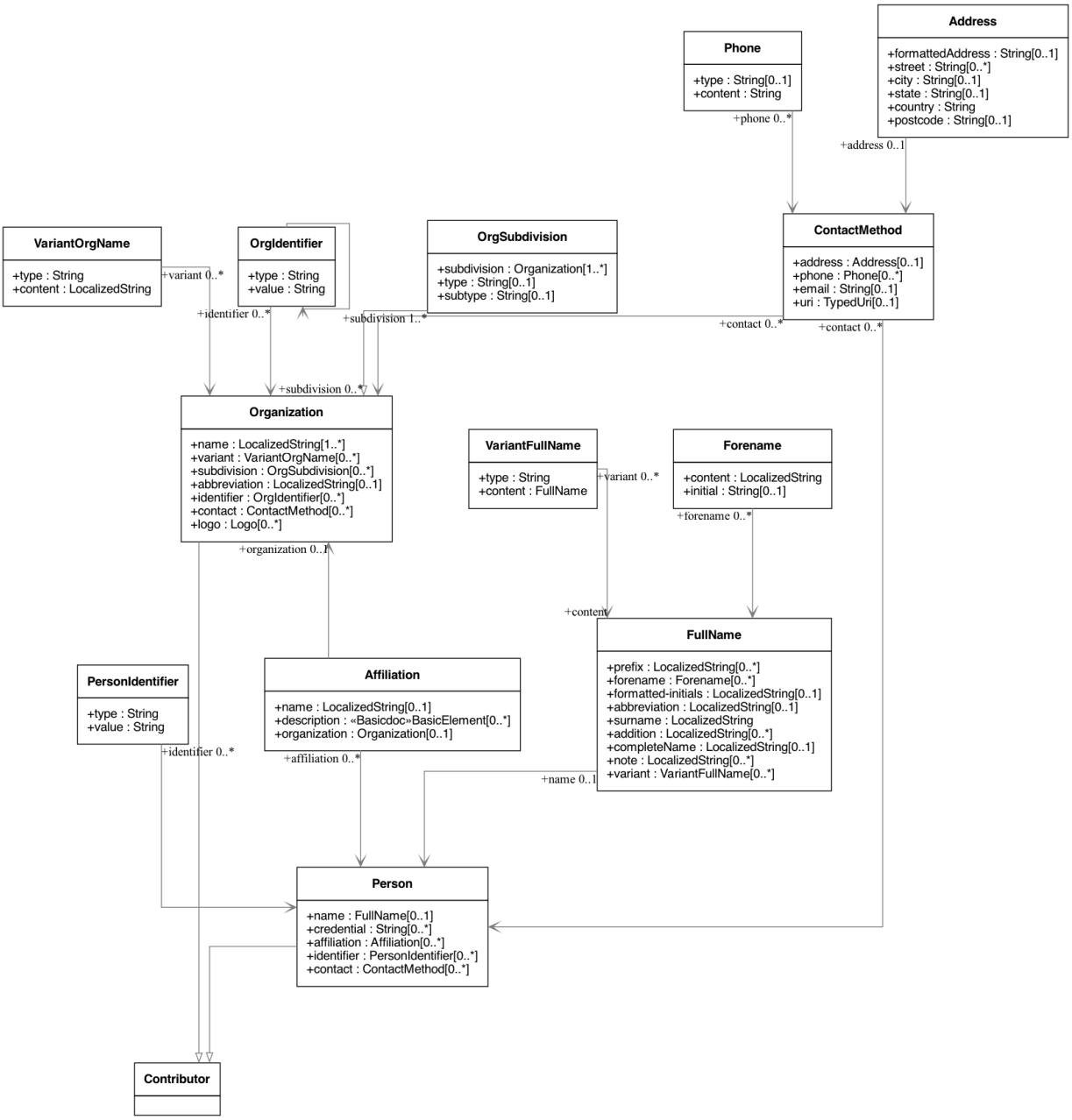

Figure 17

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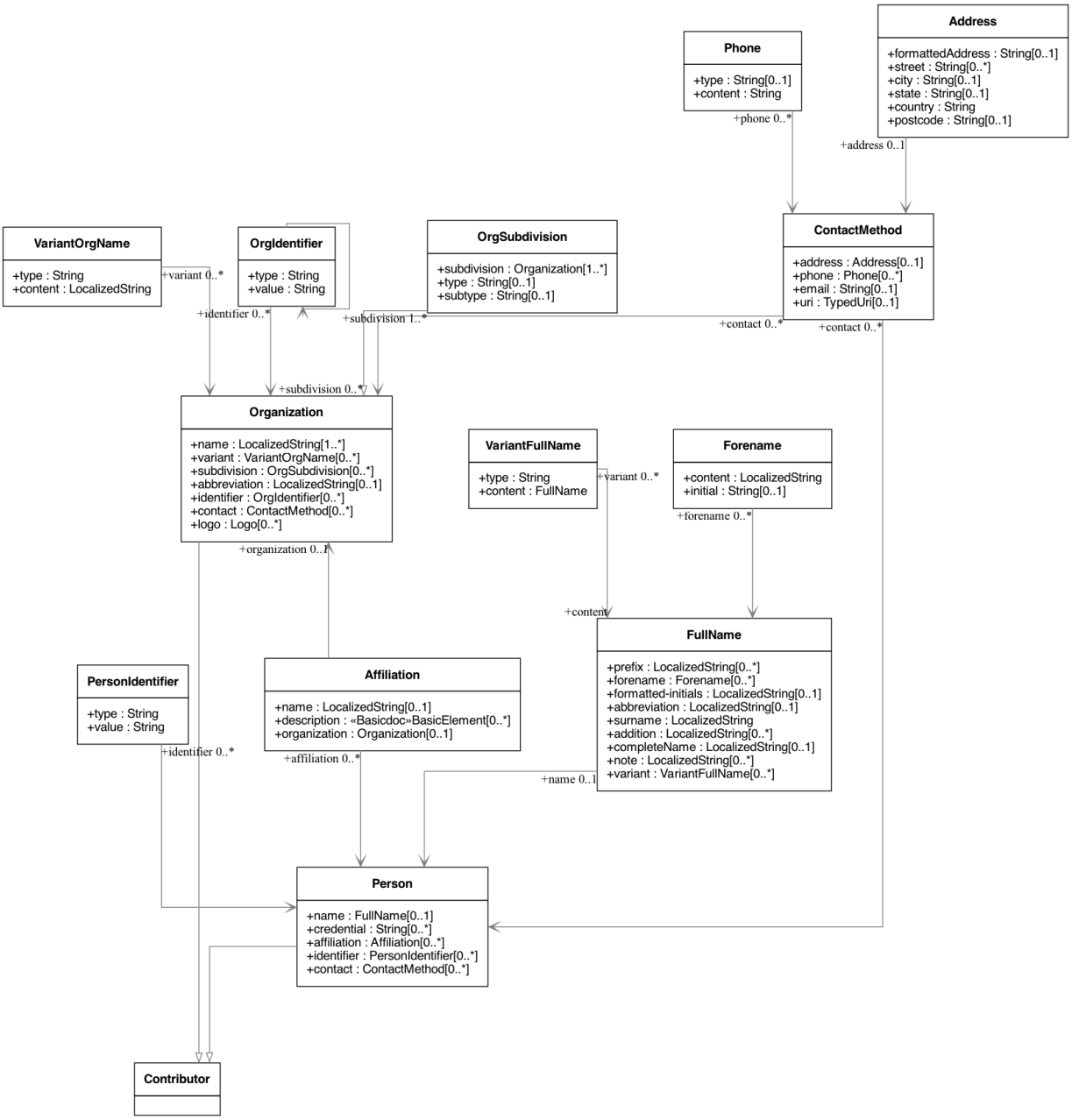

Figure 18

Names may be modelled either broken up into their constituent components (prefix, forename, initials, surname, addition), or as a complete name string. The latter is useful if (contrary to the recommendation of ISO 690, Clause 4.1) language-specific conventions for ordering of name components are to be observed; e.g. “James CLARK, John COWAN, MURATA Makoto”.

If there are multiple contributors named in a role, all contributors are expected to be represented in the bibliographic entry. This reflects practice in electronic bibliographic tools, and renderers may choose to truncate contributors with “et al.” beyond a certain cuttoff point.. If this information is not available, a dummy contributor can be named with “et al.” as their `completename`, but this is not preferred.

The `initials` component is used if all forenames are replaced by initials. If only the middle name is replaced by an initial, it is still treated as a forename.

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EXAMPLE 6

BACH, J.S.

```
<person>
  <name>
    <surname>Bach</surname>
    <initials>J. S.</initials>
  </name>
</person>
```

EXAMPLE 7

PICASSO, Pablo

```
<person>
  <name>
    <surname>Picasso</surname>
    <forename>Pablo</forename>
  </name>
</person>
```

EXAMPLE 8

KING, Martin Luther, Jr., Rev.

```
<person>
  <name>
    <prefix>Dr.</prefix>
    <surname>King</surname>
    <forename>Martin</forename>
    <forename>Luther</forename>
    <addition>Jr.</addition>
    <addition>Rev.</addition>
  </name>
</person>
```

EXAMPLE 9

KING, Martin Luther, Jr.

```
<person>
  <name>
    <completename>KING, Martin Luther, Jr.</completename>
  </name>
</person>
```

EXAMPLE 10

STEWART, John H.

```
<person>
  <name>
    <surname>Stewart</surname>
    <forename>John</forename>
    <forename>H.</forename>
  </name>
</person>
```

=== Organisations

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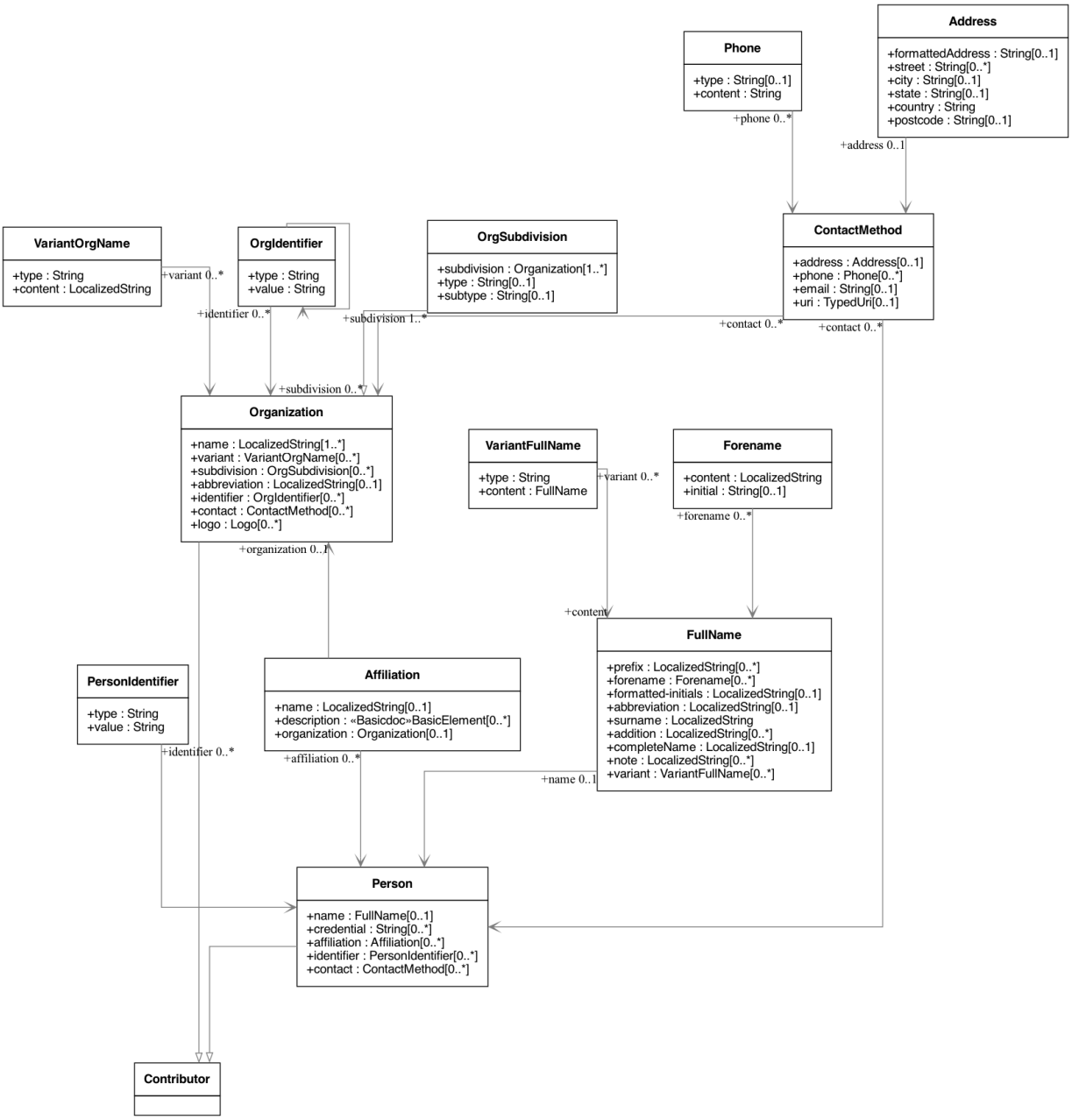

Figure 19

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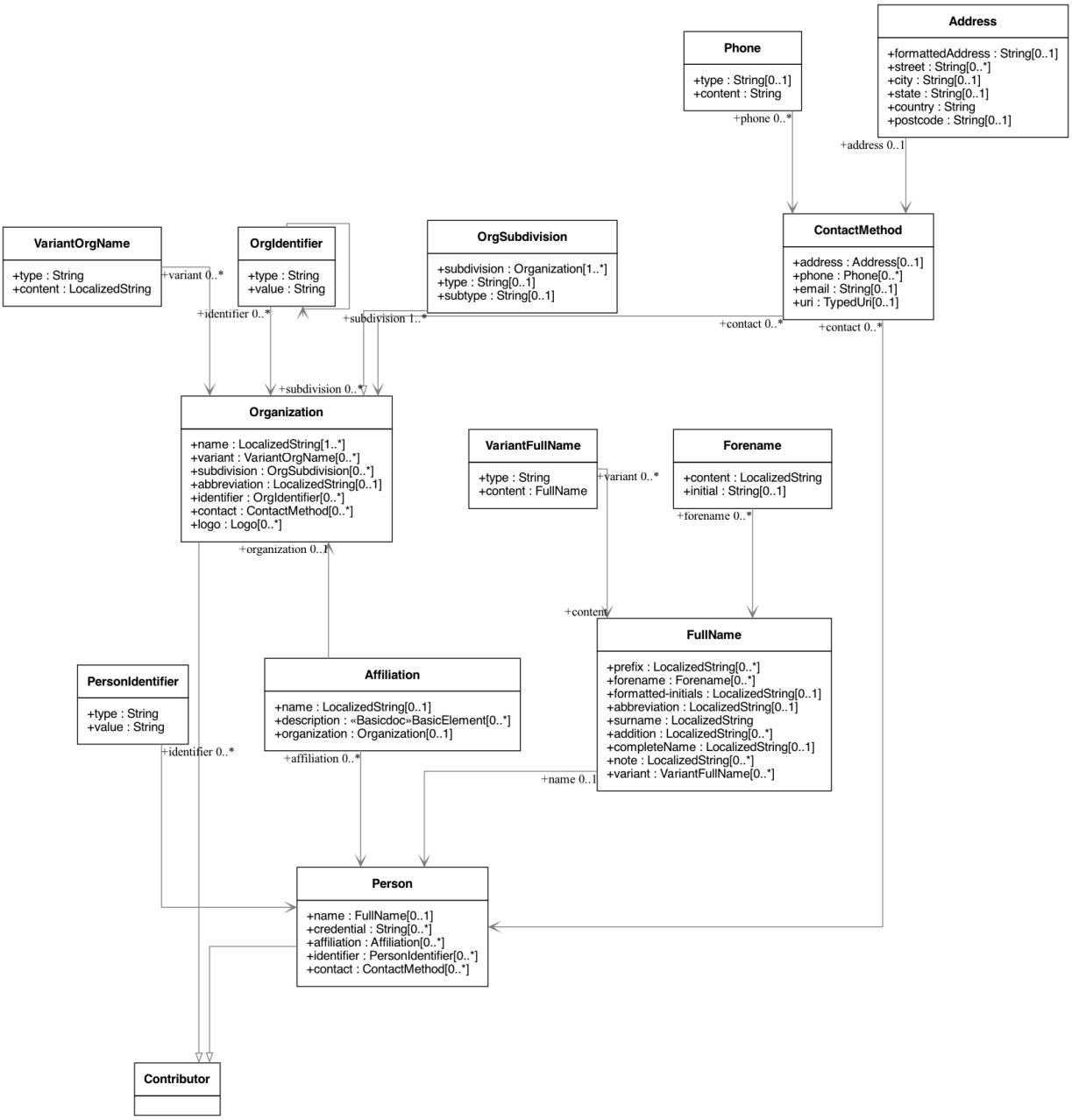

Figure 20

The model caters for both full names and abbreviations of organisations. Subordinate body names are modelled separately from the parent body name; the choice of whether to model parent + subordinate or a single name depends on the degree of independence of the subordinate body, as outlined in ISO 690, Clause 4.1.

EXAMPLE 11

St. Thomas University [Florida].

```
<organization>
  <name>St. Thomas University [Florida]</name>
```

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```
</organization>
```

EXAMPLE 12

St. Thomas University [New Brunswick].

```
<organization>
  <name>St. Thomas University [New Brunswick]</name>
</organization>
```

EXAMPLE 13

ACADEMY OF ATHENS. Research Centre for Modern Greek Dialects.

```
<organization>
  <name>Academy of Athens</name>
  <subdivision>Research Centre for Modern Greek Dialects</
subdivision>
</organization>
```

=== Pseudonyms and Variant Names

Variant names, and assumed names, can both be modelled as notes on names. However, for greater clarity, and for modelling of the internal structure of the variant or assumed name, a variant name can be modelled, with the same level of detail as default names. The type of variant, or relation between the name and variant, needs to be made explicit in that case. For example `pseudonym`/`pseudonymOf` for literary pseudonyms, or `username`/`usernameOf` for social media usernames.

Variant names can be applied to personal names, organization names, and organization subdivision names.

EXAMPLE 14

TWAIN, Mark [pseud. of Samuel Langhorne CLEMENS]

```
<person>
  <surname>Twain</surname>
  <forename>Mark</forename>
  <note>pseud. of Samuel Langhorne CLEMENS</note>
</person>
```

```
<person>
  <surname>Twain</surname>
  <forename>Mark</forename>
  <variant type="pseudonymOf">
    <surname>Clemens</surname>
    <forename>Samuel</forename>
    <forename>Langhorne</forename>
  </variant>
  <variant type="transliteration">
    <surname language="el">Τουαίην</surname>
    <forename language="el">Μαρκ</forename>
  </variant>
</person>
```

=== Anonymous and Varii

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Descriptors of authors, such as “Anon” or “Various Authors”, should be given as `completename` elements. The model does not standardise the designations of authors. As with pseudonyms, the real name of the creator if known can be modelled as a note, or as a name variant.

EXAMPLE 15

Anon. *Sir Gawain and the Green Knight*. Edited by R. A. WALDRON. Evanston: Northwestern University Press, 1970.

```
<bibitem type="book">
  <title>Sir Gawain and the Green Knight</title>
  <date type="published"><on>1970</on></date>
  <contributor>
    <role type="author"/>
    <person><name><completename>Anon</completename></name></person>
  </contributor>
  <contributor>
    <role type="editor"/>
    <person><name><completename>R. A. WALDRON</completename></name></
person>
  </contributor>
  <contributor>
    <role type="publisher"/>
    <organization>
      <name>Northwestern University Press</name>
    </person>
  </organization>
  <place>Evanston</place>
</bibitem>
```

EXAMPLE 16

Anon [Thomas Robert MALTHUS]. *An Essay on the Principle of Population*. 1st edition. London: J. Johnson, 1798.

```
<bibitem type="book">
  <title>An Essay on the Principle of Population</title>
  <date type="published"><on>1798</on></date>
  <contributor>
    <role type="author"/>
    <person><name><completename>Anon</completename></name></person>
    <variantname type="realname">
      <completename>Thomas Robert MALTHUS</completename>
    </variantname>
  </contributor>
  <contributor>
    <role type="publisher"/>
    <person><name><completename>J. Johnson</completename></name></
person>
  </contributor>
  <edition>1st edition</edition>
  <place>London</place>
</bibitem>
```

== Contribution and contributor models

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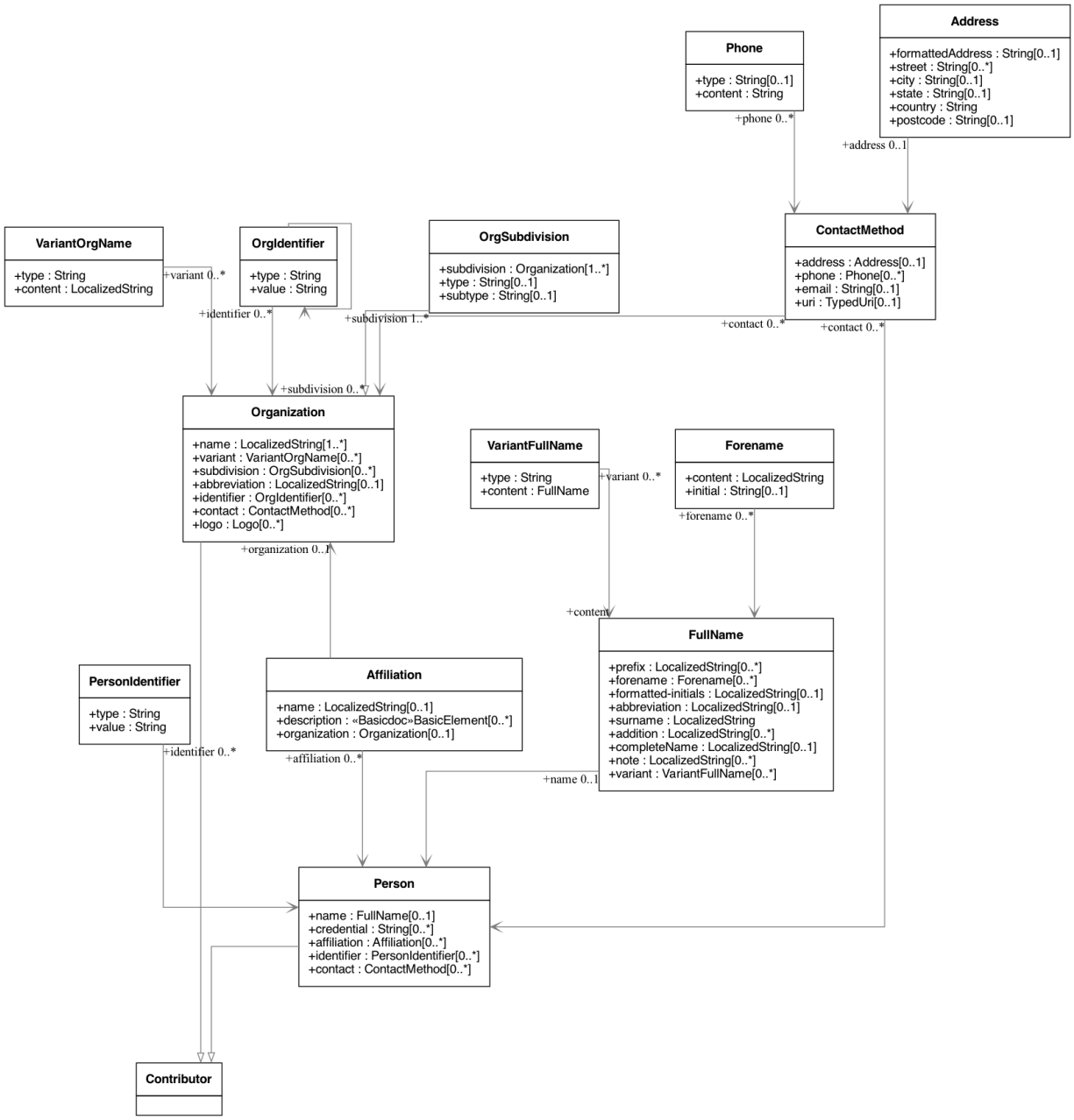

Figure 21 — Contributor model

Person/name	The name of a person.
Person/name/forename	A forename of the person.
Person/name/initials	The initials of the person (initials of forenames and middle names).
Person/name/surname	A surname of the person.
Person/name/addition	A suffixed addition to the name of the person.
Person/name/prefix	A prefixed addition to the name of the person.

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Person/name/completeName	The preformatted version of the name of the person, not broken down into its component parts.
Person/name/note	An additional note about the name of the person
Person/name/variant	A variant name
Person/name/variant/type	The type of variant of the name
Person/uri	A URI with information about the person.
Person/affiliation	The affiliation of the person within an organization.
Person/affiliation/name	The name of the affiliation of the person.
Person/affiliation/description	A more detailed description of the affiliation of the person.
Person/affiliation/organization	The organization with which the person is affiliated.
Person/identifier/value	An identifier of the person according to an international identifier scheme.
Person/identifier/type	The international identifier scheme for the identifier of the person.
Person/contact	Contact information for the person, including address, phone number, and email.
Organization/name	The name of the organization.
Organization/name/primary	The name of the organization (if it has variants).
Organization/name/variant/type	The type of variant name of the organization.
Organization/name/variant/primary	The variant name of the organization.
Organization/subdivision	The subdivision of the organization directly involved with the production of the bibliographic item.
Organization/subdivision/primary	The name of the subdivision (if it has variants).
Organization/subdivision/variant/type	The type of variant name of the subdivision.
Organization/subdivision/variant/primary	The variant name of the subdivision.
Organization/uri	A URI with information about the organization.
Organization/name/identifier/value	An identifier of the organization according to an international identifier scheme.
Organization/name/identifier/type	The international identifier scheme for the identifier of the organization.
Organization/name/contact	Contact information for the organization, including address, phone number, and email.
Organization/abbreviation	Abbreviation under which the organization is known.

=== Title

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==== Preferred form

— Source: ISO 690, Clause 4.2; ISO 690, Clause 7.3
— Serialisation: `bibitem/title`

The wording and spelling of the title should be given in the form in which it appears in the cited information resource (see Clause 6, Paragraph 1).

A title is serialised as `bibitem/title`, with its type in `title/@type` and its language and script in the language attributes (see Clause 8.1).

EXAMPLE 17

Unknown soldier.

Additional information such as the format or date may be provided, if necessary.

A work identifier (e.g., ISAN) may be added after the title, preceded by the identifier type. The identifier should be used if the title alone does not uniquely identify the cited resource.

EXAMPLE 18

Unknown soldier. [film]. 2017. [ISAN 0000-0005-007D-0000-Q-0000-0000-X].

==== Alternative forms

If alternative forms of title are given in the cited information source, the most prominent should be used. If several forms are given equal prominence, the form used should be one of the following, listed in order of preference:

1) a title in the language and script mainly used in the cited information resource;
2) the title given prominence by the order of titles or the layout;
3) a title in the language of the main target audience; and
4) other forms of title.

EXAMPLE 19

Eric, or Little by little: a tale of Roslyn School.

A resource can have multiple titles, including alternative titles and subtitles. Titles are classified through `title@type`; the model allows for “alternative”, “subtitle”, “unofficial” (i.e. a title that has become prevalent but has never been the official/intended title of the resource), “original” (including the source language title of a translated resource), and “main” (for the proper title or titles of the resource). If a title type is not given, it is assumed to be a main title.

EXAMPLE 20

Lemuel Gulliver [pseud. of Jonathan Swift]. *Travels into Several Remote Nations of the World. In Four Parts* [Gulliver’s Travels]. London: Ben. Motte, 1798.

```
<bibitem type="book">
  <title type="original">Travels into Several Remote Nations of the
World. In Four Parts</title>
  <title type="unofficial">Gulliver's Travels</title>
  <date type="published"><from>1726</from><to>1727</to></date>
  <contributor>
    <role type="author"/>
```

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```
    <person><name><completename>Lemuel Gulliver</completename></name>
</person>
    <note>pseud. of Jonathan Swift</note>
  </contributor>
  <contributor>
    <role type="publisher"/>
    <person><name><completename>Benj. Motte</completename></name></
person>
  </contributor>
  <place>London</place>
</bibitem>
```

==== Popular or original title

If the information resource used is widely known by, or was originally issued under, a title different from that of the cited version, the alternative may also be given. The alternative title shall be placed in brackets immediately following the original title.

A popular title is serialised as `title@type = "unofficial"`, and the source language title of a translated resource as `title@type = "original"`.

EXAMPLE 21

CENTRAL ADVISORY COUNCIL FOR EDUCATION (ENGLAND). *Children and their primary schools* [Plowden Report].

EXAMPLE 22

Cutter's Way [Cutter and Bone] [film].

EXAMPLE 23

GREAT BRITAIN. House of Commons. *Official Report. Parliamentary debates* [Hansard].

EXAMPLE 24

Sun Tzu. *The Art of War* [孫子兵法]. Translated by Samuel B. Griffith. Oxford: Oxford University Press, 1963.

```
<bibitem type="book">
  <title type="original" lang="zh" script="Hant">孫子兵法</title>
  <title type="main">The Art of War</title>
  <date type="published"><on>1963</on></date>
  <contributor>
    <role type="author"/>
    <person><name><completename>Sun Tzu</completename></name></
person>
  </contributor>
  <contributor>
    <role type="translator"/>
    <person><name><completename>Samuel B. Griffith</completename></
name></person>
  </contributor>
  <contributor>
    <role type="publisher"/>
    <organization><name>Oxford University Press</name></organization>
  </contributor>
  <place>Oxford</place>
```

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```
</bibitem>
```

==== Long title

A title that is inconveniently long may be shortened by the omission of some words, but initial words, other than the definite or indefinite article, should not be omitted, nor should the sense be altered. The omitted words, except for omitted articles, should be replaced by an ellipsis indicated by three dots (for abbreviation of periodical titles, see [series_abbreviation]).

Even the truncated title should enable unique identification of the cited information resource. Generic titles, even if long, should not be truncated.
NOTE 4 It is not possible to specify a generic logic or method for truncation, which diminishes the usefulness of title shortening.

EXAMPLE 25

On source: *Map of the countries lying between Turkey and Birmah, comprising Asia Minor, Persia, India, Egypt and Arabia and including the Black, Caspian and Red Seas*.

Reference: *Map of the countries lying between Turkey and Birmah*.

EXAMPLE 26

On source: *Alphabet juice: the energies, gists and spirits of letters, words and combinations thereof; their roots, bones, innards, piths, pips, and secret parts, tinctures, tonics, and essences; with examples of their usage foul and savory.*

Reference: *Alphabet juice: the energies, gists and spirits of letters, words and combinations thereof.*

or

Reference: *Alphabet juice*

==== Additional title parts

Subtitles shall be included if they are required for the identification of the cited information resource (see [ambiguous_title]), otherwise they may be omitted. A subtitle is serialised as `title@type = "subtitle"`.

If the cited information resource consists of two or more parts, the full title of the part used shall be included.

EXAMPLE 27

Etheldreda's Isle: a pictorial map of the Isle of Ely to commemorate the 1300th anniversary of the founding of Ely's conventual church.

EXAMPLE 28

Frankenstein; or, The Modern Prometheus.

EXAMPLE 29

Ici, sous l'étoile polaire. 2. Les gardes rouges de Tampere

==== Ambiguous or incorrect title

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Elucidation of a title that is ambiguous or fails to indicate clearly the content of the cited information resource may be supplied in brackets after the title. If a title contains an obscure abbreviation, the full form, if known, may be supplied.

EXAMPLE 30

Statistical digest of the war. [1939–1945].

EXAMPLE 31

Two trio sonatas for two violins and basso continuo. [Op. 5 no. 4, 5.].

Can be described as:

Two trio sonatas for two violins and basso continuo. [Opus 5 number 4, 5.].

==== No title

If there is no clear title in the cited information resource or in embedded / external metadata, a popular or traditional title may be given, if one exists. Otherwise, a title should be supplied in brackets, giving the following information:

1) the special subject matter; and
2) the nature of the item (e.g., pamphlet, map, plan, drawing, index, engraving, photograph, dataset).

“Untitled” can be treated as a main title.

EXAMPLE 32

[*Wildlife sanctuaries of Trinidad*].

==== Translated title

A translation of the title (and/or its Romanized form) of the cited information resource in the language of the publication may be supplied immediately after the original title.

A translated title is serialised as an additional `bibitem/title` with its language and script attributes.

EXAMPLE 33

Братья Карамазовы [*The Brothers Karamazov*].

EXAMPLE 34

Les parapluies de Cherbourg [*The Umbrellas of Cherbourg*].

EXAMPLE 35

Mustataustainen omakuva [*Self-Portrait, Black Background*]

If both translated title and its Romanized form are given, a semicolon may be used as a delimiter between them.

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EXAMPLE 36

源氏物語 [*Genji monogatari*; *The Tale of Genji*].

==== Titles of translated works

The original title of a work, or its translation or Romanized form, may be supplied immediately after the title used in the cited information resource.

EXAMPLE 37

The Brothers Karamazov [*Братья Карамазовы*].

EXAMPLE 38

The Brothers Karamazov [*Brat'ya Karamazovy*].

EXAMPLE 39

The Umbrellas of Cherbourg [*Les parapluies de Cherbourg*].

==== Representation

The title element can have a key role in enabling the users to locate the cited information resource. Therefore, the title may be emphasized.

EXAMPLE 40

Frog and Toad are Friends

For translated and Romanized titles placed in brackets, the emphasis should be used in order to differentiate between this title-derived information and other supplementary information also in brackets.

EXAMPLE 41

Ranelot et Bufolet, une paire d'amis [*Frog and Toad are Friends*]

Titles in scripts that are not traditionally emphasized, should not be emphasized.

EXAMPLE 42

淮南子 [*Huainanzi*; *The Writings of the Huainan Masters*].

EXAMPLE 43

Sigur Rós. Untitled [Vaka]. In: *( )* [compact disc]. Track 1. Mosfellsbær: Sundlaugin, 2002.

```
<bibitem type="music">
  <title>Untitled</title>
  <title type="unofficial">Vaka</title>
  <date type="published"><on>2002</on></date>
  <contributor>
    <role type="author">composer</role>
    <organization><name>Sigur Rós</name></organization>
  </contributor>
  <medium>
    <form>compact disc</form>
```

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```
    </medium>
    <relation type="includedIn">
      <bibitem>
        <title>( )</title>
        <contributor>
          <role type="author">composer</role>
          <organization><name>Sigur Rós</name></organization>
        </contributor>
        <contributor>
          <role type="publisher"/>
          <organization><name>Sundlaugin</name></organization>
        </contributor>
        <place>Mosfellsbær, Iceland</place>
      </bibitem>
      <locality type="track">
        <referenceFrom>1</referenceFrom>
      </locality>
    </relation>
  </bibitem>
```

=== Component parts

==== General

— Source: ISO 690, Clause 7.4
— Serialisation: `bibitem/relation[type=includedIn|includes]`, `bibitem/extent`, `relation/locality`

Citable information resources can be component parts of host resources, other citable information resources.

Component parts include articles in periodicals, newspapers and Web sites, individual tracks (and their lyrics) in LPs and CDs, poems and short stories published in books, episodes in TV series, conference presentations published in proceedings, and so on.

A component part is serialised as a `relation` of the item within its host item (see [doc-relations]); the position of the component part within the host item is given in `relation/locality`, and its extent in `bibitem/extent`.

EXAMPLE 44

OWEN, W. *Strange meeting*. In: OWEN, W. Poems by Wilfred Owen. London: Chatto & Windus, 1920, p. 1–2

```
<bibitem type="poem">
  <title>Strange meeting</title>
  <contributor>
    <role type="author"/>
    <person><name><completename>W. Owen</completename></name></
person>
  </contributor>
  <relation type="includedIn">
    <bibitem type="book">
      <title>Poems by Wilfred Owen</title>
      <contributor>
        <role type="author"/>
        <person><name><completename>W. Owen</completename></name></
person>
      </contributor>
      <contributor>
```

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```
            <role type="publisher"/>
            <organization><name>Chatto &amp; Windus</name></organization>
          </contributor>
          <place>London</place>
          <date type="published"><on>1920</on></date>
        </bibitem>
        <locality type="page">
          <referenceFrom>1</referenceFrom>
          <referenceTo>2</referenceTo>
        </locality>
      </relation>
    </bibitem>
```

==== Representation

===== General

If the host information resource is not a serial, a connector phrase. “In:” or equivalent in the language of the publication should precede the title of the host item.
NOTE 5 Serials include e.g. periodicals, journals, newspapers, annuals etc.

The method of representation is given below, where `{hostItemTitle}` is the title of the host item.

```
In: {hostItemTitle}
```

EXAMPLE 45

In: Wikipedia

EXAMPLE 46

The Guardian.

It is also possible to provide a more complete description of the host resource, where `hostResourceReference` is the reference to the host item:

```
In: {hostResourceReference}
```

EXAMPLE 47

In: OWEN, W. Poems by Wilfred Owen. London: Chatto & Windus, 1920.

Locality information within the host item may be provided, where `locality` is the location of the component part within the host item:

```
In: {hostItemReference}, {locality}
```

EXAMPLE 48

OWEN, W. *Strange meeting*. In: OWEN, W. Poems by Wilfred Owen. London: Chatto & Windus, 1920, p. 1–2

===== Serials

The use of the connector phrase is not needed for citations which are contributions from journals. It is optional for other types of serials.

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EXAMPLE 49

SUHONEN, Pertti. *Suomalaiset arvot ja politiikka*. Aikamerkki. 1989, 62(1), 2–23.

===== Emphasis for locatability

Reference should enable the users to locate the cited information resource, no matter how granular it is (for instance, a component part of a component part, such as an image in a journal article).

— If the cited component part can be directly discoverable, emphasis should be placed on its title.
EXAMPLE 50

Belle de Jour [article] [online]. In: Wikipedia. Available from: Wikipedia (distributor), https://en.wikipedia.org/wiki/Belle_de_Jour_%28film%29. [viewed 2018-08-24].

EXAMPLE 51

CLARK, Carol. *On the threshold of a brave new world*. In: Blueprint of the body [online]. CNN.com, 2000 In-depth specials. Archived copy available from: Internet Archive (distributor), https://web.archive.org/web/20010223233730/http://www.cnn.com/SPECIALS/2000/genome/story/overview/ [viewed 2018-02-14].

EXAMPLE 52

DÜRER, Albrecht. *Feldhase* [still image] [online]. In: ART IN WORDS. Wien: ARTinWORDS, 2018. Available from: https://artinwords.de/albrecht-duerer-feldhase-1502/. [viewed 2018-07-23].

EXAMPLE 53

AYMARD, M. (ed.), *Dutch capitalism and world capitalism*. (Studies in Modern Capitalism). New York: Cambridge University Press, 1982, pp. 78–96.

EXAMPLE 54

MADDOX, Brenda. *DNA's double helix: 60 years since life's deep molecular secrets was discovered*. [online]. The Guardian, 2013-02-22. ISSN 1756-3224.

— If the cited component part cannot be retrieved but the host resource can be retrieved, emphasis should be placed on the host item's title.
EXAMPLE 55

MADDOX, Brenda. DNA's double helix: 60 years since life's deep molecular secrets was discovered. [online]. The Guardian, 2013-02-22. ISSN 0261-3077.

EXAMPLE 56

MANN, T. *Letter to Hermann Hesse*, 1951-10-14. In: WINSTON, R. and C. WINSTON (ed.). The Letters of Thomas Mann, 1889–1955. Vol. II 1942–1955, p. 630–632. London: Secker & Warburg, 1970.

EXAMPLE 57

COHEN, Leonard. *Suzanne* [lyrics]. In: COHEN, Leonard. Songs of Leonard Cohen. [audio disc]. Columbia records, 1968.

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EXAMPLE 58

COHEN, Leonard. *Suzanne* [lyrics]. [online]. Available from: https://www.azlyrics.com/lyrics/leonardcohen/suzanne.html. [viewed 2019-12-10].

NOTE 6 When citing an article in a digital journal where the article can be found directly, the emphasis is placed on the article's title, since the article is the most granular locatable resource.

NOTE 7 When citing a newspaper article from a printed manifestation, the emphasis is placed on the newspaper's title (the host item) since it facilitates location of the article (the cited resource).

=== Formats and resource type categorization

==== Formats

— Source: ISO 690, Clause 4.4; ISO 690, Clause 7.5
— Serialisation: `bibitem/medium`

An information resource with identical content can be published in multiple formats, potentially manifesting via multiple types of media.
NOTE 8 While some formats are labelled as "editions", this document uses the term "edition" specifically to indicate content revision.

In specifying format, it is recommended not to specify the reading or interpreting device used. It is generally unnecessary to indicate the actual digital file format.

ISO 690 differentiates between the content type of the item, the media type (which includes file format for electronic media), the carrier type, the size of the item (which can include duration, and electronic file size, as well as physical medium size), and for maps, the scale of the item. These are all modelled as elements of the item medium; the media type or file format is modelled as `medium/form`.

There is no fixed vocabulary modelled for any of the elements of `medium` (although ISO 690 suggests closed Resource Description and Access (RDA) vocabularies for `medium/content` and `medium/carrier`, and IANA Media Type is best practice for `medium/form` for electronic resources. As ISO 690 allows, there may be instances where the medium descriptions need to be discursive.

ISO 690 suggests specifying detailed information about the type of electronic information resource (e.g. "statistical dataset"), which cannot be represented in the type of bibliographic item (`bibitem/@type`), and is likely to be to specific for the RDA triple of content, carrier and form. The `medium/genre` element is intended to convey this kind of information, and can be used more generally as a well-recognised subclass of bibliographic type or content.

Information about alternate formats should be modelled as related bibliographic items (through the "instance" document relation), each with their own medium information.

The size and scale of the item (`medium/size`, `medium/scale`) usually contains numerical information, but is modelled as a string, given the complications of how size and scale can be described, particularly for cartographic material.

EXAMPLE 59

PLOKHY, Serhii. *Chernobyl: The History of a Nuclear Catastrophe*. Kindle edition.

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EXAMPLE 60

SKLOOT, R. *The Immortal Life of Henrietta Lacks.* Audiobook.

EXAMPLE 61

SEUSS, Dr. *The Cat in the Hat*. Loose leaf.

EXAMPLE 62

SEUSS, Dr. *Green Eggs and Ham*. Board book.

EXAMPLE 63

TORIYAMA, Akira. *Dragon Ball* [ドラゴンボール]. Paperback.

EXAMPLE 64

WU, Cheng'en. *Journey to the West* [西遊記]. Paperback. Translated from Chinese into English. W.J.F. JENNER (translator).

EXAMPLE 65

Sigur Rós. Untitled [Vaka]. In: *( )* [compact disc]. Track 1. Mosfellsbær: Sundlaugin, 2002.

```
<bibitem type="music">
  <title>Untitled</title>
  <title type="unofficial">Vaka</title>
  <date type="published"><on>2002</on></date>
  <contributor>
    <role type="author">composer</role>
    <organization><name>Sigur Rós</name></organization>
  </contributor>
  <medium>
    <form>compact disc</form>
  </medium>
  <relation type="includedIn">
    <bibitem>
      <title>( )</title>
      <contributor>
        <role type="author">composer</role>
        <organization><name>Sigur Rós</name></organization>
      </contributor>
      <contributor>
        <role type="publisher"/>
        <organization><name>Sundlaugin</name></organization>
      </contributor>
      <place>Mosfellsbær, Iceland</place>
    </bibitem>
    <locality type="track">
      <referenceFrom>1</referenceFrom>
    </locality>
  </relation>
```

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```
</bibitem>
```

EXAMPLE 66

Easterbrook, Don J. *Geologic Map of Western Whatcom County, Washington*. Map. 1:62,500. col. 68 x 69 cm. fold. in envelope 30 x 24 cm. Miscellaneous Investigations Series, map 1-854-B. Reston, VA: U.S. Geological Survey, 1976.

```
<bibitem type="map">
  <title>Geologic Map of Western Whatcom County, Washington</title>
  <date type="published"><on>1976</on></date>
  <contributor>
    <role type="author"/>
    <person><name><completename>Easterbrook, Don J.</completename></
name></person>
  </contributor>
  <contributor>
    <role type="publisher"/>
    <organization><name>U.S. Geological Survey</name></organization>
  </contributor>
  <medium>
    <form>map</form>
    <size>col. 68 x 69 cm. fold. in envelope 30 x 24 cm.</size>
    <scale>1:62500</scale>
  </medium>
  <series>
    <title>Miscellaneous Investigations Series</title>
    <number>map 1-854-B</number>
  </series>
  <place>Reston, VA</place>
</bibitem>
```

EXAMPLE 67

GATES, B. [BillGates]. (2013, February 26). #Polio is 99% eradicated. Join me & @FCBarcelona as we work to finish the job and #EndPolio. [Tweet]. Available from: https://twitter.com/BillGates/status/306195345845665792. [viewed 2016-07-06T12:30:15+02:00]. See also VIDEO: http://b-gat.es/X75Lvy.

```
<bibitem type="electronic resource">
  <title>#Polio is 99% eradicated. Join me & @FCBarcelona as we work
to finish the job and #EndPolio</title>
  <date type="published"><on>2013-02-26</on></date>
  <date type="accessed"><on>2016-07-06T12:30:15+02:00</on></date>
  <contributor>
    <role type="author"/>
    <person>
      <name>
        <surname>Gates</surname>
        <initial>B.</initial>
      </name>
      <variant type="username">
        <completename>BillGates</completename>
      </variant>
    </person>
  </contributor>
  <uri>https://twitter.com/BillGates/status/306195345845665792</uri>
  <medium>
    <form>Twitter</form>
    <genre>tweet</genre>
  </medium>
```


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```
        <relation type="complements">
          <bibitem type="video">
             <uri>http://b-gat.es/X75Lvy</uri>
          </bibitem>
        </relation>
      </bibitem>
```

==== Resource type categorization

===== General

Content, media and carrier type should be specified if they have a significant impact on the intellectual content, look and feel, or usage of the cited information resource.

The information should be taken from the resource if it is provided. Otherwise, an external reference may be used when necessary for identification purposes, such as:

— IANA Media Types list[2];
— Resource Description and Access (RDA) content types[3], media types[4], and carrier types[5].

Resource type description does not always provide added value for citations.

EXAMPLE 68

A printed book would have content type “text”, and carrier type “volume”. Such information is seldom relevant for citations.

EXAMPLE 69

A Web site would have content type “text”, media type “computer” and carrier type “online”. Only the carrier type here is relevant for citation.

===== Content type

Content type should be provided when it is required for the identification of the cited work. For instance, there may be several related interrelated works which share the same title.

EXAMPLE 70

Macbeth [film].

===== Carrier type

Digital information resources can be fragile. In order to preserve them, it will be necessary to transfer them to new carriers. For instance, audio tapes last only up to 30 years, but their lifespan can be even shorter if the tapes are not stored correctly. And even if the carrier itself is still fine, finding a player for an outdated carrier type (e.g. a C-cassette deck) may be difficult.

[2] https://www.iana.org/assignments/media-types/media-types.xhtml

[3] http://www.loc.gov/standards/valuelist/rdacontent.html

[4] http://www.loc.gov/standards/valuelist/rdamedia.html

[5] http://www.loc.gov/standards/valuelist/rdacarrier.html

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Since carrier type information will become outdated, carrier type should not be specified if the same version of the information resource is known to be available on multiple carriers (e.g. LP, C-cassette, CD) or if the information used is available even on versions published on other carriers.

Carrier type should be provided if the carrier type is relevant for the citation.

EXAMPLE 71

If the quality and special features of a 5-channel recording released on SA-CD are discussed, the citation specifies the carrier type, since other carriers such as LP or CD do not provide the relevant features.

À la russe. [SA-CD]. BIS-2150 SACD

==== Digital file formats

The digital file format of the cited online electronic information resource should be specified. This is especially the case when the carrier type is not provided or if the carrier type does not provide sufficient detail about the file format.

Identification of digital file formats may utilize the following information:

— file extension of the information resource;
— Clause 8.2.1.1, Example 1;
— well-known format designations like the Clause 8.2.1.1, Example 1 Unique Identifier.

NOTE 9 Both IANA Media Type and file extension may be insufficient if there are several incompatible versions of the same file format with significantly different characteristics. In such cases, different rendering tools may be required.

EXAMPLE 72

[application/pdf].

EXAMPLE 73

[PDF].

EXAMPLE 74

[fmt/14]. (PRONOM Unique Identifier for PDF version 1.0)

EXAMPLE 75

[EPUB 3.0.1].

If the format of the cited resource is uncommon, sufficient technical metadata or a link to such metadata should be provided. In cases where the cited resource is from an archive with a digital preservation program, this may be covered by the archive.
NOTE 10 A file format specification can be accompanied by one or more applications capable of rendering resources in the format, and for provenance purposes the application with which the information resource was created should sometimes be provided. However, including technical metadata in references is not very practical since it changes over time. If file format is specified using the PRONOM identifier, the identifier can be used to find up to date information about the format, including rendering tools, from the PRONOM database.

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If the format is widely known and supported (e.g., HTML), the RDA term “online resource” or just “online” may be used instead of the file format designation. Type of the resource may also be specified.

EXAMPLE 76

[online resource].

EXAMPLE 77

[online serial].

The specific type of electronic information resource may also be specified, if it is not clear from the context. The level of specificity may be chosen, as appropriate.

EXAMPLE 78

[statistical dataset].

EXAMPLE 79

[LiDAR dataset].

EXAMPLE 80

[statistical analysis program].

EXAMPLE 81

[IBM SPSS Statistics].

Information about other file formats in which the cited information resource is available (e.g., a PDF version of an HTML document which was originally used) may be provided in addition to the cited resource. Information about alternative formats should be clearly separated from the information pertaining to the file format used, and it should be preceded by an appropriate phrase, including the file format and the online host if necessary.

EXAMPLE 82

[Available also in PDF format].

If an alternative file format is included in the reference, a check should be made to verify that the alternative resource contains the cited information. Digital surrogates of printed resources can differ significantly from the original documents.

==== Migrated medium

If the information resource used has been migrated and the original resource is no longer accessible, the migrated resource may be used if it contains the cited information. A note about the original version may be added.

EXAMPLE 83

[PDF/A]. [Originally a Microsoft Word document].

=== Edition and version

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==== Editions

— Source: ISO 690, Clause 4.5; ISO 690, Clause 7.6
— Serialisation: `bibitem/edition`, `bibitem/version`, `bibitem/date`

Editions are used to differentiate significant content revisions, including draft stages.

Editions are modelled as free text, given the variety of ways they can be represented. For that reason, the full word “edition” needs to appear after any ordinal. The optional `number` attribute can be used to provide a numeric equivalent.

An edition number shall be provided if the information resource is of a second edition or higher. The edition should be specified in the terms, including symbols, used in the cited information resource. The word for “edition” or equivalent term in the language of the cited information resource may be abbreviated.

If there is a reasonable expectation of forthcoming editions, an edition number should be provided even when the cited information resource is a first edition.

If a program or research dataset cited is updated often, edition (or version) should be included only if necessary, since the information provided becomes outdated very quickly, and locating and/or running the indicated version is likely to be difficult. An edition number is required if other (earlier or later) editions of the program or research dataset are not applicable.

If an edition (or version) number is provided for programs and research datasets, a first edition is not an exception. The first official release of a program may not be the first version that has been available for the public. Edition is also important since hardware and software requirements are dependent on version information.

EXAMPLE 84

3rd ed., rev.

EXAMPLE 85

2. laitos.

EXAMPLE 86

ORACLE. *MySQL*® [program]. Enterprise edition. Redwood City: Oracle, 2015.

EXAMPLE 87

Digital Preservation Handbook [online]. 2nd revised edition. Digital Preservation Coalition, 2015.

EXAMPLE 88

Anon [Thomas Robert MALTHUS]. *An Essay on the Principle of Population*. 1st edition. London: J. Johnson, 1798.

```
<bibitem type="book">
  <title>An Essay on the Principle of Population</title>
  <date type="published"><on>1798</on></date>
  <contributor>
    <role type="author"/>
    <person><name><completename>Anon</completename></name></person>
    <note>Thomas Robert MALTHUS</note>
```

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```
  </contributor>
  <contributor>
    <role type="publisher"/>
    <person><name><completename>J. Johnson</completename></name></
person>
  </contributor>
  <edition number="1">1st edition</edition>
  <place>London</place>
</bibitem>
```

EXAMPLE 89

SKOUSEN, Mark. *The Structure of Production*. New revised edition. New York: New York University Press, 2015.

```
<bibitem type="book">
  <title>The Structure of Production</title>
  <date type="published"><on>2015</on></date>
  <contributor>
    <role type="author"/>
    <person>
      <name>
        <surname>Skousen</surname>
        <forename>Mark</forename>
      </name>
    </person>
  </contributor>
  <contributor>
    <role type="publisher"/>
    <organization><name>New York University Press</name></
organization>
  </contributor>
  <edition>New revised edition</edition>
  <place>New York</place>
</bibitem>
```

Some information resources may be appropriately cited prior to formal publication. For instance, it is possible to cite a preprint of a scientific article before it is published, or a standard when it is still under preparation (see [standards-section]).

Citing an unfinished information resource shall follow the guidelines provided either within the information resource or by the publisher. Draft stage indication (such as “Preprint” or “work in progress” shall be incorporated into the reference according to such guidance.

EXAMPLE 90

BLOSS C. S., N. E. WINEINGER, M. PETERS [et al.]. *A prospective randomized trial examining health care utilization in individuals using multiple smartphone-enabled biosensors*. Preprint.

Reprints should also be specified as such, with the phrase “Reprint” or equivalent after the title.

EXAMPLE 91

ANONYMOUS. *Diary of an Oxygen Thief*. Reprint. New York: Gallery Books, 2016.

==== Audience differentiated content

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If an information resource is published in different languages in different countries, the country of publication should be given after the title in the language used in the source and separated from the main title with a colon.

EXAMPLE 92

National Geographic: Sverige.

If the edition of the cited resource shown to a user depends on his or her geographical location, a note indicating the edition used should be provided. If the content of a resource can be personified with e.g., cookies or some other technique, citation should be based on a non-personified basic version of the page.

EXAMPLE 93

[Swedish edition].

==== Version

If the cited information resources has been updated or expanded, it usually has a version statement. The number and other designation for the version should be recorded in the terms given in the cited information resource.
NOTE 11 Words such as “version”, “level”, “update”, as well as phrases such as “revised”, “third update” or “training level” are often used to indicate version changes.

The `version` element can be used to give more detailed information about resource versions, including version numbers (drafts) and version dates (which are differentiated from `date`, since they are often used as version identifiers).

As described in [datetypes], dates when a resource was last accessed are modelled as `date[@type = "accessed"]`; dates when a resource was last updated are modelled as `date[@type = "updated"]`.

If a change in a file format version has an impact on the usage (for instance, different tool is needed to render the resource), the version information should be provided.

EXAMPLE 94

EPUB 2 and EPUB 3 are different formats and may require different rendering tools. Therefore, EPUB is included in citations with the version number.

Personified Web resources should not be used for referencing, since other users may not be able to verify whether the resource does contain or did contain the cited information.

If a specific version of an information resource is cited, the version should be indicated by giving the name and/or number of the release, update or equivalent, and, if necessary, the year, with (if necessary) month, day and time (see [season_month_day_time]), when that version was created or updated. It is also possible to specify the date when the information resource was viewed or accessed.

EXAMPLE 95

1.0 Rev A.

EXAMPLE 96

APPLE. *Mac OS X El Capitan*. Version 10.11 [program]. [viewed 2016-06-25].

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EXAMPLE 97

MOZILLA FOUNDATION. *Mozilla Firefox*. Version 60.4.0 ESR [program]. Available from: https://www.mozilla.org/. [viewed 2019-01-11].

EXAMPLE 98

When did the sounds of 'w' and 'v' change in High German? *Stack Exchange: Linguistics Beta*. Updated 8 May 2017 [viewed 10 May 2018]. Available from: https://linguistics.stackexchange.com/questions/22872/when-did-the-sounds-of-w-and-v-change-in-high-german

```
<bibitem type="webresource">
  <title>When did the sounds of 'w' and 'v' change in High German?</
title>
  <uri>https://linguistics.stackexchange.com/questions/22872/when-
did-the-sounds-of-w-and-v-change-in-high-german</uri>
  <date type="updated"><on>2017-05-08</on></date>
  <date type="accessed"><on>2018-05-10</on></date>
  <relation type="includedIn">
    <bibitem type="website">
      <title>Stack Exchange: Linguistics Beta</title>
    </bibitem>
  </relation>
</bibitem>
```

EXAMPLE 99

MOZILLA FOUNDATION. Mozilla Firefox version 60.4.0 ESR [computer program]. Available from: https://www.mozilla.org/. [viewed 2019-01-11].

```
<bibitem type="software">
  <title>Mozilla Firefox</title>
  <uri>https://www.mozilla.org/</uri>
  <date type="accessed">2019-01-11</date>
  <contributor>
    <role type="author"/>
    <organization>
      <name>Mozilla Foundation</name>
    </organization>
  </contributor>
  <version>
    <draft>60.4.0 ESR</draft>
  </version>
  <medium>
    <content>computer program</content>
  </medium>
</bibitem>
```

Guidelines for citing versions of Web pages and their component parts are described in detail in [network_location].

=== Date

==== General

— Source: ISO 690, Clause 7.7
— Serialisation: `bibitem/date`, `date/@type`, `date/on|from|to`, `date/@text`

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The date of publication, manufacture, distribution, execution, transmission, etc., should be cited if necessary. For physical items such as printed books, providing the year is often sufficient to facilitate locatability, but for intangible works (e.g., Internet documents, serials, research datasets and patents), the explicit date and time of the last modification and/or date and time the document was viewed may be necessary.

If appropriate, date may be expressed as shown in the cited information resource or external metadata describing the resource, e.g., the name of a season or a university term.

The format of the date information should be based on representations provided in the ISO 8601 series if the information should be machine readable and understandable.
NOTE 12 The ISO 8601 series specifies representations of date and time information for interchangeable purposes, that are sometimes neither familiar nor ideal for human users. For instance, an open time interval intended for human reading is usually represented using an en-dash (e.g. 1990–) or hyphen (e.g. 1990-), whereas its standard-based representation utilizes a solidus and full stops (e.g. 1990/..). In these cases, the human readable form is preferred.

A date is serialised as `date/@type` (the lifecycle phase, from the `BibliographicDateType` vocabulary) with either the point date `date/on`, or the range `date/from` and `date/to`, each in the ISO 8601 format. A date that cannot be expressed as a Gregorian date is serialised as text in `date/@text`.

EXAMPLE 100

MADDOX, Brenda. *DNA's double helix: 60 years since life's deep molecular secrets was discovered*. [online]. The Guardian, 2013-02-22.

```
<bibitem type="article">
  <title>DNA's double helix: 60 years since life's deep molecular
secrets was discovered</title>
  <date type="published"><on>2013-02-22</on></date>
  <relation type="includedIn">
    <bibitem type="periodical">
      <title>The Guardian</title>
    </bibitem>
  </relation>
</bibitem>
```

==== Model

For a point date, only `date/on` is populated. For a date range, `date/from` and `date/to` are populated. If the range is ongoing, the `date/to` element is left out.

The date for `date/on`, `date/from` and `date/to` is by default given as a Gregorian date/time, following the conventions of ISO 8601-1; in an XML serialisation, they would be expected to follow the XML Schema `xs:datetime` representation (Clause 8.2.1.1, Example 1). However bibliographic dates often contain information that cannot be restricted to an ISO 8601 date (dates in other calendars, date corrections; other subdivisions of the year; approximate date or no date.) For that reason, the model allows dates to be expressed in text instead of as an ISO 8601 date (`date/on@text`, `date/from@text`, `date/to@text`), or as well as an ISO 8601 date if a Gregorian date is still applicable. If the textual value of a date is a date range, and ISO 8601 dates are still to be provided for the start and end of the date range, then the textual value is repeated for `date/from@text` and `date/to@text`.

Date corrections may also involve indications of provenance ([provenance]).

The date of copyright is associated expressly with the copyright holder, in `bibitem/copyright/date/from`. Unlike other bibliographic dates, the copyright date can only have a year value.

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EXAMPLE 101

ROGET, Peter Mark. *Roget's Thesaurus*. Revised by Susan M. LLOYD. Burnt Mill, Harlow, Essex: Longman Group Limited, 1982 [1852].

```
<bibitem type="book">
  <title>Roget's Thesaurus</title>
  <date type="created"><on>1852</on></date>
  <date type="updated"><on>1982</on></date>
  <date type="published"><on>1982</on></date>
  <contributor>
    <role type="author"/>
    <person>
      <name>
        <surname>Roget</surname>
        <forename>Peter</forename>
        <forename>Mark</forename>
      </name>
    </person>
  </contributor>
  <contributor>
    <role type="editor">revised</role>
    <person>
      <name>
        <surname>Lloyd</surname>
        <forename>Susan</forename>
        <forename>M.</forename>
      </name>
    </person>
  </contributor>
  <contributor>
    <role type="publisher"/>
    <organization>
      <name>Longman Group Limited</name>
    </organization>
  </contributor>
  <place>Burnt Mill, Harlow, Essex</place>
</bibitem>
```

EXAMPLE 102

2018-05-09, 21:33:28

<date type=”created”> <on>2018-05-09T21:33:28</on> </date>

EXAMPLE 103

Jewish calendar 5685 [1925]

<date type=”published” text=”Jewish calendar 5685”><on>1925</on></date>

EXAMPLE 104

Islamic calendar 1439 [2017–2018]

<date type=”created”> <from text=”Islamic calendar 1439”>2017</from> <to text=”Islamic calendar 1439”>2018</to> </date>

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EXAMPLE 105

1959 [i.e. 1995]

<date type=”created”> <on>1959</on> </date> <date type=”created” source=”supplied”> <on text=”1959 [i.e. 1995]”>1995</on> </date>

EXAMPLE 106

Michaelmas term (Oxford), 2002

<date type=”created”> <from text=”Michaelmas term (Oxford), 2002”>2002-10-01</from> <to text=”Michaelmas term (Oxford), 2002”>2002-12-17</to> </date>

EXAMPLE 107

1650?

<date type=”created” text=”1650?”> <on>1650</on> </date>

EXAMPLE 108

\[no date]

<date type=”created” text=”[no date]”/>

EXAMPLE 109

1951 copied 1957

<date type=”created”> <on>1951</on> </date> <date type=”copied”> <on>1957</on> </ date>

EXAMPLE 110

1951-

<date type=”published”> <from>1951</from> </date>

EXAMPLE 111

© ISO, 2018

<copyright> <from>1951</from> <owner><organization><name>ISO</name></ organization></owner> </copyright>

===== Date types

Dates are associated with specific phases of the production of a bibliographic item, and those phases are named through `date@type`. The default type used in bibliography is the date of publication (`date[@type = "published"]`), but the “created”, “updated”, “unchanged”, and “copied” dates in particular are often given where they differ from the date of publication. The date of transmission is used instead of the date of publication for a broadcast.

The repertoire of date types is expanded to deal with the particular requirements of standards:

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Normal bibliographic dates:

created	Date a resource was created.
published	Date a resource was published.
accessed	Date a resource was last accessed by the bibliographer; routinely used for online publications. (Unlike in ISO 690, no distinction is made between “viewed” and “accessed” based on whether the resource is human-readable or machine-readable.)
updated	Date a resource was updated and republished. Used for new editions.
unchanged	Date a resource was reprinted, i.e. republished without any changes.
circulated	Date a draft version of a resource was circulated. (Drafts by definition are not published.)
transmitted	Date a resource was broadcast.
copied	Date a resource was physically copied, or recreated without any substantial change in content (allowing for change in medium).
adapted	Date a resource was adapted for a new purpose or audience, with some change in content (includes translation).

Standards bibliographic dates:

implemented	Date a standard takes effect.
obsoleted	Date a standard becomes no longer in effect.
confirmed	Date a standard is renewed to take effect.
issued	Date a standard is authorised for publication.

The date of publication is taken to be the date when the current version of the resource was published, unless a separate “unchanged”, “updated” or “copied” date is given; in that case, the date of publication is assumed to be the date of initial publication.

The date of creation is taken to apply to the work instantiated by the resource, rather than to a specific format or edition. The latter are represented by the date of adaptation and of update, respectively.

==== Representation

===== Year

The year should usually be given as it appears in the cited information resource, however, years written as words in the cited information resource should be given as Arabic numerals in the reference.

If the cited information resource bears a date from a calendar system other than the Common Era (CE), the date should be given together with its ISO 8601-1 equivalent in the CE calendar system supplied as associated information.

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EXAMPLE 112

Jewish calendar 5685 [1925].

EXAMPLE 113

唐貞觀元年 [Zhengguan era of the Tang dynasty, year 1] [627].

EXAMPLE 114

中華民國元年 [Calendar of the Republic of China, year 1] [1911].

EXAMPLE 115

平成３１年 [Heisei era, year 31] [2019].

EXAMPLE 116

L'AN VI [1798].

===== Season, month, day, time

If a machine readable date is required, it should be provided in a format compliant with the ISO 8601 series, including, if necessary, time. In that case, the time zone may also be provided.

EXAMPLE 117

1984-02-10T13:43:11Z.

EXAMPLE 118

1984-22. (Summer 1984)

EXAMPLE 119

MANN, T. *Letter to Hermann Hesse*, 1951-10-14

EXAMPLE 120

MADDOX, Brenda. *DNA's double helix: 60 years since life's deep molecular secrets was discovered*. [online]. The Guardian, 2013-02-22.

The precise date may be provided with the season or month spelled out, either in full or abbreviated, and with day, month, year and time given in the order and language used in the cited resource (see Clause 6, Paragraph 1). If so, an ISO 8601 equivalent of the date may also be provided as associated information after the date from the cited resource.

EXAMPLE 121

June 22, 2019.

EXAMPLE 122

10 Feb. 1984 [1984-01-10].

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EXAMPLE 123

10{period} tammikuuta 1984 [1984-01-10].

EXAMPLE 124

Chinese lunar calendar date: Winter (month 1), day 10, 2019 [2019-02-14].

====== Uncertain, unknown, approximate or missing date

If the year of publication is not given but can be ascertained, it should be supplied. If the date is uncertain, an approximate date, followed by a question mark should be provided.

The character X may be used in place of one or more rightmost digits to indicate that the value of that digit is unspecified. Approximate date may be specified with tilde (“~”), uncertain and approximate date with percent character (“%”).

If no date can be given, the Latin phrase “s. a.”, English phrase “no date” (or “n. d.”), or an equivalent in the language of the publication may be supplied.

EXAMPLE 125

[1750].

EXAMPLE 126

[1873?]. (Uncertain year, possibly 1873)

EXAMPLE 127

[177X]. (The resource is known to have been published between 1770 and 1779.)

EXAMPLE 128

[1984~]. (Approximate year)

EXAMPLE 129

[1914%]. (Uncertain and approximate year, possibly 1914)

EXAMPLE 130

[no date].

====== Date ranges

Date ranges should be created using the Unicode “hyphen-minus” as the separator character. Open ranges are acceptable.

EXAMPLE 131

1940–.

EXAMPLE 132

1978–, Jahrg. 5–.

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EXAMPLE 133

1936–1941, año 1–6.

EXAMPLE 134

1970–1973, vols 1–3. [Discontinued].

If the date range has to be machine readable, it may be expressed as specified in ISO 8601. The standard uses solidus (“/”) as the separator character in ranges.

EXAMPLE 135

1970/1973, vols 1–3. [Discontinued].

===== Date of publication

The year (and, if necessary, full date or date and time) on which the cited information resource was published should be given.

EXAMPLE 136

1997.

EXAMPLE 137

June 22, 2019.

In a reference to the whole or a limited run of any item issued in parts over a period of years, the years of publication of the first part issued (which is not necessarily numerically the first part) and the part last issued should be given.

EXAMPLE 138

1842–1898.

If the run is in progress, the year of the first item should be provided, followed by a hyphen-minus. The numeration and pagination (see [numeration]), if any, should also be given.

EXAMPLE 139

1842–.

===== Date of citation

The full date (and, if necessary, time) on which the cited information resource was viewed should be given if:

1) The cited information resource is dynamic, and it is necessary to indicate the exact version used with the date.
2) There is no other date information to be found either in the cited information resource or in the related documentation such as external metadata.

The date of citation should be preceded by an appropriate term such as “viewed” and “accessed” (for human and machine-readable information resources, respectively) or equivalent terms in the language of the publication.

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The date the cited resource was viewed should follow the link used. Even a single citation may contain several links to different copies or versions of the cited information resource, and it may be important to indicate when the functionality of these links was checked.

EXAMPLE 140

[viewed 2016-09-03].

```
<date type="accessed"><on>2016-09-03</on></date>
```

===== Surrogate dates

In a reference to a reprint, facsimile, digital surrogate or other copy of the original information resource, the date of publication of that edition or, for a copy, the date of the original, should be given, along with the date of reprinting or copying.

EXAMPLE 141

1796 [copied 1810].

EXAMPLE 142

1870 [digitized 2010].

===== Incorrect dates

If the date given on the cited information resource is known to be incorrect, the correct year should also be supplied in brackets after the date in the cited resource.

EXAMPLE 143

1959 [i.e. 1995].

If the date on the cited information resource is known to be different from the actual publication date, both dates may be given; the actual date in brackets after the date in the cited resource.

=== Production information

— Source: ISO 690, Clause 4.6; ISO 690, Clause 7.8
— Serialisation: `bibitem/place`, `bibitem/contributor[role@type = "publisher"]`, `bibitem/contributor[role@type = "distributor"]`

==== Roles

===== General

The organizations or people responsible are likely to be variously described in different kinds of resources. The order of preference should be:

1) publisher or production company;
2) distributor or issuing body or online host;
3) printer or manufacturer;
4) sponsoring body.

The publisher is a subclass of creator (Clause 8.2). Of the classes of creator that can be used as the publisher, “publisher or production company” and “printer or manufacturer” have `bibitem/contributor/role@type = "publisher"`; “distributor or issuing body” and “sponsoring body”

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have `bibitem/contributor/role@type = "distributor"`. ISO 690 allows that distributors, issuers and sponsors can be named in addition to publishers.

===== Publisher

The organization or person shown most prominently in the cited information resource (see Clause 6, Paragraph 1) as responsible for the production of the resource should be given as publisher.

EXAMPLE 144

FINANCIAL TIMES. *Data archive*. London: FINANCIAL TIMES LTD, 2016.

Publishers' names may be abbreviated by omitting details not essential for identification.

A public identity identifier (ISNI or other) may be added after the publisher's name, preceded by the identifier type. The identifier should be used if the name alone does not uniquely identify the publisher or if the publisher has changed name.

EXAMPLE 145

WSOY. [URN http://urn.fi/URN:NBN:fi:au:cn:32729A]

[The publisher is Werner Söderström Osakeyhtiö].

If a publisher is unknown, an indication such as "publisher not known", or an equivalent abbreviation such as the Latin "s.n." may be provided.

EXAMPLE 146

Germania: *cum priuilegio*. [ca. 1: 3,000,000.] Antwerp: s.n., 1579. 360 mm x 480 mm. University of Berne, the Ryhiner Map Collection Ryh 4301 7.

===== Multiple roles

If the names of two or more organizations appear equally prominently in the same role, only one need to be given; the other names may be omitted if they do not provide added value.

===== Distributor, issuing body or online host

The name of the distributor, issuing body, or online host should be given in the citation if appropriate and known.

Any restrictions on access to a resource imposed by an online host (e.g. geographical restrictions) should be indicated in `bibitem/note`.

EXAMPLE 147

Paramount Pictures, 1928. London: Universal International Pictures (UK) (distributor in the UK).

EXAMPLE 148

Arista Records, New York, NY (distributor). Originally released on Savoy MG9003, 1947.

A well-known acronym may be used, and a translation of the name may be given.

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EXAMPLE 149

Available from: MedlinePlus (distributor), https://www.nlm.nih.gov/medlineplus/.

EXAMPLE 150

Available from: FSD [Finnish Social Science Data Archive] (distributor), https://services.fsd.uta.fi/catalogue/ .

If the online host is different than the publisher, both should be given.

EXAMPLE 151

France v Croatia – 2018 FIFA World Cup Final – Highlights [video file]. FIFA. Uploaded by [FIFATV], Jul. 15, 2018. Available from: YouTube (distributor), https://www.youtube.com/watch?v=GrsEAvRerTg. [viewed 2018-07-22].

If two copies of the information resource have been used, both should be cited if it is not known whether the copies are technically identical. If they are different or if they have different access restrictions, both shall be cited.

EXAMPLE 152

HAWKING, Stephen. *Do black holes have no hair? 2016 Reith lecture*. [audio file]. BBC Radio, 26 Jan 2016. Available from: BBC, https://www.bbc.co.uk/programmes/b06pttqf. Available from: YouTube (distributor), https://www.youtube.com/watch?v=G6SKUOoTo4g. [viewed 2018-07-22 and 2019-07-01].

Online hosts may have technical requirements which have an impact on the usage of information resources on their sites. Site specific hardware and software requirements should not be included in references, since such requirements do change often.

If an online host limits access to information resources permanently on e.g., geographical basis, the access barrier should be indicated.

EXAMPLE 153

YLE Areena. TV (distributor). Available from: https://areena.yle.fi/tv [Accessible from Finland only].

===== Printer or manufacturer

The name of the printer and manufacturer, if applicable and known, should be provided in the citation.

EXAMPLE 154

Resources for Tomorrow. Volume 2. Ottawa, ON: Queen's Printer (printer), 1961.

EXAMPLE 155

Nutrition label of SANPELLEGRINO Melograno E Arancia. San Pellegrino Terme (BG), Italy: SANPELLEGRINO S.p.A. (manufacturer), 2019.

===== Sponsor

Sponsors may have many roles, including funder, contributor, distributor or online host.

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The name and, if appropriate and known, the role of a sponsoring body may be given after the publisher's information.

EXAMPLE 156

Gaithersburg: National Institute of Standards Technology, 2010. Sponsored by the Federal Emergency Management Agency (funding sponsor).

EXAMPLE 157

Florence: UNICEF Innocenti Research Centre. Sponsored by UNICEF (study sponsor).

If the publisher is also a sponsor, sponsorship information can be shown with the publisher.

EXAMPLE 158

Chichester: Phillimore (publication sponsor for the Society of Genealogists).

EXAMPLE 159

Woodbridge: The Boydell Press (publication sponsor for The Royal Historical Society).

A publication that is published on behalf of another entity can be described after the publisher.

EXAMPLE 160

Geneva: World Health Organization (on behalf of the Special Programme for Research and Training in Tropical Diseases).

==== Place

===== General

The place of production should be given as it appears most prominently in the cited information resource. If the place is known but not mentioned in the cited resource, it may be supplied.

For well-known places, the place name alone may be given. If there is another, less well-known place with the same name or if the place is less known, one or more qualifiers should be added (e.g., county, department, state, province, country) to the place name to avoid confusion and to aid correct localization.

Strictly speaking the place of production is an attribute of the publisher, and it can in fact be modelled as `bibitem/contributor[role@type = "publisher"]/organization/address/city`. However, it is modelled as a top-level attribute of the bibliographic item to allow the place to be extracted by consumers of the serialisation more readily, to allow multiple locations to be associated with the publisher, and to allow only one of the places of the publisher to be associated with the production of the item.

A URI in a geographical registry may optionally be given as `place/@uri`. A region within which the place is located may be given as `place/@region`, for disambiguation purposes; using a ISO 3166 code for a country or subnational region is recommended.

EXAMPLE 161

London.

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EXAMPLE 162

London (Ontario).

EXAMPLE 163

SANGSTER, R. B. *Roman Jakobson and beyond*. Berlin, New York & The Hague: Mouton, 1984.

```
<bibitem type="book">
  <title>Roman Jakobson and beyond</title>
  <date type="published"><on>1984</on></date>
  <contributor>
    <role type="author"/>
    <person>
      <name>
        <surname>Sangster</surname>
        <initial>R. B.</initial>
      </name>
    </person>
  </contributor>
  <contributor>
    <role type="publisher"/>
    <organization>
      <name>Mouton</name>
    </organization>
  </contributor>
  <place>Berlin</place>
  <place>New York</place>
  <place>The Hague</place>
</bibitem>
```

EXAMPLE 164

London (CA, USA).

EXAMPLE 165

London (Kiribati).

EXAMPLE 166

London (Ontario)

```
<place uri="https://en.wikipedia.org/wiki/London,_Ontario" region=
"CA-ON">London (Ontario)</place>
```

===== Place codes

Names of countries and their subdivisions may be encoded in accordance with ISO 3166-1 and ISO 3166-2.

EXAMPLE 167

Paris [FR].

EXAMPLE 168

Paris [CA-YT].

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EXAMPLE 169

Paris [US-TX].

===== Place identifiers

An identifier may be added after the place name. The identifier may be used instead of a qualifier if the name alone does not uniquely identify the place.

EXAMPLE 170

Ahjo [http://www.yso.fi/onto/yso/p106955].

===== Multiple places

If two or more place names appear equally prominently in association with one publisher, distributor, producer, etc., all names after the first in the cited information resource may be omitted.

===== Unknown place

If a publisher is given and no place is known for them, an indication such as “place not known” or a similar phrase in the language of the publication, or an equivalent abbreviation such as the Latin “s. l.” or the English “n.p.” may be provided.

EXAMPLE 171

[s. l.].

=== Numeration and pagination

==== General

— Source: ISO 690, Clause 4.7; ISO 690, Clause 7.9
— Serialisation: `bibitem/extent`

The components of the cited information resource should be referred in the terms used in the resource, their order following the principle that the larger precedes the smaller.

Components of an item are modelled under the `bibitem/extent` element as one or more “localities”; these consist of a locality type (`bibitem/extent@type`), a locality value (`bibitem/extent/referenceFrom`), and optionally a locality range endpoint (`bibitem/extent/referenceTo`). The `extent` gives the part of the host item being cited, if this is a contained item ([host-item]), such as a journal article or book chapter (e.g. “pp. 25-45”).

Some electronic formats such as PDF may retain the pagination of the original (printed) resource, but some other formats may not have the pagination. If so, logical components of the cited information resource should be used.

EXAMPLE 172

chapter 2, paragraphs 5–9.

A hierarchical locality is expressed by repeating the extent element with the different applicable locality types; these should be given in hierarchical order. However localities in an extent may be

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complimentary instead (e.g. “xiii+179 pp” for prefatory and main pagination; “114pp + 3 plates” for plates outside the main page numeration).

Discontinuous ranges are modelled by repeating the extent element for the same locality type.

Extent includes the volume and issues of a journal, if the item is an article in the journal.

If the item is not a component of another item, then the extent gives the locality value for the entire work (e.g. page count: “[7 pp.]”). This is expressed by giving an empty `bibitem/extent/referenceFrom`, and populating only `bibitem/extent/referenceTo` (“[7 pp.]” = pp. 1-7).

If a locality is labelled conventionally with a range, but is in fact a single item (as often occurs with volumes and issues; e.g. issue 18–19 is in fact a single issue), the label should be associated with `bibitem/extent/referenceFrom` rather than being treated as a true range. However the rendering of the item will typically not be any different.

A part of a contained item may be cited, and this has posed difficulty for some citation schemes (e.g. citing a page within a journal article, which itself covers a page range: “Dedes, D. 1993. Ποίηματα του Μαυλανά Ρουμή [Poems by Mevlana Rumi]. *Ta Istorika* 10.18-19: 3-22. pp. 7-19”.) However, the model copes with this by separating the extent of a citation Clause 7 from the extent of a bibliograhic item, and the extent of a contained item from the extent of a host item. In this instance, “pp. 7-19” would be treated normally as part of the citation, not part of the bibliographic item.

EXAMPLE 173

Dedes, D. 1993. Ποίηματα του Μαυλανά Ρουμή [Poems by Mevlana Rumi]. *Ta Istorika* 10.18-19: 3-22.

```
<bibitem type="article">
  <title lang="en">Poems by Mevlana Rumi</title>
  <title type="original" lang="ell">Ποίηματα του Μαυλανά Ρουμή</
title>
  <date type="published"><on>1993</on></date>
  <contributor>
    <role type="author"/>
    <person>
      <name>
        <surname>Dedes</surname>
        <forename>Dimitrios</forename>
      </name>
    </person>
  </contributor>
  <series>
    <title>Ta Istorika</title>
  </series>
  <extent type="volume">
    <referenceFrom>10</referenceFrom>
  </extent>
  <extent type="issue">
    <referenceFrom>18–19</referenceFrom>
  </extent>
  <extent type="page">
    <referenceFrom>3</referenceFrom>
    <referenceTo>22</referenceTo>
  </extent>
```

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```
</bibitem>
```

EXAMPLE 174

Brown, P. L. (1999, September 5). Tiffany glass and other tales from the crypt. *The New York Times*, pp. 1, 5.

```
<bibitem type="article">
  <title>Tiffany glass and other tales from the crypt</title>
  <date type="published"><on>1999-09-05</on></date>
  <contributor>
    <role type="author"/>
    <person>
      <name>
        <surname>Brown</surname>
        <initials>P. L.</initials>
      </name>
    </person>
  </contributor>
  <series>
    <title>The New York Times</title>
  </series>
  <extent type="page">
    <referenceFrom>1</referenceFrom>
  </extent>
  <extent type="page">
    <referenceFrom>5</referenceFrom>
  </extent>
</bibitem>
```

==== Part cited

The reference should identify the part of the information resource that is cited. For a component part, the number and designation of the smallest separately identified component should be given.

EXAMPLE 175

vol. 6, no. 3, pp. 25–45.

EXAMPLE 176

vol. 2, plate XXV.

EXAMPLE 177

fiche 4, frame B5.

If the entire information resource is being cited, its extent may optionally be stated in brackets. The extent should be given, if the cited resource is large.

EXAMPLE 178

https://doi.org/10.14296/resaw.0004 [7 pp].

EXAMPLE 179

https://doi.org/10.3886/ICPSR31521.v1 [2 GB]

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EXAMPLE 180

Ramsey, J. K., & McGrew, W. C. (2005). Object play in great apes: Studies in nature and captivity. In A. D. Pellegrini & P. K. Smith (Eds.), *The nature of play: Great apes and humans* (pp. 89-112). [308pp]. New York, NY: Guilford Press.

```
<bibitem type="incollection">
  <title>Object play in great apes: Studies in nature and captivity</
title>
  <date type="published"><on>2005</on></date>
  <contributor>
    <role type="author"/>
    <person>
      <name>
        <surname>Ramsey</surname>
        <initials>J. K.</initials>
      </name>
    </person>
  </contributor>
  <contributor>
    <role type="author"/>
    <person>
      <name>
        <surname>McGrew</surname>
        <initials>W. C.</initials>
      </name>
    </person>
  </contributor>
  <relation type="includedIn">
    <bibitem>
      <title>The nature of play: Great apes and humans</title>
      <contributor>
        <role type="editor"/>
        <person>
          <name>
            <surname>Pellegrini</surname>
            <initials>A. D.</initials>
          </name>
        </person>
      </contributor>
      <contributor>
        <role type="editor"/>
        <person>
          <name>
            <surname>Smith</surname>
            <initials>P. K.</initials>
          </name>
        </person>
      </contributor>
      <contributor>
        <role type="publisher"/>
        <organization>
          <name>Guilford Press</name>
        </organization>
      </contributor>
      <place>New York, NY</place>
      <extent type="page">
        <referenceTo>308</referenceTo>
      </extent>
    </bibitem>
```

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```
    </relation>
    <extent type="page">
      <referenceFrom>89</referenceFrom>
      <referenceTo>112</referenceTo>
    </extent>
  </bibitem>
```

==== Omission of terms

Previous editions of this document allowed omission of the term “volume” and terms for smaller component parts of serial publications. Typographic means were then used to distinguish the volume number and the part number, with the volume number in bold type and the part number, if required, in parentheses.

EXAMPLE 181

6(3), 25–45.

In this edition, such practice is no longer allowed. Font styles should not be used to replace or indicate information, because individuals with limited sight or reading disabilities may not be able to distinguish between bold and regular font. Also, generally, a proprietary software, such as Microsoft Word is needed to view bold or italics. In preparation for machine-readable citations, it is important for citation data to be provided in a format that is easily recognizable by a machine, such as a plain text file.

EXAMPLE 182

Pluralism in the Soviet Union: Essays in Honour of H. Gordon Skilling. Edited by Susan Gross Solomon. New York: St. Martin’s Press, 1983. xiii, 179 pp. $27.50.

```
<bibitem type="book">
  <title>Pluralism in the Soviet Union: Essays in Honour of H.
Gordon Skilling</title>
  <date type="published"><on>1983</on></date>
  <contributor>
    <role type="editor"/>
    <person>
      <name>
        <surname>Solonom</surname>
        <forename>Susan</forename>
        <forename>Gross</forename>
      </name>
    </person>
  </contributor>
  <contributor>
    <role type="publisher"/>
    <organization>
      <name>St Martin's Press</name>
    </organization>
  </contributor>
  <note>$27.50</note>
  <place>New York</place>
  <extent type="page">
    <referenceTo>xiii</referenceTo>
  </extent>
  <extent type="page">
    <referenceTo>179</referenceTo>
  </extent>
```

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```
</bibitem>
```

EXAMPLE 183

John H. Stewart, Edwin H. McKee, and Harold K. Stager. *Geology and mineral deposits of Lander County, Nevada*. Nevada Bureau of Mines and Geology Bulletin 88. 1977. Reno: University of Nevada. [114 pp, 3 plates]

```
<bibitem type="book">
  <title>Geology and mineral deposits of Lander County, Nevada</
title>
  <date type="published"><on>1977</on></date>
  <contributor>
    <role type="author"/>
    <person>
      <name>
        <surname>Stewart</surname>
        <forename>John</forename>
        <forename>H.</forename>
      </name>
    </person>
  </contributor>
  <contributor>
    <role type="author"/>
    <person>
      <name>
        <surname>McKee</surname>
        <forename>Edwin</forename>
        <forename>H.</forename>
      </name>
    </person>
  </contributor>
  <contributor>
    <role type="author"/>
    <person>
      <name>
        <surname>Stager</surname>
        <forename>Harold</forename>
        <forename>K.</forename>
      </name>
    </person>
  </contributor>
  <contributor>
    <role type="publisher"/>
    <organization>
      <name>University of Nevada</name>
    </organization>
  </contributor>
  <place>Reno</place>
  <series>
    <title>Nevada Bureau of Mines and Geology Bulletin</title>
    <number>88</number>
  </series>
  <extent type="page">
    <referenceTo>114</referenceTo>
  </extent>
  <extent type="plate">
    <referenceTo>3</referenceTo>
  </extent>
```

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```
</bibitem>
```

=== Series title and number

==== General

— Source: ISO 690, Clause 4.8; ISO 690, Clause 5.2; ISO 690, Clause 7.10
— Serialisation: `bibitem/series`

Articles have their journal title modelled as the series title of the article item. However, the journal volume and issue should be modelled as part of the article item extent [numeration], rather than as part of the series.

Standards body identifiers for standards are modelled as series numbers.

EXAMPLE 184

ISO 690, *Information and documentation — Guidelines for bibliographic references and citations to information resources*.

```
<bibitem type="standard">
  <title>Information and documentation -- Guidelines for
bibliographic references and citations to information resources</
title>
  <contributor>
    <role type="publisher"/>
    <organization>
      <name>International Organization for Standardization</name>
    </organization>
  </contributor>
  <series>
    <title>ISO</title>
    <number>690</number>
  </series>
</bibitem>
```

The collection or fonds of archival material is modelled as a series.

==== Qualifiers for titles

If the title of a serial issued by a society or similar organization is insufficient to identify the cited information resource and the key title is not known, the organization's name should be added as specified in [organization_names].

Organization and Place of Publication can be added to series titles for disambiguation. Organization in this instance is only modelled as a strings, rather than as a detailed object (cf. [organisation]). The formattedTitle element is used to enforce the formatting of the series title and its qualifiers.

EXAMPLE 185

Bulletin trimestriel. Institut archéologique du Luxembourg.

The title may also by qualified by the place of publication or ISSN in order to support the identification of the serial.

EXAMPLE 186

Life. MDPI.

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Life (Basel). (https://en.wikipedia.org/wiki/Life_(journal))

```
<series>
  <title>Life</title>
  <place>Basel</place>
  <organization>MDPI</organization>
  <formattedTitle>_Life_ (Basel)</formattedTitle>
</series>
```

EXAMPLE 187

Life. (New York). (https://en.wikipedia.org/wiki/Life_(magazine))

```
<series>
  <title>Life</title>
  <place>New York</place>
</series>
```

EXAMPLE 188

Natura (Bucharest).

EXAMPLE 189

Natura (Salvador, Brasil).

EXAMPLE 190

Guardian. ISSN 1197-2386.

EXAMPLE 191

Guardian. ISSN 1170-0475.

==== Key title and the abbreviated key title

Serials with the same title should be distinguished from each other with the key title. These titles are available from the ISSN Portal[6].

EXAMPLE 192

Bulletin trimestriel de l'Institut archéologique du Luxembourg.

EXAMPLE 193

Natura (Amsterdam).

EXAMPLE 194

Natura (Bucureşti. 1905).

Abbreviated key title is a specific title established by the ISSN network by replacing each significant word of a key title with the corresponding abbreviation from the *List of Title*

[6] https://portal.issn.org/

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Word Abbreviations[7] managed by the ISO 3297 for ISO 4. Abbreviations are based on ISO 4, Documentation—Rules for the Abbreviation of Title Words and Titles of Publications and in accordance with the specific rules spelled out in the *ISSN Manual*.

The abbreviated key title should be used when it appears in the cited information resource (see Clause 6, Paragraph 1). The ISSN should be included with the abbreviated title (see [international_standard_identifiers]).

If there is any risk of ambiguity, the title shall be given in full.

EXAMPLE 195

European Physical Journal Plus. (full title)

Eur. Phys. J. Plus. ISSN 2190-5444. (abbreviated key title with ISSN)

==== Earlier titles

If the title of a cited serial has changed, earlier title of the serial should be given with the years when the title was in use.

The current title of a series is given with `series@type` as “main” (which is the default); alternate titles, including historical titles, are given with `series@type` as “alt”. Different time spans for historical titles are given with `series/dateFrom` and `series/dateTo`.

EXAMPLE 196

British Journal of Physical Education. 1983–1999. ISSN 0954-6693.

British Journal of Physical Education. 1970–1979. ISSN 0007-120X.

Journal of Physical Education. 1945–1954.

Physical Education. 1955–1959.

EXAMPLE 197

New Scientist. 1956-1971.
New Scientist and Science Journal. Jan 21, 1971-Sept 30, 1971.
_New Scientist

```
<series type="alt">
  <title>New Scientist</title>
  <dateFrom>1956</dateFrom>
  <dateTo>1956</dateTo>
</series>
<series type="alt">
  <title>New Scientist and Science Journal</title>
  <dateFrom>1971-01-21</dateFrom>
  <dateTo>1971-09-30</dateTo>
</series>
<series type="main">
  <title>New Scientist</title>
  <dateFrom>1971-09-30</dateFrom>
```

[7] https://www.issn.org/services/online-services/access-to-the-ltwa/

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```
</series>
```

==== Regular conferences

If regular conferences are held with the same title, the date and place of the conference should be added, in the format used in the cited information resource.

EXAMPLE 198

ICIP 2005: International Conference on Image Processing. Genova, 11–14 September 2005.

==== Carried title

If the cited information resource also carries the title of a series of which it forms a numbered or unnumbered component, the series title and the numeration within that series may be included in the reference. The series title and number should be recorded as they appear on the cited resource.

EXAMPLE 199

Oceanographic report series, 99–12.

EXAMPLE 200

Handbook of motivation and cognition. The interpersonal context, vol. 3.

EXAMPLE 201

Diagnosis and Management of Infantile Hemangioma. Comparative Effectiveness Review No. 168. (AHRQ publication 16-EHC002-EF).

The ISSN of the series may be a part of the citation.

EXAMPLE 202

Tampereen yliopiston opettajankoulutuslaitoksen julkaisuja: A. ISSN 1238-3279.

A report number should be included.

EXAMPLE 203

Current Population Reports, P60-263.

NOTE 13 In this example, “P60” identifies a report series, “P60-263” is the report number.

==== New series

Journals may re-start their series number without changing the journal title. Then it is necessary to differentiate the “old series” and the “new series”, using “new series” or “n.s.” as appropriate.

If a series restarts numbering its volumes, that is typically indicated in citations by giving an ordinal number for the series run, given after the series name: 1st series, 2nd series, 3rd series. More commonly, there are only two series runs for a series, and the second run is indicated as “new series”, or the abbreviation “n.s.”.

— *Vizantiiskii Vremmenik* (St Petersburg/Petrograd/Leningrad, 1894-1928) and *Vizantiiskii Vremmenik* (Moscow, 1947-) have the same name, and volume numbering for the Moscow journal restarted at 1; the first two volumes of the new series run were numbered 1/26 and

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2/27, to continue the first series. While citations could differentiate the two by city, usual practice is to insert “n.s.” after the journal title for the second series.

— The *Journal of the Royal Anthropological Institute* was originally published as *Man*, from 1901-1965. The journal restarted numbering at 1 from 1966-1996 without changing name, and explicitly designating itself as a “new series”. Unlike *Vizantiiskii Vremmenik*, both series were published in London, so place of publication cannot differentiate between them. While the organization did change name between the two runs (from “Anthropological Institute of Great Britain and Ireland” to “Royal Anthropological Institute of Great Britain and Ireland”), the change is slight; and the series run is preferred to differentiate the two runs.

EXAMPLE 204

Vizantiiskii Vremmenik. vol. 1–25 (1894–1927), vol. 1– (1944-) [n. s].

EXAMPLE 205

Journal of the Royal Anthropological Institute. vol. 18 (2012) [n. s.], pp. 197–241. ISSN 1359-0987.

EXAMPLE 206

A. A. Barnes. 1966. Durkheim’s Division of Labour in Society. *Man* (n.s.) 1(2): 158-175.

```
<bibitem type="article">
  <title lang="en">Durkheim's Division of Labour in Society</title>
  <date type="published"><on>1966</on></date>
  <contributor>
    <role type="author"/>
    <person>
      <name>
        <surname>Barnes</surname>
        <initials>J. A.</initials>
      </name>
    </person>
  </contributor>
  <series>
    <title>Man</title>
    <number>1</number>
    <partnumber>2</partnumber>
    <run>new series</run>
  </series>
  <extent type="page">
    <referenceFrom>158</referenceFrom>
    <referenceTo>175</referenceTo>
  </extent>
</bibitem>
```

Subsequent re-starts followed by “new series” would be indicated by the ordinal number of the series preceded by the letters “ser.”, starting from “3rd ser.”

EXAMPLE 207

Transactions of the Royal Historical Society, vol. vii. (1913) [3rd ser.].

The series number should be recorded as it appears on the cited resource.

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EXAMPLE 208

American Journal of Science. Series 5. 15(88): 287-296. https://doi.org/10.2475/ajs.s5-15.88.287

=== Identifiers

==== International standard identifiers

— Source: ISO 690, Clause 4.9; ISO 690, Clause 7.11
— Serialisation: `bibitem/docidentifier`

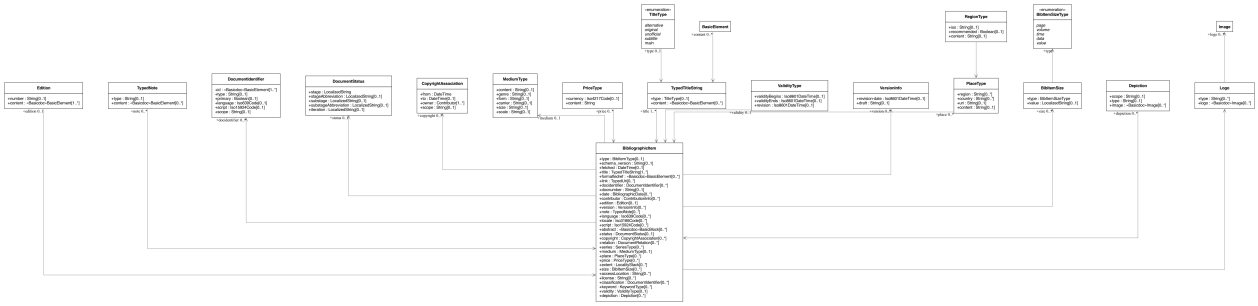

Figure 22

ISO 690 states that unique international standard identifiers must be included in the bibliography. In practice, identifiers are included at the discretion of the bibliographer: they are routinely included in bibliographic databases, but seldom in references within documents.

If the cited information resource has an international standard identifier (e.g., ISSN, ISBN, ISMN, ISRC, etc.) that uniquely identifies the resource, it may be included in the reference (see [key_title]) in a human readable form.

The namespace of an identifier is indicated through its type attribute. The scope of an identifier is introduced to disambiguate the identifier referent, when it is not obvious. So it is introduced where an identifier identifies only a component of the item (e.g. a document included in the item), or a superset of the item (e.g. a series). It can also be used if the identifier identifies a specific instantiation of the document as an entity; in terms of the Functional Requirements for Bibliographic Records Clause 8.2.1.1, Example 1, for example, an identifier may identify a work, an expression of the work (e.g. an edition), a manifestation of the work (e.g. a format), or an item of the manifestation (e.g. a single physical copy).

Neither the type nor the scope of the identifier have an associated controlled vocabulary, and one is unlikely to be derived. Identifier type should follow established practice in the domain; most well-known identifiers have a widely used short name or abbreviation.

Cited information resources can have both manifestation and work identifiers. These identifiers have different roles in information retrieval. For instance, a track published on a CD can have ISWC (International Standard Musical Work Code) assigned to the composition, and ISRC (International Standard Recording Code) assigned to a specific recording of the composition. With the latter it is possible to find different copies of the same recording in the Internet or on other carriers; with the former a user can find other recordings or interpretations of the same work, if no manifestations of the cited recording can be located.

Depending on how the information resource is cited, either the work identifier or the manifestation identifier may be the best choice. The former is a good choice if any manifestation of the work will do. Both identifiers may be included in the reference, if appropriate.

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NOTE 14 ISSN can have multiple roles. There is an agreement to consider it as an identifier for both works and manifestations, because a serial work is also a plan for how a serial will be expressed and manifested. Therefore a serial may only have one expression and one manifestation.

EXAMPLE 209

Geological Magazine. ISSN 0016-7568.

EXAMPLE 210

MANN, Thomas. *Mario the magician & other stories*. Translated from German. H.T. LOWE-PORTER (translator). London: Vintage Classics, 2000. ISBN 0-7493-8662-2.

EXAMPLE 211

Animal farm: a fairy story [ISTC 0A3200912B4A1057].

EXAMPLE 212

ORWELL, George. *Animal farm: a fairy story* [ISTC 0A3200912B4A1057]. [London]. Penguin Books, 2018. ISBN 978-0-241-34166-7.

EXAMPLE 213

International Journal of Islamic Thought. e-ISSN 2289-6023. ISSN 2232-1314.

```
<bibitem type="journal">
  <title>International Journal of Islamic Thought</title>
  <docidentifier scope="digital" type="e-ISSN">2289-6023</
docidentifier>
  <docidentifier scope="print" type="ISSN">2232-1314</docidentifier>
</bibitem>
```

If other metadata elements in the reference do not guarantee unique identification of the cited information resource (for instance, if there are several periodicals sharing the same title) the identifier of the cited information resource should be included.

EXAMPLE 214

In: Guardian (Vancouver). ISSN 1197-2386.

EXAMPLE 215

In: Guardian (Palmerston North). ISSN 1170-0475.

If the cited information resource has more than one identifier (for instance, a book published in a series may have both ISSN and ISBN), only the one that most precisely identifies the resource used should be included in the reference.

If the cited information resource has both ISBN-10 and ISBN-13, only ISBN-13 should be included in the reference.

If the identifier in the cited information resource is cancelled or invalid, it may be included, preceded by term “Invalid” or “Cancelled” or an appropriate phrase in the language of the publication.

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Invalid or cancelled identifiers should be so identified through the identifier scope: the cancellation of the identifier does not impact its namespace, but its connnection to a referent.

EXAMPLE 216

> *Elävän kuvan vuosikirja*. Helsinki: Suomen elokuvasäätiö ja Suomen elokuva-arkisto, 1988–1996. ISSN 0785-8015 [Invalid].

If the correct identifier is known, it should be used in the citation. The invalid or cancelled identifier may also be included in brackets, preceded by term “Invalid” or “Cancelled” or an appropriate phrase in the language of the publication.

EXAMPLE 217

> *Elävän kuvan vuosikirja*. Helsinki: Suomen elokuvasäätiö ja Suomen elokuva-arkisto, 1988–1996. ISSN 0786-5386. [Invalid ISSN 0785-8015].

Standards body identifiers for standards may be modelled as series numbers or as identifiers ([series_title_number]). We recommend that the canonical identifier issued for a standard by a standards body be encoded as an identifier; other identifiers assigned to the same document may be better identified with a series title, as a named and numbered grouping of documents.

Identifiers can be expressed as HTTP URIs may be so expressed, without changing the identifier type. A DOI for example may be expressed as either the DOI proper, or as a doi.org URI.

==== Persistent identifiers

If the cited information resource has a persistent identifier (PID) such as ARK, DOI name, Handle or URN, it shall be included in the reference.

Actionable PIDs should be expressed as hyperlinks (HTTP URIs). Un-actionable versions of persistent identifiers such as `doi:10.3886/ICPSR31521.v1` or `URN:NBN:fi:au:cn:39756A` should not be used.

If the PID is present in the reference as a hyperlink, the network location (URL) of the cited information resource shall not be used.

If the cited Web resource has both a traditional identifier and a persistent identifier based on it (for instance ISBN and URN:ISBN or ISBN-A), both should be included in the reference.

EXAMPLE 218

> GROSS, Oskar. *Word associations as a language model for generative and creative tasks.* [online] Helsinki: Helsinki University, 2016. ISBN 978-951-51-2090-8. Available from: http://urn.fi/URN:ISBN:978-951-51-2090-8. [viewed 2018-03-07].

EXAMPLE 219

> [AKADEMIE VON FINNLAND]. SUOMEN AKATEMIA. [http://urn.fi/URN:NBN:fi:au:cn:39756A]

If the cited resource is a component part, the traditional identifier of the host information resource should be included in addition to the persistent identifiers of the cited information resource. For instance, a journal article may have a DOI name, and the journal itself an ISSN.

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EXAMPLE 220

ROBINSON, R. *Quiet and Poised: "Silent" Genes Accumulate Transcription Machinery*. [online]. PLoS Biol. 2010, **8**(1), e1000269. ISSN 1544-9173. Available from: https://doi.org/10.1371/journal.pbio.1000269 [viewed 2019-09-11].

EXAMPLE 221

Ahmed al-Kindi & Anke Iman Bouzenita. 2018. The notion of *Sunna*: An eclectic reading in the Ibadhi legacy. *International Journal of Islamic Thought* 14:1-21. https://doi.org/10.24035/ijit.14.2018.001.

```
<bibitem type="article">
  <title>International Journal of Islamic Thought</title>
  <docidentifier scope="journal" type="doi">10.24035/ijit</
docidentifier>
  <docidentifier scope="article" type="doi">https://doi.org/10.24035/
ijit.14.2018.001</docidentifier>
</bibitem>
```

If the cited information resource has more than one persistent identifier, they may all be included in the reference. Each PID facilitates access to a different copy of the cited resource, and these copies may have different access rights (for instance, one provides a link to a copy in a system maintained by the publisher, another to an open archive hosted by a university). If only one PID is included, it should provide a link to a copy that does not have access limitations.

Persistent identifiers often resolve to URLs of landing pages, which contain links to the actual resources. In such cases, it is sometimes not obvious if the PID identifies the cited resource or its landing page (or both), but such PIDs should nevertheless always be included in references, since they facilitate access to the cited resources.

EXAMPLE 222

HÜNING, Anne K., Frank MELZNER, Jörn THOMSEN, Magdalena A. GUTOWSKA, Lars KRÄMER, Mika KOHNO, Philip ROSENSTIEL, Hans-Otto PÖRTNER, Eva E. R. PHILIPP, Magnus LUCASSEN. *Seawater carbonate chemistry and mantle gene expression patterns of the Baltic Sea blue mussel in a laboratory experiment*. PANGAEA, 2013. Available from: https://doi.org/10.1594/PANGAEA.833670 [viewed 2019-09-12].

=== Availability and location

==== Model

— Source: ISO 690, Clause 4.10; ISO 690, Clause 5.10; ISO 690, Clause 7.12
— Serialisation: `bibitem/accessLocation`, `bibitem/uri`

Unpublished items with a limited number of copies that are held at a repository should be referenced through `bibitem/accessLocation`, which gives the repository that the cited copy is held in, and the locator used by the repository. The repository and locator are not differentiated, and are treated as a single string. The `bibitem/accessLocation` element is also used for online locations of digital resources, where a single URL (`bibitem/uri`) is not sufficient, and either a navigation path, or an in-document object identifier is used.

An archival URI can be differentiated from an original URI for a resource, through using "archival" as the `uri/@type`. Alternatively, the archival copy and the original copy may be treated as related items (through an "instance" relation), although that is typically not necessary.

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Persistent identifiers and other identifiers expressed as actionable URIs should still be represented as `bibitem/docidentifier` rather than `bibitem/uri`, so long as they are managed in a distinct namespace. That applies to such identifiers as DOI, ARK, Handle, ISSN, etc.

==== Physical location

===== General

If only a single or a limited number of copies of an information resource such as artwork or archival material are known to exist, or if a specific item is referenced, the place name shall be provided in a citation.

===== Place and repository

“At:” or an equivalent phrase in the language of the publication should be given before the place name.

The method of representation is given below, where `{placeName}` is the name of the place.

```
At: {placeName}
```

EXAMPLE 223

At: New York

EXAMPLE 224

P.Vind.Tand.25a = HGV P.Vindob. Tandem 25 a = Trismegistos 26540. At: P.Vindob.Gr. Inv. Nr. 12424 + 24718 + 28384.

(Highly abbreviated format, using conventions familiar to papyrologists)

```
<bibitem type="booklet">
  <title>[Untitled]</title>
  <uri>http://papyri.info/hgv/26540/</uri>
  <uri>http://aquila.zaw.uni-heidelberg.de/hgv/26540</uri>
  <uri>https://www.trismegistos.org/text/26540</uri>
  <docidentifier type="papyri.info">P.Vind.Tand.25a</docidentifier>
  <docidentifier type="HGV">P.Vindob. Tandem 25 a</docidentifier>
  <docidentifier type="Trismegistos">26540</docidentifier>
  <accessLocation>P.Vindob.Gr. Inv. Nr. 12424 + 24718 + 28384.</
accessLocation>
</bibitem>
```

(More elaborated form)

```
<bibitem type="booklet">
  <title>[Untitled]</title>
  <uri>http://papyri.info/hgv/26540/</uri>
  <uri>http://aquila.zaw.uni-heidelberg.de/hgv/26540</uri>
  <uri>https://www.trismegistos.org/text/26540</uri>
  <docidentifier type="papyri.info">P.Vind.Tand.25a</docidentifier>
  <docidentifier type="HGV">P.Vindob. Tandem 25 a</docidentifier>
  <docidentifier type="Trismegistos">26540</docidentifier>
  <relation type="includedIn">
    <bibItem>
        <title>Fünfunddreißig Wiener Papyri (P. Vindob. Tandem)</
title>
        <date type="published">1976</date>
```

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```
        <contributor>
          <role type="editor"/>
          <person><name><completeName>Pieter Johannes Sijpesteijn</
completeName></name></person>
        </contributor>
        <contributor>
          <role type="editor"/>
          <person><name><completeName>Klaas Anthony Worp</
completeName></name></person>
        </contributor>
        <contributor>
          <role type="publisher"/>
          <organization><name>Terra</name></organization>
        </contributor>
        <series>
          <title>Studia Amstelodamensia ad epigraphicam, ius
antiquum et papyrologicam pertinentia</title>
          <number>6</number>
        </series>
    </bibItem>
    <bibLocality type="part">
      <referenceFrom>25a</referenceFrom>
    </bibLocality>
  </relation>
  <accessLocation>National Library of Vienna. P.Vindob.Gr. Inv. Nr.
12424 + 24718 + 28384.</accessLocation>
</bibitem>
```

EXAMPLE 225

At: Hong Kong

The language of the information resource shall be used in representing the place name.

EXAMPLE 226

Im: Wien

The place name should be qualified if necessary (see [place_general]).

EXAMPLE 227

At: Washington, D.C.

EXAMPLE 228

At: Newport, CA.

If the cited resource is held within a repository (within for instance, an item or a collection), the name of the repository that it belongs to and its locator (such as the call number, locator or identifier) in the form used by the repository.

EXAMPLE 229

Im: Albertina, Wien.

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EXAMPLE 230

Sijainti: Ateneumin taidemuseo, Helsinki.

EXAMPLE 231

At: British Museum, Department of Prints and Drawings, London. Register number 1915-27-41.

EXAMPLE 232

At: Special Collections and Archives, Oviatt Library, California State University, Northridge, Los Angeles, CA.

It is possible to cite surrogates of information resources that no longer exist, such as temporary or destroyed work.

EXAMPLE 233

At: Museum of Modern Art, New York, NY. Available from: https://www.moma.org/collection/works/101549.

EXAMPLE 234

At: Great Hall, University of Vienna, Vienna. Available from: FLEIDL, G. *Gustav Klimt 1862-1918 The World in Female Form*, p. 77, Cologne: Taschen, 1994.

Examples of full references are provided below.

EXAMPLE 235

DÜRER, Albrecht. *Feldhase* [aquarell, 1502]. Im: Albertina, Wien.

EXAMPLE 236

SCHJERFBECK, Helene (1862–1946). *Mustataustainen omakuva* [Self-Portrait, Black Background] [öljyväri ja kangas]. 1915. Sijainti: Ateneumin taidemuseo, Helsinki.

EXAMPLE 237

GOSSE, Sylvia (1881–1968). *The Garden, Rowlandson House* [etching and aquatint, 1912]. At: British Museum, Department of Prints and Drawings, London. Register number 1915-27-41.

EXAMPLE 238

SELL, John M. *John M. Sell Civil War Collection*. At: Special Collections and Archives, Oviatt Library, California State University, Northridge, Los Angeles, CA.

==== Network location and access

===== General

If the cited information resource is available in the Internet, a hyperlink such as HTTP URI, shall be provided to allow retrieval of the resource.

Internet addresses are often unreliable and therefore, URLs should be used with caution. Recommended practice is to use URIs based on persistent identifiers (PIDs), permalinks or a URI

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of an archived copy of the resource. If these approaches are not possible or practical, URL may be used, but with caution (see Example 249 below).

The elements of URI as specified in Clause 8.2.1.1, Example 1, *URI Generic syntax* (e.g., scheme, authority, path, query and fragment) should be transcribed with the same punctuation, upper-case and lower-case letters as given in the cited information resource.

In URIs, the scheme and host are case-insensitive and normally provided in lower case; all other URI components may be case-sensitive and should be treated as such. The name of the service may be added before the URI. Some services (for instance, Google Maps) apply internal URI syntaxes which differ from the URI syntax defined in Clause 8.2.1.1, Example 1. In such case, the syntax of the service may be used.

===== Network access

To indicate network access location of the cited information resource, a phrase equivalent to “Available from:”, in the language of the publication, should be given before the URI.

The following indicates the method of representation, where {URI} indicates expression of the URI:

```
Available from: {URI}
```

EXAMPLE 239

Available from: http://www.collectionscanada.ca/moodie-traill/index-e.html.

Name of the service (for instance, an institutional repository) holding the cited resource may be included. Below {URI} indicates expression of the URI and {service-name} the name of the service:

```
Available from {service-name}: {URI}
```

EXAMPLE 240

Available from: Helda: http://urn.fi/URN:ISBN:978-951-51-4424-9.

Specific features of the cited information resource should be provided, if they have an impact on its use:

```
{type} available from: {URI}
```

EXAMPLE 241

A legal deposit copy available from: http://verkkoarkisto.kansalliskirjasto.fi:8080/20060916080210/http://www.verkkosanomat.fi/ [access only in the premises of the National Library and other deposit libraries].

===== Related locations

If the cited information resource is for instance a program, it may be useful to include in the citation a link to additional information about the resource. A phrase “See also:” or equivalent in the language of the publication should be prefixed to a URI.

EXAMPLE 242

Available from: https://www.mozilla.org/en-US/firefox/new/. See also: https://en.wikipedia.org/wiki/Firefox.

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===== Archival access

Web archives make it possible to cite Web sites or individual pages that have been lost, and past versions of resources which are still available but in an edited form.

A link to an archived copy of the cited information resource may be added to the citation even if the cited information resource is static and there is a reason to believe that it will be available on the Web for a long term.

EXAMPLE 243

British Library Web site February 1997 [online]. archive.org [distributor]. Available from: https://web.archive.org/web/19970218190613/http://www.bl.uk/. [archived 1997-02-18] [viewed 2019-02-28].

```
<bibitem type="website">
  <title>British Library Web site February 1997</title>
  <date type="copied">1997-02-18</date>
  <date type="accessed">2019-02-28</date>
  <uri type="original">http://www.bl.uk/</uri>
  <uri type="archival">https://web.archive.org/web/19970218190613/
http://www.bl.uk/</uri>
  <contributor>
    <role type="author"/>
    <organization>
      <name>British Library</name>
    </organization>
  </contributor>
  <contributor>
    <role type="distributor"/>
    <organization>
      <name>archive.org</name>
    </organization>
  </contributor>
</bibitem>
```

```
<bibitem type="website">
  <title>British Library Web site February 1997</title>
  <uri type="original">http://www.bl.uk/</uri>
  <contributor>
    <role type="author"/>
    <organization>
      <name>British Library</name>
    </organization>
  </contributor>
  <relation type="instance">
    <bibitem type="website">
      <uri type="archival">https://web.archive.org/web/
19970218190613/http://www.bl.uk/</uri>
      <date type="copied">1997-02-18</date>
      <date type="accessed">2019-02-28</date>
      <contributor>
        <role type="distributor">web archive</role>
        <organization>
          <name>archive.org</name>
        </organization>
      </contributor>
    </bibitem>
  </relation>
```

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```
</bibitem>
```

EXAMPLE 244

Archived copy available from: Internet archive (distributor), https://web.archive.org/web/20160420143942/http://www.w3.org/Provider/Style/URI.html [archived 2016-04-20 14:39:42Z].

EXAMPLE 245

Berners-Lee, T.: Cool URIs don't change. W3C, 1998. Available from: https://www.w3.org/Provider/Style/URI. Archived copy available from: Internet archive (distributor), https://web.archive.org/web/20160420143942/http://www.w3.org/Provider/Style/URI.html [archived 2016-04-20 14:39:42Z]. [viewed 2018-02-04].

===== Specific versions

If the cited Web page is dynamic and a specific version is used, an archived version of the resource shall be cited. If an accurate archived copy of the page does not exist, one shall be made using an archiving facility if possible, e.g. The Internet Archive.

The citation shall contain the name of the cited resource and the dates it has been used and archived.

EXAMPLE 246

ISO home page. [2016-01-03]. Geneve: International Organization for Standardization, 2016. Archived copy available from: Internet archive (distributor), https://web.archive.org/web/20160103090843/http://www.iso.org/iso/home.html. [archived 2016-01-03T09:08:43Z]. [viewed 2019-02-28].

EXAMPLE 247

Transliteration [online]. In: Wikipedia. Wikimedia foundation, 2018-07-23T01:33:00Z. Archived copy available from: Internet Archive (distributor), https://web.archive.org/web/20180710182934/https://en.wikipedia.org/wiki/Transliteration [viewed 2019-02-28].

===== Nonspecific versions

A link to an archived copy is not required if the cited information resource is dynamic, but no specific version of the resource is cited.

EXAMPLE 248

Transliteration [online]. In: Wikipedia (distributor). Wikimedia foundation. Available from: Wikipedia, https://en.wikipedia.org/wiki/Transliteration. [viewed 2018-08-23].

===== Representing lengthy locations

If the location information needs to be broken at the end of a line, the break should be made after a single or double solidus or a hyphen, but before other punctuation marks.

EXAMPLE 249

https://web.archive.org/web/20151024212842/http://www.ukoln.ac.uk/services/elib/papers/other/pinfield-elib/elibreport.pdf.

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===== Providing navigation path instead of URI

If the cited information resource has long and/or complex location information, the navigation path to the resource may be provided instead of the full URI.

EXAMPLE 250

Available from: http://finto.fi/en/. Path: General Finnish Ontology.

Navigation path may have 1-n levels, indicated in an appropriate manner.

EXAMPLE 251

Available from: http://finto.fi/en/. Path: General Finnish Ontology. C. Citation analysis.

EXAMPLE 252

Australian Government Bureau of Meteorology. *Latest Weather Observations for Dumont D'Urville*. http://www.bom.gov.au. Path: Antarctica: Antarctic Observations: Latest observations: Dumont D'Urville: JavaScript Object Notation format (JSON) in row-major order. Viewed 2018-03-10.

```
<bibitem type="dataset">
  <title>Latest Weather Observations for Dumont D'Urville</title>
  <uri>http://www.bom.gov.au/fwo/IDT60803/IDT60803.89642.json</uri>
  <date type="accessed"><on>2018-03-10</on></date>
  <contributor>
    <role type="publisher"/>
    <organization>
      <name>Australian Government</name>
      <subdivision>Bureau of Meteorology</subdivision>
    </organization>
  </contributor>
  <accessLocation>http://www.bom.gov.au. Path: Antarctica: Antarctic
Observations: Latest observations: Dumont D'Urville: JavaScript
Object Notation format (JSON) in row-major order</accessLocation>
</bibitem>
```

===== Providing PID

HTTP URI based on the actionable persistent identifier (PID) assigned to the cited information resource shall be provided instead of the actual location (URL) of the resource. If the location changes, it may not be redirected to the new URL, whereas the PID will most likely be resolved to the new location or locations.

EXAMPLE 253

The DOI name of an article is 10.1371/journal.pone.0115253. The URL of the article, to which the DOI name resolves, is http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0115253. Reference contains only the following information: Available from: https://doi.org/10.1371/journal.pone.0115253.

===== Outdated location information

Due to HTTP redirection, outdated URLs may still provide access to the cited information resource. However, all URLs should be up to date by the time citations are made, since URLs that require redirection are likely to be more short-lived than the current ones.

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If the cited information resource has already disappeared from the Web or if the current version has already changed by the time the citation is written, the original URL and the retrieval date of the cited resource should be included, alongside the URI of the Web archive copy of the resource.

Non-operational URLs shall be preceded by a phrase “Originally available from:”, “Previously available from:” or equivalent phrases in the language of the publication.

If there is no Web archive copy of the cited Web resource, or if the existing copy or copies are not identical to the cited information resource, the Web resource shall not be used for reference, even if the author has a local copy of the resource. Proving the authenticity of such a copy may prove difficult.

EXAMPLE 254

> The Guardian 2019-09-12T05:46:39Z. Originally available from: https://www.theguardian.com/us. Available from: Internet Archive (distributor). https://web.archive.org/web/20190912032815/https://www.theguardian.com/us [viewed 2019-09-12].

==== Permanent links

Permanent link systems support issuing of URIs “intended to remain unchanged for many years into the future” (Clause 8.2.1.1, Example 1). They work by issue of persistent URL or pattern for persistent URLs, which redirects to the URL of the requested web resource. Widely used permanent link systems include PURL (Persistent Uniform Resource Locator, see Clause 8.2.1.1, Example 1) and Clause 8.2.1.1, Example 1.

URL shorteners (Clause 8.2.1.1, Example 1) (providing URL shortening and redirection services), which may be seen as permanent link systems, should not be used for referencing, because:

— it is not possible to know how long a specific short URL will be supported.
— short URLs do not have a persistence related component unlike for example PURLs. The only role short URLs do have is to make URLs shorter in order to simplify their usage.
— as a rule, short URLs do not function in Web archives, which makes it almost impossible to find the cited content after the short URL has stopped working.

Functionality supported by these systems is simpler than in PID systems and unlike PIDs, permanent links are usually technology (HTTP) dependent.[8]

Permanent links may be used if:

— The resource has a registered permanent link (and it is known).
— There is a reason to believe that the assigned permanent link will be managed. However, it may be difficult to find out the referent’s commitment to administer the permanent link in the long term.
— The permanent link system itself is well managed and sustainable.

EXAMPLE 255

> ALTHAUS, Scott & Kalev Leetaru, *Airbrushing History, American Style.* Cline Center for Democracy, 2008. Available from: http://perma.cc/G8PW-798L. [viewed 2019-02-28].

[8] PIDs are expressed as HTTP URIs with resolver URL, but at least URNs could be actionable as such.

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If the permanent link system is discontinued due to, e.g., technical or financial issues, all URIs based on the system may fail at once. Therefore, references should contain also a link to an archived copy of the page if one exists, and the date/time the cited resource has been viewed.

It can be difficult to find out if the cited information resource does have a permanent link. It is usually not embedded in the resource itself, and the permalink is not be part of the URL to which the permalink is redirected.

==== Access restrictions

The cited information resource may be located behind a paywall or there may be legal restrictions that significantly restrict access the use of the resource. Such restrictions should be specified after the URI, with the date the restriction will end (if applicable). The name of the commercial access provider may be given before the URI.

EXAMPLE 256

> Available from: ScienceDirect, https://doi.org/10.1016/j.jtemb.2017.11.012 [paywall].

EXAMPLE 257

> Available from: https://doi.org/10.1080/03615260903206861 [paywall].

EXAMPLE 258

> Available from: http://example.org/example.html [Personal Data Privacy and Security Act of 2009]. [2034].

A note on the access limitation may be given after the URI.

EXAMPLE 259

> A legal deposit copy available from: http://verkkoarkisto.kansalliskirjasto.fi:8080/20060916080210/http://www.verkkosanomat.fi/. [access only in the premises of the National Library and other deposit libraries].

If the cited information resource is no longer available online and there is no appropriate Web archive URL to refer to (e.g. due to changing archive interface tools), the reference may be made to the archival metadata including the name of the archive, archiving date and the archive URL.

EXAMPLE 260

> Archived copy available from: Netarkivet (distributor), http://www.litlive.dk/. [archived 2015-11-18T11:33:19Z]. [webpage]. [viewed 2019-02-28]. [access only if permission is granted via netarkivet.dk].

A full reference example provided below.

EXAMPLE 261

> CARLSON, Amy & Barbara M. POPE. *The "Big Deal": A Survey of How Libraries Are Responding and What the Alternatives Are*. [online]. The Serials Librarian, **57** (2009):4, pp. 380–398. Available from: https://doi.org/10.1080/03615260903206861 [paywall]. [viewed 2019-02-13].

=== Surrogate

— Source: ISO 690, Clause 7.14.8

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— Serialisation: `bibitem/relation[type=manifestationOf|reproductionOf]`

A digital surrogate of a work is serialised as a `relation` from the surrogate to the resource it embodies or reproduces (see [docrelation-types]).

If the cited information resource is a work of art, there may be many digital surrogates of it available in the Internet. They may differ significantly from one another, with respect to reproduction fidelity and quality.

If the cited information resource is a surrogate in Internet, HTTP URIs of the surrogates shall be included. If several surrogates of the same work have been used, they should all be included.

The name or nom de plume of the person or organization which uploaded the resource, date and the distributor should be included.

EXAMPLE 262

SIBELIUS, Jean. *Violin concerto in D minor, Op. 47.* [video]. Maxim VENGEROV (violin). Chicago Symphony Orchestra. Daniel BARENBOIM (conductor). Teldec Classics, 1996. Video file uploaded by AgoraVoxFrance, Sept. 26, 2011. Available from: YouTube (distributor), https://www.youtube.com/watch?v=YsbrRAgv1b4. [viewed 2018-03-12].

```
<bibitem type="audiovisual">
  <title>Violin concerto in D minor, Op. 47</title>
  <uri type="src">https://www.youtube.com/watch?v=YsbrRAgv1b4</uri>
  <date type="accessed"><on>2018-03-12</on></date>
  <relation type="reproductionOf">
    <bibitem type="audiovisual">
      <title>Violin concerto in D minor, Op. 47</title>
      <contributor>
        <role type="performer"/>
        <person><name><completename>Maxim Vengerov</completename></
name></person>
      </contributor>
      <place>Chicago</place>
      <date type="published"><on>1996</on></date>
    </bibitem>
  </relation>
</bibitem>
```

For clarity, the phrase “digital surrogate” in the language of citation may be used to indicate the nature of the copy.

EXAMPLE 263

DÜRER, Albrecht. *A hare* [watercolour, 1502]. At: Albertina, Vienna, Austria. Digital surrogate available from: http://sammlungenonline.albertina.at/?query=Inventarnummer=%5b3073%5d&showtype=record. [viewed 2017-07-04].

EXAMPLE 264

BOWIE, David. *TVC 15* [audio file]. Uploaded by [Alluurpo]. Available from: YouTube (distributor), https://www.youtube.com/watch?v=oTjsOzeIpc0.

EXAMPLE 265

BOWIE, David. *TVC 15* [audio file]. [lyrics]. Uploaded by [jozhob]. Available from: YouTube (distributor), https://www.youtube.com/watch?v=5fyE1gXNTpA.

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EXAMPLE 266

BOWIE, David with Klaus Nomi. *TVC 15* [audio file]. Available from: Vimeo (distributor), https://vimeo.com/152500331.

All surrogates used should be included in the reference.

EXAMPLE 267

Digital surrogate available from: Solomon R. Guggenheim Founding Collection, https://www.guggenheim.org/artwork/793 [Web page]. [viewed 2017-07-10]. Digital surrogate available from: Wikiart, http://www.wikiart.org/en/marc-chagall/paris-through-the-window-1913 [Web page]. Archived copy available from: Internet Archive (distributor), {chagall_archive} [viewed 2017-02-13].

Names of the online hosts and URIs of the surrogates should be provided. Specific features of surrogates such as size may be included when deemed relevant.

EXAMPLE 268

DÜRER, Albrecht. *Feldhase* [aquarell, 1502]. At: Albertina, Vienna, Austria. Digital surrogate available from: Wikimedia (distributor), https://commons.wikimedia.org/wiki/File:Durer_Young_Hare.jpg. [still image, 3.731 × 4.123 pixels] [viewed 2018-07-16]. Digital surrogate available from: Google arts and culture (distributor), https://artsandculture.google.com/asset/hase/1QHEnzUGYMDG_w. [still image]. [viewed 2019-07-04].

=== Relationship

==== General

— Source: ISO 690, Clause 7.14
— Serialisation: `bibitem/relation/@type`, `bibitem/relation/bibitem`, `relation/locality`

A cited information resource is often related with other information resources.

For derivative works, the original information resource should be referenced within the reference to the derivative work.

The original work, if available, should be provided as an embedded reference before the date of citation in the following form, where `relationLabel` is the relation label of the relationship, and `originalWorkReference` is the reference to the original work.

```
{relationLabel}: {originalWorkReference}.
```

In order to minimize confusion, relations are considered the second type of data elements in Clause 8.1.1, so they can be placed accordingly.

EXAMPLE 269

{author}. {originalTitle}. {relationLabel}: {originalWorkReference}.

EXAMPLE 270

王弼 [WANG Bi]. 老子注 [*Commentaries on Laozi*]. Commentary on: LAOZI. Tao Te Ching.

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EXAMPLE 271

GARDNER, Martin (ed.). *The Annotated Alice: The Definitive Edition*. (Annotation on: CARROL, Lewis. Alice in Wonderland). New York: W. W. Norton & Company, 1999.

An embedded reference to the original work is serialised as `relation` with the target item in `relation/bibitem`, the kind of relationship in `relation/@type` (the vocabulary of [docrelation-types]), and, for a part-whole relationship, the extent in `relation/locality`.

EXAMPLE 272

GARDNER, Martin (ed.). *The Annotated Alice: The Definitive Edition*. (Annotation on: CARROL, Lewis. Alice in Wonderland). New York: W. W. Norton & Company, 1999.

```
<bibitem type="book">
  <title>The Annotated Alice: The Definitive Edition</title>
  <contributor>
    <role type="editor"/>
    <person><name><completename>Martin Gardner</completename></name>
</person>
  </contributor>
  <relation type="annotationOf">
    <bibitem type="book">
      <title>Alice in Wonderland</title>
      <contributor>
        <role type="author"/>
        <person><name><completename>Lewis Carroll</completename></
name></person>
      </contributor>
    </bibitem>
  </relation>
</bibitem>
```

==== Model

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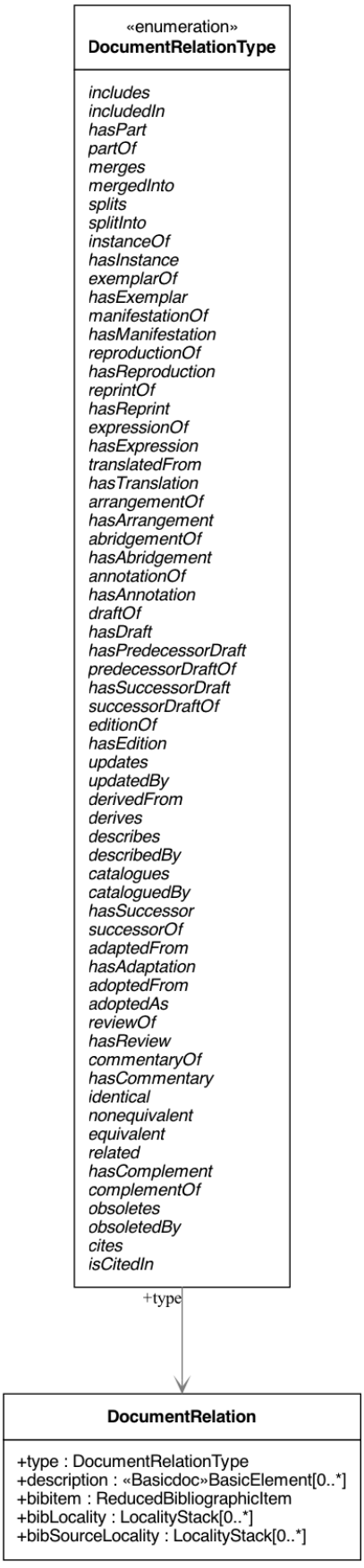

Figure 23 — DocumentRelation and related models

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DocumentRelation/ type	The type of document relation described. Different resource types have differnet relations between documents; but inclusion is applicable to most resource types (though there are constraints in which resource types can include which.)
DocumentRelation/ bibItem	The bibliographic item to which this bibliographic item is described as related to.
DocumentRelation/ bibLocality	The extent of the this bibliographic item which is related to the other bibliographic item as expressed in this instance, provided that it is not the entire bibliographic item that is so related.

The vocabulary of relation types is given in [docrelation-types].

==== Translation

Translations are expressions of the original (translated) work, and are usually indexed under the original author's name. The translator should be considered a subsidiary creator with the role of "translator" or its abbreviation (see [creator_roles]).

If the translated information resource is an exact counterpart of the original information resource, the source and destination languages shall be included if the original and translated title do not clearly indicate them.

The phrase "Translated from ... to ..." or its equivalent in the language of the publication should be shown as an attribute of the cited information resource (see Clause 8.1.1).

EXAMPLE 273

Translated from Dutch to English. George STUYCK (trans.).

EXAMPLE 274

Translated from Chinese to English. W.J.F. JENNER (trans.).

EXAMPLE 275

Translated from Serbo-Croatian to French. Georges LUCIANI (trans.).

If the cited information resource has been translated to the language of the publication, the destination language may be omitted.

EXAMPLE 276

Translated from German. H.T. LOWE-PORTER (trans.).

Both the source and destination language may be omitted if the titles indicate them.

EXAMPLE 277

DOSTOEVSKY, F. *The Brothers Karamazov* [*Братья Карамазовы*]. C. GARNETT [trans.].

A reference to the original work should be included in the citation reference as a data element if the translation has been made via an intermediate language. The phrase "Translation of:" or equivalent in the language of the publication should be used as the relation label to the translated expression. The phrase "Original work:" should be used to indicate the source.

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EXAMPLE 278

JANSSON, Tove. [####, ######]. ########### [*Banthuŕk mūnin*]. Translated from English into Thai. Thānphāyu TOWIRA (trans.). [Translation of: Moominpappa's memoirs. Original work: Muminpappans bravader.]. Bangkok: Amarin Printing & Publishing Plc.

Information about the original work or the manifestation used as the source may be included even if there is no intermediate language.

EXAMPLE 279

WU, Cheng'en. *Journey to the West*. Paperback. Translated from Chinese into English. W.J.F. JENNER (trans.). [Translation of: 西遊記.].

EXAMPLE 280

GORKI, Maxim. *The Artamonovs* [Delo Artamonovykh]. Translated from Russian. Alec BROWN (trans.). [Translation of: Максим ГОРЬКИЙ. Дело Артамоновых. Berlin: Kniga, 1925.]. London: Folio Society, 1955.

EXAMPLE 281

ANDRIĆ, Ivo. *Il est un pont sur la Drina: chronique de Višegrad*. Translated from Serbo-Croatian to French. Georges LUCIANI (trans.). [Translation of: Ivo ANDRIĆ. Na Drini ćuprija: višegradska hronika. Sarajevo: Svjetlost, 1946.]. Paris: Plon, © 1961.

EXAMPLE 282

HOMER. *The Iliad of Homer*. Translated from Greek. Alexander POPE (trans.). [Translation of: Ὁμηρος. Ιλιάδα.]. London: Printed for J. Walker, 1813. Available from: Google Books (distributor), https://books.google.fi/books?id=8UN9Z9FYQFkC.

If it is uncertain on what original work, expression or manifestation the translation is based on, the source shall not be mentioned in the reference.

EXAMPLE 283

BAARD, H. P. *Frans Hals*. Translated from Dutch to English. George STUYCK (trans.). ISBN 9780500091500. London: Thames and Hudson, 1981.

A translation is serialised as `relation/@type = "translatedFrom"` with the original work as the target `bibitem`, and its inverse as `hasTranslation`.

EXAMPLE 284

DOSTOEVSKY, F. *The Brothers Karamazov* [*Братья Карамазовы*]. C. GARNETT [trans.].

```
<bibitem type="book">
  <title>The Brothers Karamazov</title>
  <title type="original" language="ru" script="Cyrl">Братья
Карамазовы</title>
  <contributor>
    <role type="author"/>
    <person><name><completename>F. Dostoevsky</completename></name></
person>
  </contributor>
  <contributor>
    <role type="translator"/>
```

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```
        <person><name><completename>C. Garnett</completename></name></
      person>
        </contributor>
        <relation type="translatedFrom">
          <bibitem type="book">
            <title language="ru" script="Cyrl">Братья Карамазовы</title>
          </bibitem>
        </relation>
      </bibitem>
```

==== Commentary

Commentaries are considered expressions instead of new work. They should be indexed under the original author's name.

A reference to the original work, if available, should be inserted to the citation reference (see Clause 8.1.1) with the relation label "Commentary on:" or equivalent.

EXAMPLE 285

王弼 [WANG Bi]. 老子注 [*Commentaries on Laozi*]. Commentary on: LAOZI. Tao Te Ching.

==== Annotations

Annotations are considered expressions instead of new works. They are usually marketed under the original author's name.

A reference to the original work, if available, should be inserted to the citation reference (see Clause 8.1.1) with the relation label "Annotation on:" or equivalent.

EXAMPLE 286

GARDNER, Martin (ed.). *The Annotated Alice: The Definitive Edition*. [Annotation on: CARROL, Lewis. Alice in Wonderland]. New York: W. W. Norton & Company, 1999.

==== Arranger

Arrangements are considered expression instead of new work, similar to translation. They are usually marketed under the original author's name.

The reference should indicate the arranger and purpose of arrangement.

The arranger should be considered a subsidiary creator with the role of "arranger" or its abbreviation (see [creator_roles]).

The phrase "Arranged for {purpose}" (where "purpose" is the purpose of arrangement) or its equivalent should be shown as an attribute of the cited information resource (see Clause 8.1.1).

EXAMPLE 287

HANDEL, G. F. *Trio Sonata No. 1*. Arranged for 2 alto saxophones. Himie VOXMAN and Richard HERVIG (arrangers). San Antonio, TX: Southern Music, 1989.

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EXAMPLE 288

BACH, J.S. *Air (Mvt. 2) from Orchestral Suite No. 3 in D major, BWV 1068. [Air on a G String].* Arranged for orchestra. Leopold STOKOWSKI (arranger). New York: Broude Brothers, 1923.

==== Abridgement

Abridgements are treated as expressions and not original works. They are usually marketed under the original author's name.

The person who made the abridgement should be considered a subsidiary creator with the role of "adapter" or its abbreviation (see [creator_roles]).

If a reference to the original work is available, it should be inserted in the citation reference as a data element, with the original reference considered as a relation with the current (see Clause 8.1.1).

The phrase "Abridgement of:" or equivalent should be used as the relation label.

EXAMPLE 289

BAUM L. Frank. *The Wizard of Oz (A Stepping Stone Book)*. W.W. Denslow (illustrator), Daisy ALBERTO (adapter). Random House Books for Young Readers, 2012. [Abridgement of: The Wonderful Wizard of Oz.]. Chicago; New York: George M. Hill Co., 1900.

Otherwise, the label "abridgement" should be provided immediately after the title to indicate it is an abridgement of the original.

EXAMPLE 290

SWIFT, Jonathan. *Gulliver's Travels.* [abridgement] FORDYCE, W. Dingwall (adapter). New York: Sully and Kleinteich, 1915.

Translations may be abridged as well. If such translation is cited, the reference should specify differences using the terminology of the cited information resource, translated to the language of the publication.

EXAMPLE 291

HUGO, Victor. Kurjat. [abridgement]. Translated from French to Finnish. J. V. LEHTONEN and Eino VOIONMAA (trans.), abridged by Reino Rauanheimo. [Abridgement of Les Misérables]. Helsinki: WSOY, 2013.

==== Reviews and critiques

Reviews are new works, indexed under the reviewer's name.

The phrase "Review of:" or its equivalent may be used to reference the work reviewed.

EXAMPLE 292

Review of: VERBEKE, S. Alignment and Ergativity in New Indo-Aryan Languages.

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EXAMPLE 293

Review of: NINTENDO. *Mario Kart 8 Deluxe for Nintendo Switch* [game]. Nintendo Switch edition. Kyoto: Nintendo, 2017.

EXAMPLE 294

Review of: NOLAN, Christopher (director). Inception [film]. Burbank: Warner Bros.; Burbank: Legendary Entertainment; London: Syncopy, 2010.

The reviewer is considered the most prominent creator for a review. The original reference should also be given if available as a relation (see Clause 8.1.1).

The phrase “Review of:” or equivalent should be used as the relation label.

EXAMPLE 295

PLAGGE, Kallie. *Mario Kart 8 Deluxe review on Nintendo Switch* [online] [2017-04-20]. Review of: NINTENDO. Mario Kart 8 Deluxe for Nintendo Switch [game]. Nintendo Switch edition. Kyoto: Nintendo, 2017. Gamespot. Available from: https://www.gamespot.com/reviews/mario-kart-8-deluxe-review/1900-6416660/ [viewed 2019-09-02].

EXAMPLE 296

TRAVERS, Peter. *Inception — Rolling Stone*. [online]. New York: Rolling Stone. [2010-07-02]. Review of: NOLAN, Christopher [director]. Inception [film]. Burbank: Warner Bros.; Burbank: Legendary Entertainment; London: Syncopy, 2010. Available from: Rolling Stone, https://www.rollingstone.com/movies/movie-reviews/inception-248306/

In some cases, where the title already provides a reference to the original work, the embedded reference to the original work may be omitted.

EXAMPLE 297

PHILLIPS, M.P. 2014. Book review: Verbeke, Saartje. Alignment and Ergativity in New Indo-Aryan Languages. *Journal of South Asian Languages and Linguistics* 1(1): 103-110.

NOTE 15 In some citation styles, the embedding of a relationship reference inside a reference can cause confusion on whether the metadata element applies to the cited information resource or to the embedded reference. In these cases, the author may want to cite only minimal source work information to prevent misunderstanding.

=== Relation types

`bibitem/relation/@type` gives the base class of the relation between two bibliographic items.

The base class of relation types is taken from ISO 690, and represents generic bibliographical requirements, particularly inclusion in a host item ([host-item]: includedIn, includes) and translation ([relation-translation]: translatedFrom, hasTranslation). The class has been expanded substantially to deal with the requirements of standards documents.

The complete vocabulary, with definitions, is maintained in the relaton-models repository as the `DocumentRelationType` enumeration; it is reproduced here in the model order.

includes	document A includes document B, through a well-defined relation outlined in [host-item], and with distinct metadata

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includedIn	document A is included in document B, through a well-defined relation outlined in [host-item], and with distinct metadata
partOf	document A is included in document B, with no distinct metadata
merges	document A results from a merger of earlier documents B1, B2, B3...
mergedInto	The main document is one of the documents merged into the later target document.
splits	document A is split off from earlier document B
splitInto	The main document was split into several later target documents.
instanceOf	document A has as an instance document B (e.g. an edition, a format, a single copy)
hasInstance	The main document is a more specific reference to the bibliographic item, and the target document is a more generic reference.
exemplarOf	The main document is a single physical instance of the bibliographic item, which is more generically referred to in the target document. This corresponds to *Item* in the Functional Requirements for Bibliographic Records (FRBR) model. Inverse of `hasExemplar` relation.
hasExemplar	The main document is a more generic reference to the bibliographic item, of which the target document is a single physical instance. The main document may be a *Work*, *Expression* or *Manifestation* under the Functional Requirements for Bibliographic Records (FRBR) model.
manifestationOf	The main document is an embodiment in a particular medium of the content of a bibliographic item. which is more generically referred to in the target document. This corresponds to *Manifestation* in the Functional Requirements for Bibliographic Records (FRBR) model. Inverse of `hasManifestation` relation. Includes the more specific relations `reproductionOf` and `reprintOf`.
hasManifestation	The main document is a more generic reference to the bibliographic item, of which the target document is an embodiment in a particular medium. The main document may be a *Work* or *Expression* under the Functional Requirements for Bibliographic Records (FRBR) model.
reproductionOf	The main document presents the same content as the target document, and the main document has been created to reproduce the target document faithfully. The main and target document are not necessarily in the same medium. Inverse of `hasReproduction` relation. Includes the more specific relation `reprintOf`.
hasReproduction	The main document presents the same content as the target document, and the target document has been created to reproduce the main document faithfully. The main and target document are not necessarily in the same medium.

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reprintOf	The main document presents the same content as the target document, and the main document has been created to reproduce the target document faithfully. The main and target document are both print publications. Inverse of `hasReprint` relation.
hasReprint	The main document presents the same content as the target document, and the target document has been created to reproduce the main document faithfully. The main and target document are both print publications.
expressionOf	The main document is a particular realisation of the intellectual or artistic content of the bibliographic item, which is more generically referred to in the target document. This corresponds to *Expression* in the Functional Requirements for Bibliographic Records (FRBR) model. Inverse of `hasExpression` relation. Includes the more precise `translatedFrom`, `arrangementOf`, `abridgementOf`, and `annotationOf`.
hasExpression	The main document is a more generic reference to the bibliographic item, whose intellectual or artistic content the target document realises. The main document may be a *Work* under the Functional Requirements for Bibliographic Records (FRBR) model.
translatedFrom	document A is a translation of document B
hasTranslation	document A has a translation as document B
arrangementOf	The main document has the same intellectual or artistic content as the target document, and the main document has been created to realise that content through different resources than the target document. Is typically understood to involve the realisation of a musical work with different instruments or voices than the original (arrangement). This includes adding parts or an accompaniment. Inverse of `hasArrangement` relation.
hasArrangement	The main document has the same intellectual or artistic content as the target document, and the target document has been created to realise that content through different resources than the main document. Is typically understood to involve the realisation of a musical work with different instruments than the original.
abridgementOf	The main document presents a subset of the intellectual or artistic content of the target document, but is still intended as a complete work, presenting a shortened version of the main document expression. Inverse of `hasAbridgement` relation.
hasAbridgement	The main document has a target document which presents a subset of its intellectual or artistic content, but which is still intended as a complete work, presenting a shortened version of the main document expression.
annotationOf	The main document incorporates part or all of the target document, and enhances it with explanatory commentary. Inverse of `hasAnnotation` relation.
hasAnnotation	The main document has a target document which incorporates part or all of it, and which enhances it with explanatory commentary ot present in the source expression.

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draftOf	document A is a draft of document B
hasDraft	document A has as a draft document B
hasPredecessorDraft	The main document is a generic reference to a work (whether published or pre-published), and the target document is a specific pre-publication version preparatory to the main document.
predecessorDraftOf	The main document is a specific pre-publication version of the work represented by the target document (whether the target document published or pre-published), and preparatory to it. Inverse of `hasPredecessorDraft` relation.
hasSuccessorDraft	The main document is a generic reference to a work (whether published or pre-published), and the target document is a specific pre-publication version revising the main document.
successorDraftOf	The main document is a specific pre-publication version of the work represented by the target document (whether the target document published or pre-published), and revising it. Inverse of `hasSuccessorDraft` relation.
editionOf	The main document is a specific published version of the work represented by the target document. Inverse of `hasEdition` relation.
hasEdition	The main document is a generic reference to a work, and the target document is a specific published version of the work.
updates	document A updates document B
updatedBy	document A is updated by document B
derivedFrom	document A is derived from document B
derives	The main document is the original work from which the target document is derived.
describes	document A describes document B
describedBy	document A is described by document B
catalogues	The main document includes a bibliographic record of the target document. Inverse of `cataloguedBy` relation.
cataloguedBy	The main document has its bibliographic record included in the target document.
hasSuccessor	The main document has ceased fulfilling some function, and the target document has assumed that function in its stead. Typically applies when the main document is a periodical publication which has ceased publication, and the target document is a new periodical publication, designated as the continuation of the main document. Inverse of `successor0f` relation.
successorOf	The main document has assumed the function of the target document, which has ceased fulfilling that function. Typically applies when the target document is a periodical publication which has ceased publication, and the main document is a new

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	periodical publication, designated as the continuation of the target document.
adaptedFrom	The main document has its intellectual or artistic content derived from the target document, and has modified it to match the requirements of a different medium or audience. In music, an adaptation changes the musical content, whereas an arrangement changes the instrumenal and vocal resources of the work. Inverse of `hasAdaptation` relation.
hasAdaptation	The main document has been modified in the target document, to present its content matching the requirements of a different medium or audience.
adoptedFrom	document A is adopted by a standards organisation from document B by a different organisation
adoptedAs	The main document has a counterpart in the target document, which derives it content from the main document, and has been adopted in response to the main document. Typically it is an international standard which has had national standard bodies formulate a local counterpart.
reviewOf	The main document is an evaluation of the target document. Inverse of `hasReview`.
hasReview	The main document is evaluated in the target document.
commentaryOf	The main document provides explanatory commentary on the target document. Unlike `annotationOf`, the main document does not incorporate the complete text of the target document, and so cannot be read independently of the original. Inverse of `hasCommentary`.
hasCommentary	The main document is given explanatory commentary in the target document. Unlike `hasAnnotation`, the target document does not incorporate the complete text of the main document, and so cannot be read independently of the original.
identical	document A is adopted from document B, without any change
nonequivalent	document A is adopted from document B, and has been altered textually significantly
equivalent	document A is adopted from document B, without any significant textual change
related	document A is related to document B in an otherwise unspecified fashion
hasComplement	The main document has additional or contextual information provided in the the target document, to help understand the main document. The target document is complementary to the main document.
complementOf	The main document is complementary or supplementary to the target document, and provides additional or contextual information to help understand the target document. Inverse of `hasComplement` relation.
obsoletes	document A supersedes document B, and renders it obsolete

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obsoletedBy	document A is superseded by document B, and is rendered obsolete
cites	The main document references the target document. Inverse of `isCitedIn` relation.
isCitedIn	The main document is referenced in the target document.

=== Other elements

==== General

Additional categories of information that may be included are given below. When such information is included in a reference, it should comply with the guidelines provided.

==== Classification

— Source: ISO 690, Clause 4.11
— Serialisation: `bibitem/classification`

Classification codes may be included, if they have been recorded in the cited information resource. The classification scheme should be indicated if a code is provided.

The classification scheme is given in `classification/@type`.

EXAMPLE 298

Recommendations for bibliographic references to maps and charts. 2, References in books and articles. UDC 001.811.

EXAMPLE 299

WHITE, Bebo. *Programming techniques for software development.* UDC 681.3.06.

EXAMPLE 300

Int. CI. E02F3/76. GB CI. E1F12.

EXAMPLE 301

Giesler, Patricia. *Canada Remembers the Korean War*. Dewey 971.06 GIE 2003. ISBN 0662674979. Charlottetown, P.E.I. : Veterans Affairs Canada. 2003.

```
<bibitem type="book">
  <title>Canada Remembers the Korean War</title>
  <docidentifier type="ISBN">0662674979</docidentifier>
  <date type="published"><on>2003</on></date>
  <contributor>
    <role type="author"/>
    <person>
      <name>
        <surname>Giesler</surname>
        <forename>Patricia</forename>
      </name>
    </person>
  </contributor>
  <contributor>
    <role type="publisher"/>
    <organization>
```

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```
            <name>Veterans Affairs Canada</name>
          </organization>
        </contributor>
        <place>Charlottetown, P.E.I.</place>
        <classification type="Dewey">971.06 GIE 2003</classification>
      </bibitem>
```

==== Keywords

— Source: N/A
— Serialisation: `bibitem/keyword`

Keywords associated with a bibliographic item may be given as plain strings, or as terms from controlled vocabularies (with the vocabulary identifier and term code). Taxonomic names may also be given as a taxon hierarchy.

EXAMPLE 302

```
      <keyword>Homo sapiens</keyword>

      <keyword>
        <vocab>Homo sapiens</vocab>
        <vocabid type="wikidata" uri="https://www.wikidata.org/wiki/
      Q15978631">
          <code>Q15978631</code>
          <term>Homo sapiens</term>
        </vocabid>
        <vocabid type="National Biodiversity Network">
          <code>NHMSYS0000376773</code>
        </vocabid>
      </keyword>

      <keyword>
        <taxon>Hominidae</taxon>
        <taxon>Homininae</taxon>
        <taxon>Hominini</taxon>
        <taxon>Hominina</taxon>
        <taxon>Homo</taxon>
        <taxon>Homo sapiens</taxon>
        <vocabid type="wikispecies"><term>Homo_sapiens</term></vocabid>
      </keyword>
```

==== Size

The size of a printed document may be included in a reference. It may, if appropriate, be given as:

1) the height only, in millimetres,
EXAMPLE 303

210 mm.

2) the height followed by the width, or,
EXAMPLE 304

210 mm × 150 mm.

3) if appropriate, the A-size designation (see ISO 216) followed, when necessary, by “landscape”.

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EXAMPLE 305

A5 landscape.

If the printed document cited is exceptionally large, the size should be specified.

==== File size

The file size of a cited digital information resource may be given after the URI of the resource. If the file is exceptionally large, the size should be specified.

EXAMPLE 306

Available from: https://doi.org/10.3886/ICPSR03414.v1 [1 MB]

EXAMPLE 307

Available from: https://doi.org/10.3886/ICPSR20520.v2 [81 MB]

==== Price

— Source: ISO 690, Clause 4.11
— Serialisation: `bibitem/price`, `bibitem/note`

Information about price may be given, as quoted by the publisher.

Price is marked up as a distinct element, which contains the currency code, represented in ISO 4217. The price should be treated as nominal, rather than capturing all possible pricings at a given time.

Availability information for a bibliographic item is treated as a note. This also applies to the availability of an online resource, and any access limitations, but not to licensing, which is encoded separately.

EXAMPLE 308

The Supply of Machinery (Safety) (Amendment) Regulations 1994 [United Kingdom]. London: HMSO Publications, 1994. 13p. GBP 3.20. ISBN 0-11-045063-9.

Price and format ([formats]) availability may be given together.

EXAMPLE 309

POPKIN, Samuel L. *The Rational Peasant: The Political Economy of Rural Society in Vietnam*. Berkeley: University of California Press, 1979. $18.50 (cloth); $5.95 (paper).

EXAMPLE 310

Pluralism in the Soviet Union: Essays in Honour of H. Gordon Skilling. Edited by Susan Gross Solomon. New York: St. Martin's Press, 1983. xiii, 179 pp. $27.50. Available on request to the author.

```
<bibitem type="book">
  <title>Pluralism in the Soviet Union: Essays in Honour of H.
Gordon Skilling</title>
  <date type="published"><on>1983</on></date>
  <contributor>
```

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```
            <role type="editor"/>
            <person>
              <name>
                <surname>Solonom</surname>
                <forename>Susan</forename>
                <forename>Gross</forename>
              </name>
            </person>
          </contributor>
          <contributor>
            <role type="publisher"/>
            <organization>
              <name>St Martin's Press</name>
            </organization>
          </contributor>
          <note>Available on request to the author</note>
          <place>New York</place>
          <price currency="USD">27.50</price>
          <extent type="page">
            <referenceFrom>xiii</referenceFrom>
          </extent>
          <extent type="page">
            <referenceFrom>179</referenceFrom>
          </extent>
        </bibitem>
```

==== Registered trademark

A registered trademark may be denoted by the symbol “®” next to the trademarked phrase(s) or symbol(s).

EXAMPLE 311

Factsheet: DOI® System and Standard Identifier Schemes

==== Rights metadata

— Source: ISO 690, Clause 4.11
— Serialisation: `bibitem/license`, `bibitem/copyright`.

Copyright status of the information resource may be provided, if known.

Where available, URIs should be used to identify licenses unambiguously. If a URI is not available, a commonly accepted abbreviation or short name of the license should be used.

Copyright is privileged with a separate element, incorporating copyright date and owner.

If it is certain that no exclusive intellectual property rights apply to the cited information resource, e.g., it is in the public domain or is not subject to copyright, this information may be included in the reference. The phrase “Public domain” or its equivalent in the language of the publication should be used.
NOTE 16 This allows the reader to know that the cited information resource may be used freely.

EXAMPLE 312

Public domain.

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Materials may enter the public domain in one country sooner than they may in another. A work marked to be in the public domain in a jurisdiction may still be under copyright protection in another jurisdiction. Therefore, the jurisdiction where the cited information resource is in the public domain should be indicated whenever necessary.

EXAMPLE 313

Public domain in the EU.

Some created works are automatically placed in the public domain since they are not copyrightable. The jurisdiction where the cited information resource where this condition applies should be indicated.

EXAMPLE 314

Public domain, not copyrightable in the United States.

If intellectual property rights apply, the copyright date may be cited, preceded by the symbol "©" or "cop". Alternatively, the English word "copyright" or its equivalent in the language of the citation may be used. If the copyright date is different from that of the publication date, both may be given.

EXAMPLE 315

Paris: Plon, © 1961.

EXAMPLE 316

1984{period} cop. 2013.

If intellectual property rights apply but there is a well-known license which allows the usage, the acronym of the license should be provided with the version number (if any). Language of the license may be included as the ISO 639-1 code. The acronym should be preceded by the English word "license" or its equivalent in the language of the citation.

EXAMPLE 317

License: CC BY 4.0 EN.

EXAMPLE 318

license: GNU GPL version 2.

EXAMPLE 319

<license>BSD-2</license> <license>https://creativecommons.org/licenses/by/2.0/</license>

Example references are provided below.

EXAMPLE 320

ANDRIĆ, Ivo. *Il est un pont sur la Drina: chronique de Višegrad*. Translated from Serbo-Croatian into French. Georges LUCIANI (translator).

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EXAMPLE 321

LEE Annabelle, Stanley R. SNOUFFER, Randall J. EASTER, James FOTI, Tom CASAR. *NIST Special Publication 800-29 — A Comparison of the Security Requirements for Cryptographic Modules in FIPS 140-1 and FIPS 140-2*. National Institute of Standards and Technology, 2001. Public domain, not copyrightable in the United States.

EXAMPLE 322

Linux kernel [program]. The Linux Kernel Organization, 2002–. License: GNU GPL version 2.

==== Provenance and authenticity

— Source: ISO 690, Clause 4.11
— Serialisation: `bibitem/note`

The scope of provenance information varies depending on the information resource described. Traditionally, it has been limited to a record of ownership of a work of art, but provenance information may also describe the historical context of the data and its origins, including the workflows and applications used to generate the research data.

If the cited information resource is a Web document, the citation may contain a checksum with which a user can make sure that the document she has retrieved is the one cited.

If the cited resource consists of multiple files, checksums should be calculated for all of them.

Notes on bibliographical provenance, and checksums for digital resources, are both given as bibliographic notes.

Checksum algorithm should precede the checksum value. A standardized algorithm such as SHA3-256 (Clause 8.2.1.1, Example 1) should be used.
NOTE 17 There are free Web services for calculation of checksums.

EXAMPLE 323

Available from: https://www.w3.org/Provider/Style/URI. [SHA-256 ddeda5854f50c7bff8e55ccd30e2c1c3c45674768b3c83c7f88c142e81c3b9a7]

An example reference is provided below.

EXAMPLE 324

Berners-Lee, T.: Cool URIs don’t change. W3C, 1998. Available from: https://www.w3.org/Provider/Style/URI. [SHA-256 ddeda5854f50c7bff8e55ccd30e2c1c3c45674768b3c83c7f88c142e81c3b9a7]. [cited 2018-09-07].

===== Provenance of reference information

Information in a reference typically comes from the publisher of a resource, and is included in the resource itself, as described in ISO 690, Clause 4.1.2. ISO 690, Clause 4.1.2 permits information to be supplied by other parties, and differentiated by including it in brackets. This can include both missing information (e.g. “[Untitled]”), and corrections (e.g. “1959 [i.e. 1995]”).

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The party supplying emendations to reference information is identified in ISO 690, Clause 4.1.2 as the citer of the reference. However, the citer should be differentiated from the bibliographer, in the case of bibliographies as consumable resources (e.g. as bibliographic databases):

— The publisher provides the primary source information about the resource, typically in the resource itself, but also as a feed of information to a bibliographer.
— The bibliographer compiles a bibliography as a list of references, and uses their judgement to supply information and to impose uniform representation and rendering of the list.
— The citer uses a bibliography within a resource, to identify cited resources, and may further adjust the bibliography they provide within the resource (e.g. for disambiguation, or to disaggregate references included in other references.

The bibliographer and the publisher in the contemporary bibliography universe are more active parties than in the traditional model, which relies exclusively on citer discretion. Bibliographers and publishers are invested in asserting that they are sources of truth about bibliographic resources; and the bibliographies covered by any model of electronic exchange include references provided by bibliographers and publishers, in bibliographic databases—as well as the references consumed and adjusted by citers from bibliographic databases.

So the original reference as obtained from a bibliographic database may need to be differentiated from any adjustments made to the reference by a citer; and the citer adjustments in some contexts may need to be overridden.

If the serialisation of bibliographic items is to reflect such adjustments to content, it will need to indicate the provenance of bibliographic information, and allow multiple versions of the same information, with differing provenance. At the simplest level there will simply be two or more different versions of the reference serialisation, some representing the publisher or bibliographer's source of truth, and some representing the citer's adjustments (in brackets). Adjustments made by the bibliographer would also be represented in brackets; this is long-standing routine practice in library catalogues.

A more granular approach would be to permit multiple instances of any element in the reference model, differentiated by provenance: this could be done with a child element (e.g. an XML attribute), or with a nested container. If no provenance is indicated, the information is assumed to be unchanged from the source of truth. A renderer can then choose which alternative to render depending on local requirements:

EXAMPLE 325 — Differential Provenance

```
<bibitem>
  <date><on>1959</on></date>
</bibitem>

<bibitem source="citer">
  <date><on>1959 [i.e. 1995]</on></date>
</bibitem>

<bibitem>
  <date><on>1959</on></date>
  <date source="citer"><on>1959 [i.e. 1995]</on></date>
</bibitem>
```

NOTE 18 Breaking out completions and emendations into separate elements in the model (e.g. `<date><on><orig>1959</orig><corr>1995</corr></on></date>`) is not desirable, given how open-ended emendations can be (e.g. appearing anywhere in a string): they would complicate any serialisation of the model, to little real benefit.

==== System requirements

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In order to facilitate access to electronic resources, references may specify the requirements for accessing and rendering the cited information resources. In practice, providing this information is complicated for some information resource types. For instance, research data sets often require specific software tools and documentation of the content. In such cases, system requirements should be included in references since otherwise re-use of these resources may be difficult or impossible.

Content providers may impose different site-specific technical requirements to access the same information resource. For instance, a user may be required to have a Flash player and support JavaScript in one site, whereas another site may require HTML5 to access the same content. These provider specific system requirements should not be included in references, since the lifetime of such information is often short.

System requirements for programs are application specific and may be provided in a note. The note may include:

— the type of computer or computers on which the program was designed to be used;
— the name of the operating system or systems and its version on which the program will run;
— the middleware and other applications on which the program was designed to be used;
— the memory and disk requirements of the program;
— the characteristics of recommended peripherals and the Internet connection.

The wording supplied by the program itself or the related documentation should be used. To reduce ambiguity, the words “system requirements” or an equivalent phrase precede this information. A URI to a Web page giving additional information may be provided.

EXAMPLE 326

> Minimum system requirements: Windows 10 SAC, Windows Server 2019, or Windows 10 LTSC 2019 at release; 1.6 gigahertz (GHz) or faster 2-core processor, 4GB RAM (2GB RAM 32-bit); 4.0 GB of available disk space; 1280 × 768 screen resolution. [Additional information available from: https://products.office.com/en/office-system-requirements].

System requirements are technology dependent and therefore become outdated quickly (see Example 327). But even when the described system has become outdated, information about it may still be useful because the description will enable potential users of the cited information resource to have a general idea of emulation requirements (and choose migration strategy, if emulation is too complicated).

EXAMPLE 327

> Recommended system requirements: Windows 7×64 / Windows 8.1×64 / Windows 10×64; Fourth Generation Intel Core i5 2.5 Ghz or AMD FX8350 4.0 Ghz or greater; 8 GB RAM, 16 GB available space; AMD 7970 or nVidia 770 or greater with 2GB, DirectX 11 Video Card.

==== Restoration

If the cited information resource is a restored version of the original such as digitally remastered version of a film or a recording, restoration year should also be provided. If the resource has been significantly altered during restoration, or if it has been restored multiple times, restoration year is mandatory.

EXAMPLE 328

> 1964 [restored 1994].

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==== Other information

Other information relevant to the purposes of the particular reference may be included. Such information may include, for instance, links to the datasets the cited information resource is based on, or links to the documentation which enables the usage of the resource.

EXAMPLE 329

> KLEIN M, H. VAN DE SOMPEL, R. SANDERSON, H. SHANKAR, L. BALAKIREVA, K. ZHOU, et al. *Scholarly Context Not Found: One in Five Articles Suffers from Reference Rot.* Data availability: XML files which summarize the articles used are available from Figshare repository. Articles from arXiv are available from: https://doi.org/10.6084/m9.figshare.1132671; articles from Elsevier are available from: https://doi.org/10.6084/m9.figshare.1132677; https://doi.org/10.6084/m9.figshare.1132676.

== Resource types

=== General

— Source: ISO 690, Clause 5.1
— Serialisation: `bibitem@type`, `BibItemType`

While ISO 690 does not prescribe a list of possible bibliographic types, there are categories specific to particular information resource categories (ISO 690, Clause 5), as well as rendering rules specific to information resource categories (e.g. ISO 690, Clause 5.5: series title appears before item title for broadcasts). For that reason, bibliographic items should indicate what bibliographic type they belong to.
NOTE 19 The list of bibliographic types is a union of the types listed in ISO 690 and BibTeX. Master's Thesis and PhD Thesis from BibTeX are subsumed under "thesis".

The list maintains a distinction between the following resources, all of which are necessarily included in another resource:

"inbook"	A typically untitled part of a book. May be a chapter (or section, etc.) and/or a range of pages.
"incollection"	A part of a book having its own title.
"inproceedings"	An article in a conference proceedings.
"article"	An article from a journal or magazine.

NOTE 20 The above distinction aligns with BibTeX usage.

The overloaded type "electronic resource" should be avoided where possible, particularly if the resource corresponds closely to a paper bibliographic type, such as "book" or "article". The following types have been added, as specialisations of "electronic resource" with no print or physical counterpart:

— dataset: an electronic dataset, a collection of data that is not meant to be human-readable, and which is typically only machine readable.
— webresource: a human-readable or consumable web resource, a single item accessible online via a web browser, which is not composed of components all of which can be accessed in the same way. Includes media files, as well as individual web pages.
— website: a collection of web resources, presented under the same URL domain and by the same (individual or corporate authorship).
— social_media: one or more resources within a collection that is typically collectively authored by member users. Includes blog posts, forum posts, social media posts, tweets. Is usually a

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webresource, but not always (e.g. blogs on WeChat are only accessible within the WeChat app.)
— software: computer executable code, not itself human-readable text (though it may generate such text).

The following types have been added, as specialisations of "electronic resource" with a physical but not a print counterpart:

— alert: a single communication intended for multiple persons, and publicly accessible. May be electronic (e.g. Facebook status update) or voice (e.g. evacuation alert), but is typically not print.
— message: a single communication intended for a restricted number of authorised persons (typically one). May be electronic (e.g. Twitter direct message, email) or voice (e.g. a remark made to someone, typically cited as "personal communication").
— conversation: an exchange of messages between two or more persons. May be electronic (e.g. web chat) or voice (e.g. phone call).

Bibliographic types can overlap; for example much social media can be treated as webresources, and webresources are electronic resources; a Facebook status update can be treated as an alert, or as social media. However each bibliographic type is associated with a particular set of conventions around citation, so classifying an item as belonging to a given bibliographic type determines how it will be cited. Following the classification of citations in ISO 690, `social_media` takes priority over other types where it is applicable, particularly for publicly visible communications (such as status updates).

=== Monographs

==== Metadata elements

Table 1 shows the elements, in order, to be included in references to books and other separately issued monographs.

Metadata elements for a monograph

Elements (in order)	**Status**	**Relevant clause(s)/ subclauses**
Name of creator(s) (of the cited resource)	Required	Clause 8.2
Standard identifiers of creators' public identities	Optional	Clause 8.2
Title of the item	Required	[form_of_title], [translation_of_title]
Medium designation	Required if the item is not in print	[medium]
Subsidiary titles	Optional	[additional_titles] to [no_title]
Edition and version	Required if the item is not the first edition	[edition_and_version]
Subsidiary creator	Optional	[subsidiary_creator]
Series title and number	Required if the item is likely to be identified as part of a series	[form_of_title], [series_title_number]
Place and publisher	Required	[place], [publisher]
Date of publication	Required	[date-publication]
Rights metadata	Optional	[rights_metadata]
Date of update/revision	Required, if available, for online information resources	[web_specific]
Standard identifier *(ISBN, etc.)*	Required if available	[international_standard_identifiers]
Distributor or online host	Required for electronic resources if available	[distributor_host]

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Elements (in order)	Status	Relevant clause(s)/ subclauses
Persistent identifier	Required if available	[persistent_ identifiers]
Location and access (URI)	Required for online information resources with no persistent identifier or archived copy	[network_location]
Physical location	Required for print information resources if a limited number of copies are known to exist	[physical_location]
Relationships	Required if available	[relations]
Date of citation	Required for dynamic online information resources	[date-citation]
Other information may be added in whatever position is most appropriate	Optional	[additional-info]; [web_specific]

==== Simple monographs

A printed monograph, such as a book, may be referenced using typical monographic citation rules.

EXAMPLE 330

FARRAR, Frederic William. *Eric, or Little by Little: a tale of Roslyn School*. London: Hamilton, 1971.

EXAMPLE 331

FOWLER, H. W [ISNI 0000 0001 2101 5357]. *Fowler's dictionary of modern English usage*. 4th ed. Revised by Jeremy BUTTERFIELD. ISBN 978-0-19-966135-0. Oxford: Oxford University Press, 2015.

EXAMPLE 332

HAMILTON, Alastair, Sjouke VOOLSTRA, and Piet VISSER (eds.), *From martyr to muppy (Mennonite urban professionals): a historical introduction to cultural assimilation processes of a religious minority in the Netherlands, the Mennonites*. Amsterdam: Amsterdam University Press, 1994.

A digital copy of a monograph should be referred to with an online link, if the book is available in the Internet.

EXAMPLE 333

GEHERIN, David. *Small towns in recent American crime fiction* [online]. Jefferson, NC: McFarland & Co., 2015. ISBN 978-1-47661918-7. Available from: EBSCOhost. [paywall].

EXAMPLE 334

HOMER. *The Iliad of Homer*. Translated from the Greek. Alexander POPE (trans.). London: Printed for J. Walker, 1813. Available from: Google Books (distributor), https://books.google.fi/books?id=8UN9Z9FYQFkC.

==== Composed of multiple volumes

Monographs that are composed of multiple volumes may be indicated so.

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EXAMPLE 335

PARKER, T. J. and W. A. HASWELL. *A text book of zoology*. 6th ed. Vol. 1 revised by Otto LOWENSTEIN; Vol. 2 revised by C. FORSTER-COOPER. London: Macmillan, 1940.

==== E-books

Edition, carrier type, media type and/or file format of the cited e-book should be specified, but in a form that does not become obsolete quickly. For instance, giving the precise version of the e-book format or reading device used should be avoided unless it is relevant from the usage point of view.

EXAMPLE 336

PLOKHY, Serhii. *Chernobyl. The History of a Nuclear Catastrophe.* Kindle edition. New York: Basic Books, 2018.

If the cited e-book does not have page numbers, in-text citation may use any of the following:

— a paragraph number from the beginning of the book, if provided
— a paragraph number within a chapter
— a heading or an abbreviated version of it in quotation marks

If the cited e-book has numbered chapters, sections, and paragraphs, they may be used.

EXAMPLE 337

One of the author's main points is that "people don't rise from nothing" (Gladwell, 2008, Chapter 1, Section 2, paragraph 5).

==== Audiobooks

The narrator of the cited information resource should be included if mentioned in the publication. Duration of the audiobook may be specified either in ISO 8601 format or in a more human readable form.

EXAMPLE 338

PLOKHY, Serhii. *Chernobyl. The History of a Nuclear Catastrophe*. [audiobook]. Ralph LISTER (narrator). Audible & Hachette Audio (distributor), 2018.

EXAMPLE 339

BEOWULF [abridged, duration 133 min.].

EXAMPLE 340

BEOWULF [abridged, duration P2H13M]. Translated from Old English. Seamus HEANEY (translator and narrator). [audiobook]. Highbridge audio, 2006. Available from: Audible (distributor), www.audible.com/pd/Classics/Beowulf-Audiobook/B002V5CVPY [viewed 2019-07-04].

EXAMPLE 341

BAUM, L. Frank. *The Wonderful Land of Oz* [online]. Etext no. 17426. Roy TRUMBULL (narrator). Project Gutenberg, 2005 [audio file]. [MP3]. Available from: http://www.gutenberg.org/files/17426/17426-readme.htm. [viewed 2017-06-22].

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In-text citation for an audiobook should specify the relevant section.

EXAMPLE 342

(Beowulf, 01:12:17/01:15:42)

=== Monograph components

==== Metadata elements

Table 2 shows the metadata elements, in order, to be included in references to component parts within monographs.

Metadata elements for a monograph component part

Elements (in order)	**Status**	**Relevant clause(s)/ subclauses**
Name of creator(s) (of the component part)	Required	Clause 8.2
Standard identifiers of creators' public identities	Optional	Clause 8.2
Title of the component part	Required	[form_of_title], [translation_of_title] and [component_parts]
Additional information for component part	Optional	[additional-info]
In:	Required	[component_parts]
Name of creator(s) (of the host item)	Required	Clause 8.2
Title of the host item	Required	[form_of_title], [translation_of_title] and [component_parts]
Medium designation	Required if the item is not in print	[medium], [web_specific]
Subsidiary titles	Optional	[additional_titles] to [no_title]
Edition and version	Required if the item is not a first edition	[edition_and_version]
Subsidiary creator of the host item	Optional	[subsidiary_creator]
Series title and number	Required if the item is likely to be identified as part of a series	[form_of_title], [series_title_number]
Place and publisher	Required	[place], [publisher]
Date of publication	Required	[date-publication]
Rights metadata	Optional	[rights_metadata]
Numeration (of volume, etc. , containing the component part)	Required	[numeration]
Range of page number(s) (of the component part)	Required	[numeration_part_cited]
Date of update/revision	Required, if available, for online information resources	[web_specific]
Standard identifier (ISBN, etc.)	Required if available	[international_standard_identifiers]
Distributor or online host	Required for electronic resources if available	[distributor_host]
Persistent identifier	Required if available	[persistent_identifiers]
Network location and access (URL)	Required for online information resources with no persistent identifier or archived copy	[network_location]

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Elements (in order)	Status	Relevant clause(s)/ subclauses
Physical location	Required for print information resources if a limited number of copies are known to exist	[physical_location]
Relationships	Required if available	[relations]
Date of citation	Required for dynamic online information resources	[date-citation]
Other information may be added in whatever position is most appropriate	Optional	[additional-info], [web_specific]

==== Component parts of a monograph

If a component part of a monograph (e.g., an article within an encyclopaedia) is cited, information about the host information resource shall be provided along with locality information on the location of the cited information resource within the host information resource.

EXAMPLE 343

JUTURU, Vijaya. *Type 2 Diabetes*. In: Encyclopedia of Obesity. Vol. 2, pp. 158-59. ISBN 978-1412952385. Sage Publications, 2008.

If the identifier and creator of the host information resource are known, they shall be provided to facilitate identification of the resource.

EXAMPLE 344

JUTURU, Vijaya. *Type 2 Diabetes*. In: Kathleen KELLER (ed.). Encyclopedia of Obesity. Vol. 2, pp. 158-59. ISBN 978-1412952385. Sage Publications, 2008.

EXAMPLE 345

BURCHARD, J. E. *How humanists use a library*. In: C. F. J. OVERHAGE and J. R. HARMAN (eds.). Intrex: Report on a planning conference and information transfer experiments. Cambridge, MA: MIT Press, 3 Sep. 1965, pp. 41–87.

EXAMPLE 346

SMITH, C. *Problems of information studies in history.* In: S. STONE (ed.). Humanities information research. Sheffield: CRUS, 1980, pp. 27–30.

EXAMPLE 347

MICHAEL, D. *The effect of local deformations on the elastic interaction of cross walls coupled by beams*. In: COULL, E. A. and B. STAFFORD-SMITH (eds.). Tall buildings. Oxford: Pergamon Press, 1967.

EXAMPLE 348

KELLY, John D. *Seeing Red: Mao Fetishism, Pax Americana, and the Moral Economy of War*. In: KELLY, John D., Beatrice JAUREGUI, Sean T. MITCHELL, and Jeremy WALTON (eds.). Anthropology and Global Counterinsurgency. pp. 67–83. ISBN 978-0-226-42993-9. Chicago: University of Chicago Press, 2010.

The locality of the cited component part of an information resource should be stated according to hierarchical navigation, in order to facilitate the reader to locate the cited component part.

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EXAMPLE 349

GREAT BRITAIN. *Data Protection Act 1984*. Schedule 1, c 35, Part 1, Clause 7. London: HMSO.

Component parts of monographs presented on non-printed medium may be referred to in the same way.

EXAMPLE 350

BAUM, L. Frank. *The Wonderful Land of Oz. Chapter 2: The Marvelous Powder of Life* [online]. Etext no. 17426. Roy TRUMBULL (narrator). Project Gutenberg (distributor), 2005. [MP3]. Available from: http://www.gutenberg.org/files/17426/17426-mp3/17426-mp3-chap2.mp3. [viewed 2016-06-22].

=== Serials and their component parts

==== General

Continuing resources include serials and ongoing integrating resources such as web sites. Examples of their component parts include journal articles and web pages.

Serials have traditionally been published in successive issues which had numerical and/or chronological designations. Publication patterns of digital journals may differ from this; for instance, there may still be volumes and articles but not issues. Citation guidelines must take this diversity into account.

==== Metadata elements

===== Referencing an entire serial or entire issue of a serial

Table 3 shows the metadata elements, in order, to be included in references to serials.

Metadata elements for an entire serial or entire issue of a serial

Elements (in order)	Status	Relevant clause(s)/ subclauses
Title of the serial	Required	[form_of_title], [translation_of_title], [series_title_number]
Medium designation	Required if the item is not in print	[medium], [web_specific]
Subsidiary titles	Optional	[additional_titles] to [no_title]; [serial_title_qualifier] to [key_title]
Edition and version	Required if edition exists	[edition_and_version]
Place and publisher	Required	[place], [publisher]
Date of publication	Required	[date-publication]
Numeration	Required if not citing the entire serial in general	[numeration]
Rights metadata	Optional	[rights_metadata]
Standard identifier (ISSN)	Required if available	[international_standard_identifiers]
Distributor or online host	Required for electronic resources if available	[distributor_host]
Persistent identifier	Required if available	[persistent_identifiers]

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Elements (in order)	Status	Relevant clause(s)/ subclauses
Network location and access	Required for online information resources with no persistent identifier or archived copy	[network_location]
Physical location	Required for print information resources if a limited number of copies are known to exist	[physical_location]
Relationships	Required if available	[relations]
Date of citation	Required for dynamic online information resources	[date-citation]
Other information may be added in whatever position is most appropriate	Optional	[additional-info], [web_specific]

===== Referencing a component part within a serial

Table 4 shows the elements, in order, to be included in references to articles or other component parts within a serial.

Metadata elements for a component part within a serial

Elements (in order)	Status	Relevant clause(s)/ subclauses
Name of creator(s) (of the cited component part)	Required	Clause 8.2
Standard identifiers of creators' public identities	Optional	Clause 8.2
Title of component part	Required	[form_of_title], [translation_of_title], [series_title_number], [component_parts]
Additional information for component part	Optional	[additional-info]
Title (key title, abbreviated key title) of the host serial	Required	[form_of_title], [translation_of_title], [series_title_number]
Medium designation	Required if the item is not in print	[medium], [web_specific]
Subsidiary titles	Optional	[additional_titles] to [no_title], [component_parts]
Edition and version	Required if edition exists	[edition_and_version]
Place and publisher	Required	[place], [publisher]
Date of publication	Required	[date-publication]
Numeration (of volume, etc. , containing the component part)	Required, if volumes and issues exist	[numeration]
Page number range (of the component part)	Required, if pages are numbered	[numeration_part_cited]
Rights metadata	Optional	[rights_metadata]
Date of citation	Required for dynamic online information resources	[date-citation]
Standard identifier (ISSN, etc.)	Required if available	[international_standard_identifiers]
Distributor or online host	Required for electronic resources if available	[distributor_host]
Persistent identifier (DOI, etc.)	Required if available; should be expressed as HTTP URI	[persistent_identifiers]
Network location and access	Required for online information resources with no persistent identifier or archive copy	[network_location]

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Elements (in order)	Status	Relevant clause(s)/ subclauses
Physical location	Required for print information resources if a limited number of copies are known to exist	[physical_location]
Relationships	Required if available	[relations]
Other information may be added in whatever position is most appropriate	Optional	[additional-info]; [web_specific]

==== Printed serials

A printed serial may be referred to by the title. The key title and / or ISSN should be used when the title proper is not unique. Other information (publisher, dates of publication) may be provided if appropriate.

EXAMPLE 351

Bulletin trimestriel de l'Institut archéologique du Luxembourg Arlon. 1925-. ISSN 0020-2177.

EXAMPLE 352

Bulletin (Sydney). Sydney: Australian Consolidated Press, 1880–2008.

EXAMPLE 353

Argus (Melbourne, Vic. Print). ISSN 2200-8225.

==== Non-printed serials

Online serial citations shall contain online access information. If the key title indicates that the resource is available on line, there is no need to repeat this information.

EXAMPLE 354

Acta Zoologica (Oxford. Online). [PDF]. Hoboken, NJ.: Wiley, 1920–. Wiley Online Library (distributor). ISSN 1463-6395. Available from: https://onlinelibrary.wiley.com/journal/14636395. [paywall]. [viewed 2018-07-23].

EXAMPLE 355

Australasian Journal of Educational Technology (Online). [HTML]. Tugun, QLD: ASCILITE, 1985–. ISSN 1449-5554. Winter 2000, vol. 16, no. 2. Available from: https://ajet.org.au/index.php/AJET/issue/view/67. [viewed 2018-02-12].

Untraditional numbering schemes of online serials should be recorded as such. Metadata provided in the article (e.g., the publication date and license) may be used in the citation as deemed appropriate.

EXAMPLE 356

STONE, Richard A., Alice M. McGLINN, Ranjay CHAKRABORTY and others. *Altered ocular parameters from circadian clock gene disruptions*. PLoS ONE 14(6): e0217111. Published: June 18, 2019. License: CC BY 4.0 EN. Available from: https://doi.org/10.1371/journal.pone.0217111 [viewed 2019-06-24].

==== Monograph series

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If a component part of monograph series (such as an article or a book) is cited, the series title and number shall be included when present. The monograph series title shall be placed right after the monograph title, indicating that the monograph belongs to a monograph series. Context delimiters such as parentheses should be used to separate the series' title and the monograph's title.

EXAMPLE 357

AYMARD, M. (ed.), *Dutch capitalism and world capitalism*. (Studies in Modern Capitalism). New York: Cambridge University Press, 1982, pp. 78–96.

A report number, if available, should also be included.

EXAMPLE 358

FONTENOT, Kayla, Jessica SEMEGA, Melissa KOLLAR and U.S. Census Bureau. *Income and poverty in the United States: 2017*. [online]. Washington, DC.: U. S. Government Printing Office (distributor), 2018. Current Population Reports, P60. (Report no. P60-263). Available from: https://www.census.gov/content/census/en/library/publications/2018/demo/p60-263.html. [viewed 2019-07-01].

EXAMPLE 359

CHINNADURAI, S, K. SNYDER K, N. SATHE [et al]. *Diagnosis and Management of Infantile Hemangioma*. [online]. Rockville (MD): Agency for Healthcare Research and Quality (US), 2016. Comparative Effectiveness Reviews, No. 168. (AHRQ Report No. 16-EHC002-EF). Available from: https://www.ncbi.nlm.nih.gov/books/NBK344065/

For demonstration purposes, in accordance with [numeration_omission], the following examples are shown without the use of the volume or pagination labels.

EXAMPLE 360

AMAJOR, L. C. The Cenomanian hiatus in the Southern Benue Trough, Nigeria. *Geological Magazine*. 1985, **122**(1), 39–50. ISSN 0016-7568.

EXAMPLE 361

ANDREWS, M., et al. Growth of Chara Lispida II. Shack adaptation. *Journal of Ecology (Print)*. 1984, **72**(3), 885–895. ISSN 0022-0477.

EXAMPLE 362

QUINTANA-ASCENSIO, P. F., et al. *Predicting landscape-level distribution and abundance: Integrating demography, fire, elevation and landscape habitat configuration*. [online]. [paywall]. Journal of Ecology (Online). 02 April 2018. Available from: https://doi.org/10.1111/1365-2745.12985. [viewed 2019-12-06].

EXAMPLE 363

STIEG, M. F. *The information needs of historians*. College and Research Libraries. 1981, **42**(6), 549–560. ISSN 0010-0870.

A serial component part may be available not only as the final published version, but also in unfinished forms, such as preprint.

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Since the content and layout of the published resource and its unfinished version may differ, information with which it is possible to identify the edition used shall be included in the citation.

EXAMPLE 364

Compare between:

BLOSS C. S., N. E. WINEINGER, M. PETERS [et al.]. *A prospective randomized trial examining health care utilization in individuals using multiple smartphone-enabled biosensors*. Preprint. bioRxiv, 2015-10-28. Available from: https://doi.org/10.1101/029983 [viewed 2018-07-12].

BLOSS C. S., N. E. WINEINGER, M. PETERS [et al.]. *A prospective randomized trial examining health care utilization in individuals using multiple smartphone-enabled biosensors*. PeerJ 2016-01-14. Available from: https://doi.org/10.7717/peerj.1554 [viewed 2019-07-01].

If a component part of an online serial is referred to, PID-based link should be used whenever possible. URI may be used if the resource does not have a persistent identifier, but a link should be provided to an archive copy of the resource as well.

EXAMPLE 365

STRINGER, John A., et al. *Reduction of RF-induced sample heating with a scroll coil resonator structure for solid-state NMR probes* [online]. Journal of Magnetic Resonance. Elsevier. March 2005, vol. **173**(1), 40–48. Available from: https://doi.org/10.1016/j.jmr.2004.11.015. [viewed 2016-06-06].

EXAMPLE 366

MYERS, Michael P., Jay YANG, and Per STAMPE. *Visualization and functional analysis of a maxi-K channel (mSlo) fused to green fluorescent protein (GFP)* [online]. EJB: Electronic Journal of Biotechnology. Valparaiso (Chile): Universidad Catolica de Valparaiso, 15 December 1999, vol. 2, no. 3. ISSN 0717-3458. Available from: http://www.ejbiotechnology.info/content/vol2/issue3/full/3/3.pdf. [viewed 2016-06-28]. Archived copy available from: Internet Archive (distributor), https://web.archive.org/web/20170810170554/http://www.ejbiotechnology.info/content/vol2/issue3/full/3/3.pdf [viewed 2016-10-13].

==== Periodical articles

For newspaper articles, publishing date should replace volume and issue.

EXAMPLE 367

MADDOX, Brenda. *DNA's double helix: 60 years since life's deep molecular secrets was discovered*. [online]. The Guardian, 2013-02-22. ISSN 1756-3224. London: Guardian Media Group, 1959–. Available from: https://www.theguardian.com/science/2013/feb/22/watson-crick-dna-60th-anniversary-double-helix. [viewed 2017-05-13].

EXAMPLE 368

[ANONYMOUS]. *I Am Part of the Resistance Inside the Trump Administration*. [online]. The New York Times, 2018-09-05. ISSN 2574-5328. New York: The New York Times Company, 1851–. Available from: https://www.nytimes.com/2018/09/05/opinion/trump-white-house-anonymous-resistance.html. [viewed 2019-08-08].

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EXAMPLE 369

PLUNKETT, John. *Sorrell accuses Murdoch of panic buying.* [online]. The Guardian, 2005-10-27. ISSN 1756-3224. London: Guardian Media Group, 1959. Available from: https://www.theguardian.com/technology/2005/oct/27/news.rupertmurdoch.

Digital surrogate of a printed article should be cited as an online resource.

EXAMPLE 370

Railway Fatality. Argus (Melbourne, Vic. Online). 1910-01-12, p.5.ISSN 1833-9719. Available from: https://trove.nla.gov.au/newspaper/article/10826947. [viewed 2019-08-09]

Magazines should be cited either by date or by volume and issue, depending on the publishing pattern.

Newsletters should also be treated like magazines.

EXAMPLE 371

Chile under Marxism: Does it work? *Newsweek*, 1971-11-15. ISSN 0028-9604.

=== Programs and applications

==== NEW

— Source: ISO 690, Clause 5.3

System requirements are modelled as a note, prefixed with “System requirements:”. (Note that detailed system requirements are less commonly expressed now for software than they were in the 1990s and 2000s.)

URLs should not be broken at the end of a line: that is a rendering requirement, not an information modelling requirement.

As discussed in [resource_types], where possible, a more specific category should be used than “electronic resource”, which is properly a description of a medium and not a resource type; monographs and journals are now routinely published online.

The specific type of electronic resource, if not covered by `bibitem/@type` (e.g. “book”, “dataset”), should be given as `medium/genre`.

EXAMPLE 372

Ubisoft. *Far Cry 5* [computer game]. 2018. Viewed: 2018-05-10. System requirements: CPU: Intel Core i5-2400 | AMD FX-6300 @ 3.5 GHz or better (minimum); Intel Core i7-4770 @ 3.4 GHz | AMD Ryzen 5 1600 @ 3.2 GHz or equivalent (recommended). RAM: 8 GB. OS: Windows 7 SP1, Windows 8.1, Windows 10 (64-bit versions only). VIDEO CARD: NVIDIA GeForce GTX 670 | AMD R9 270 (2GB VRAM with Shader Model 5.0 or better) (minimum); NVIDIA GeForce GTX 970 or AMD R9 290X (4GB VRAM with Shader Model 5.0 or better) (recommended).

```
<bibitem type="software">
  <title>Far Cry 5</title>
  <date type="published"><on>2018</on></date>
  <date type="accessed"><on>2018-05-10</on></date>
  <contributor>
```

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```
      <role type="author"/>
      <organization>
        <name>Ubisoft</name>
      </person>
    </organization>
    <contributor>
      <role type="publisher"/>
      <organization>
        <name>Ubisoft</name>
      </organization>
    </contributor>
    <medium>
      <genre>computer game</genre>
    </medium>
    <note>System requirements: CPU: Intel Core i5-2400 | AMD FX-6300 @
3.5 GHz or better
(minimum); Intel Core i7-4770 @ 3.4 GHz | AMD Ryzen 5 1600 @ 3.2 GHz
or equivalent (recommended).
RAM: 8 GB. OS: Windows 7 SP1, Windows 8.1, Windows 10 (64-bit
versions only).
VIDEO CARD: NVIDIA GeForce GTX 670 | AMD R9 270 (2GB VRAM with
Shader Model 5.0 or better) (minimum);
NVIDIA GeForce GTX 970 or AMD R9 290X (4GB VRAM with Shader Model
5.0 or better) (recommended).</note>
    </bibitem>
```

==== General

Programs and applications should be referenced like traditional information resources, such as printed and electronic publications.
NOTE 21 Games are considered applications.

NOTE 22 The FORCE11 Software Citation Working group[9] published an initial set of software citation principles[10] in 2016. These principles form the basis of these recommendations.

==== Metadata elements

Due to the diversity of programs and applications, it is impossible to provide a full list of metadata elements which should or may be used when citing these resources, but for instance, the following elements in Table 5 may be present:

Metadata elements for programs

Elements (in order)	**Status**	**Relevant clause(s)/ subclauses**
Name of creator(s) (of the cited resource)	Required	[program-creator], Clause 8.2
Standard identifiers of creators' public identities	Optional	[program-creator], Clause 8.2
Program title	Required	[form_of_title], [translation_of_title]
Subsidiary titles	Optional	[additional_ titles] to [no_title]
Edition, version, revision	Optional	[program-edition], [edition_and_version]

[9] https://www.force11.org/group/software-citation-working-group

[10] https://peerj.com/articles/cs-86/

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Elements (in order)	Status	Relevant clause(s)/ subclauses
Subsidiary creator	Optional	[subsidiary_creator]
Place and publisher	Required	[place], [publisher]
Date of publication	Required	[program-pub-date], [date-publication]
Copyright	Optional	[rights_metadata]
License	Optional	[program-license], [rights_metadata]
Date of update/revision	Required, if available, for online information resources	[web_specific]
Distributor or online host	Required for electronic resources if available	[distributor_host]
Persistent identifier	Required if available	[persistent_identifiers]
Location and access (URI)	Required for online information resources with no persistent identifier or archived copy	[network_location]
System requirements	Optional	[system_ requirements]
File size	Required for large files	[element-filesize], [datasets-size]
Date of citation	Required for dynamic online information resources	[date-citation]
Relationships	Required if available	[relations]
Other information may be added in whatever position is most appropriate	Optional	[additional-info]; [web_specific]

NOTE Programs and applications are sets of data, but a specific category of data that are used as a tool to operate on data. Therefore, they are not treated in the same way as research datasets in citations. See https://peerj.com/preprints/2630/ for more information about this.

==== Data elements and guidance specific to type

===== Creator

The name(s) of the creator(s) should be given in preference to that of the distributor, even if the latter is more prominently displayed.

Often a computer program is treated as corporately authored, and neither the designer nor the programmers are credited. In that case the organization publishing the program is credited as the creator.

EXAMPLE 373

ORACLE CORP. *MySQL*® [computer program]. Enterprise edition. Redwood City: Oracle, 2015. [accessed 2016-03-23].

EXAMPLE 374

RIBOSE INC. *metanorma-standoc* [computer program]. Version 1.3.1, 2019-09-04. Available from: GitHub (distributor), https://github.com/metanorma/metanorma-standoc. See also: https://www.metanorma.com.

The system designer of a program should be treated as the creator; other developers involved that are credited in the software are treated as subsidiary creators. If there is no system designer distinct from programmers, the lead developer should be treated as the creator, if present, since they have assumed design responsibility for the developer team.

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EXAMPLE 375

TANENBAUM, Andrew S. *MINIX* [computer program]. Version 3.4.0rc6, 2017-05-09. License: BSD.

===== Date of publication

The publication date should be the date (or year) on which the cited version of the program was released for use.

===== Edition and version

Citation should enable identification of the edition and/or version of the program used in order to support reproducibility.

If there is no actionable and persistent identifier,[11] URL may be used as a link.

If the citation is not version specific, the publication date may be replaced by the date of citation, which should be the date on which the program was accessed in the context of the material being referenced.

===== License

The license should be described if it is known (see [rights_metadata]).

EXAMPLE 376

License: BSD

EXAMPLE 377

License: MIT

EXAMPLE 378

License: Apache

===== Additional information

Reproducibility of results is important. Therefore, citation of a program or application should provide sufficient technical metadata or a link to such metadata, in order to enable access to both the program itself and to its associated metadata, needed for using the referenced program. Such metadata is often available via the landing page of the resource.

If the landing page does not exist or it does not provide sufficient information about, e.g., configuration of the program or acceptable software and hardware platforms, this information should be included either in the citation or elsewhere in the citing publication.

[11]There is no standard identifier for programs and applications. But Software Heritage Archive (https://www.softwareheritage.org/), which archives open source programs from various sources, assigns identifiers for information resources harvested into the archive. See https://docs.softwareheritage.org/devel/swh-model/persistent-identifiers.html.

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EXAMPLE 379

VILLANOVA UNIVERSITY. *VuFind. Release 4.1.2.* [program]. Philadelphia, PA: Villanova university, 2017. License: GNU GPL 2.0. Available from: GitHub (distributor), https://github.com/vufind-org/vufind. [viewed 2018-03-02]. See also: http://vufind-org.github.io/vufind/. [viewed 2018-03-19].

See [system_requirements] for additional information.

==== Operating systems

When operating systems are cited, version or edition should be included only if necessary, since such information becomes outdated quickly.

Hardware requirements should be included if the edition / version information is provided.

EXAMPLE 380

APPLE COMPUTER, INC. *Mac OS X El Capitan* [computer program]. 25 June 2016 [accessed 2016-06-27]. Available from: http://www.apple.com. Path: Homepage; Mac OS X El Capitan; Upgrade now.

EXAMPLE 381

Linux kernel. [computer program]. The Linux Kernel Organization, 2002–. License: GNU GPL version 2. Available from: https://www.kernel.org/. [accessed 2018-04-15]. See also: https://en.wikipedia.org/wiki/Linux.

==== General programs

When programs are cited, version or edition should be included only if necessary, since such information becomes outdated quickly.

System requirements should be included if edition / version information is provided.

EXAMPLE 382

MOZILLA FOUNDATION. *Mozilla Firefox* [computer program]. Available from: https://www.mozilla.org/. Path: Download Firefox. [accessed 2017-06-27].

EXAMPLE 383

ORACLE CORP. *MySQL®* [computer program]. Enterprise edition. Redwood City: Oracle, 2015. [accessed 2016-03-23].

EXAMPLE 384

MICROSOFT CORP. *Office 2019* [computer program]. Windows edition. Redwood: Microsoft, 2019. Minimum system requirements: Windows 10 SAC, Windows Server 2019, or Windows 10 LTSC 2019 at release; 1.6 gigahertz (GHz) or faster 2-core processor, 4GB RAM (2GB RAM 32-bit); 4.0 GB of available disk space; 1280 × 768 screen resolution. [Additional information available from: https://products.office.com/en/office-system-requirements] Available from: https://www.office.com

==== Games

Electronic games should be referenced using the criteria for programs.

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EXAMPLE 385

NINTENDO. *Mario Kart 8 Deluxe for Nintendo Switch* [game]. Nintendo Switch edition. Kyoto: Nintendo, 2017. Available from: https://mariokart8.nintendo.com.

EXAMPLE 386

FIRAXIS GAMES.*Sid Meier's Civilization VI: Gathering Storm* [game]. Windows edition. Novato: 2K, 2016. Recommended system requirements: Windows 7×64 / Windows 8.1×64 / Windows 10×64; Fourth Generation Intel Core i5 2.5 Ghz or AMD FX8350 4.0 Ghz or greater; 8 GB RAM, 16 GB available space; AMD 7970 or nVidia 770 or greater with 2GB, DirectX 11 Video Card. Available from: https://civilization.com.

=== Cartographic material

==== General

Examples of cartographic material include maps, atlases, cartographic archival resources and datasets.

==== FROM 6900

— Source: ISO 690, Clause 5.4

The projection, prime meridian, orientation, and reference systems (such as grids and navigational lattices) are given as notes. The spectral characteristics of the sensor, details of the satellite systems, and the amount of cloud cover are also given as notes. Details of the creator's role are given in `bibitem/contributor/role`.

EXAMPLE 387

Berner, L.T., P.S.A. Beck, M.M. Loranty, H.D. Alexander, M.C. Mack, and S.J. Goetz. *Siberian Boreal Forest Aboveground Biomass and Fire Scar Maps, Russia, 1969-2007*. ORNL DAAC, Oak Ridge, Tennessee, USA. 2016. http://dx.doi.org/10.3334/ORNLDAAC/1321

```
<bibitem type="map">
  <title>Siberian Boreal Forest Aboveground Biomass and Fire Scar
Maps, Russia, 1969-2007</title>
  <date type="published"><on>2016</on></date>
  <docidentifier type="DOI">10.3334/ORNLDAAC/1321</docidentifier>
  <uri>https://daac.ornl.gov/VEGETATION/guides/Siberian_Biomass_
Wildfire.html</uri>
  <contributor>
    <role type="author">
    <person><name><completeName>Berner, L.T.</completeName></name></
person>
  </contributor>
  <contributor>
    <role type="author">
    <person><name><completeName>Beck, P.S.A.</completeName></name></
person>
  </contributor>
  <contributor>
    <role type="author">
    <person><name><completeName>Loranty, H.D.</completeName></name></
person>
  </contributor>
  <contributor>
    <role type="author">
```

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```
      <person><name><completeName>Mack, M.C.</completeName></name></
person>
  </contributor>
  <contributor>
    <role type="author">
    <person><name><completeName>Goetz, S.J.</completeName></name></
person>
  </contributor>
  <contributor>
    <role type="publisher"/>
    <organization>
      <name>Oak Ridge National Laboratory</name>
      <subdivision>Distributed Active Archive Center</subdivision>
      <abbreviation>ORNL DAAC</abbreviation>
    </organization>
  </contributor>
  <medium>
    <form>map</form>
    <size>col. 68 x 69 cm. fold. in envelope 30 x 24 cm.</size>
    <scale>1:62500</scale>
  </medium>
  <note>Type: Projected
Projection: Albers_Conic_Equal_Area
Geographic Coordinate Reference:  WGS 1984
Prime Meridian: Greenwich
Extent: North: 69.8980555555556 South: 64.4575 West:
155.931944444444 East: 166.474444444444</note>
<note>Satellites:
Biomass Mapping: WorldView-1 (WV-1), Landsat 5 TM
Fire Scar Mapping: Landsat 7 ETM+, Landsat 5 TM, Landsat 1–3 MSS</
note>
  <place>Oak Ridge, Tennessee, USA</place>
</bibitem>
```

==== Metadata elements

Table 6 shows the elements, in order, to be included in references to cartographic information resources.

Metadata elements for cartographic information resources

Elements (in order)	Status	Relevant clause(s)/ subclauses
Name of creator(s) (of the cited resource)	Required	Clause 8.2, [cartographic-roles]
Standard identifiers of creators' public identities	Optional	Clause 8.2
Title of the item	Required	[cartographic-title], [form_of_title], [translation_of_title]
Subsidiary titles	Optional	[additional_ titles] to [no_title]
Map series designation	Required for maps only	[cartographic-series]
Subject area	Required for maps only	[cartographic-subject]
Scale	Required for maps, plans, etc., only	[cartographic-scale]
Edition and version	Required if the item is not the first edition	[edition_and_version]
Subsidiary creator	Optional	[subsidiary_creator]
Series title and number	Required if the item is likely to be identified as part of a series	[form_of_title], [series_title_number]

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Elements (in order)	Status	Relevant clause(s)/ subclauses
Place and publisher	Required	[place], [publisher]
Date of publication	Required	[date-publication]
Size	Required for maps, plans, etc., only	[element-size], [cartographic-size]
Projection	Optional	[cartographic-additional]
Prime meridian	Optional	[cartographic-additional]
Reference systems (grids and navigational lattices)	Optional	[cartographic-additional]
Spectral characteristics	Optional	[cartographic-spectral]
Terrain (relief) and colours	Optional	[cartographic-additional]
Rights metadata	Optional	[rights_metadata]
Date of update/revision	Required, if available, for online information resources	[web_specific]
Standard identifier *(ISBN, etc.)*	Required if available	[international_ standard_identifiers]
Distributor or online host	Required for electronic resources if available	[distributor_host]
Persistent identifier	Required if available	[persistent_identifiers]
Location and access (URI)	Required for online information resources with no persistent identifier or archived copy	[network_location]
Physical location	Required for print information resources if a limited number of copies are known to exist	[physical_location]
Date of citation	Required for dynamic online information resources	[date-citation]
Relationships	Required if available	[relations]
Other information may be added in whatever position is most appropriate	Optional	[additional-info]; [web_specific]

==== Data elements and guidance specific to type

===== Title

The form of title used for cartographic material should be one of the following, listed in order of preference (in preference to [form_of_title], [title-alt]):

1) an overprinted title;
2) a title in the title panel;
3) a title in embedded metadata;
4) a title within the grid or other border which encloses the detail of a map; and
5) a title elsewhere; including external metadata sources.

If there is no clear title in the cited cartographic resource (e.g., atlas or single-sheet map), in addition to the possible titles provided in [no_title], a title describing the area covered by the resource may be chosen.

For a map series, the scale and series designation should be supplied, if they are necessary to distinguish the series from others of the same area.

EXAMPLE 388

[Western Australia forestry series. 1:63,360].

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EXAMPLE 389

[Hong Kong. 1:1,000. Series HP1C].

===== Subject and area covered

For cartographic material, the special subject and area covered should be supplied if not given in the title.

EXAMPLE 390

National topographic map series. 1:100,000. [Queensland index map].

EXAMPLE 391

Gull's eye view [of Hugh Town, St Mary's, Isles of Scilly].

The supplied name of a geographical area should be the name of the area as conceived of by the cartographer, whether in their contemporary frame of reference or in a historical sense, rather than as a present-day equivalent.

EXAMPLE 392

Cartographic material on "Ancient Mesopotamia" is not be labeled as "Iraq".

EXAMPLE 393

Cartographic material on "Yugoslavia" is not be labeled as "Serbia, Croatia, Montenegro, Bosnia, Slovenia, North Macedonia".

===== Roles

For cartographic material, the creator's role may be indicated on the map by terms such as "by", "cartographer", "compiled", "corrected", "dedicated", "edited", "designed", "drawn", "copied", "made", "engraved", "revised", or "updated".

EXAMPLE 394

Wording on map: Surveyed by Isaac Taylor.
Originator cited: TAYLOR, Isaac [ISNI 0000 0000 8172 5695].

EXAMPLE 395

Wording on map: Lake District: tourist map. Ordnance Survey.
Originator cited: ORDNANCE SURVEY [ISNI 0000 0004 0599 9271].

EXAMPLE 396

Wording on map: Karttatiedot cop. 2016 Google
Originator cited: GOOGLE.

Attributions may be given in the creator element or in the additional information (see [additional-info]). The name of an individual who is known to be the major contributor to the creation of a map should be included, even if the name is not prominently displayed.

If both printer and publisher are shown on a map, only the publisher's name should be given.

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===== Series designation

The map series designation, if any, should be given in the form in which it appears in the cited information resource, preceded, if appropriate, by the term “series”.

EXAMPLE 397

A.D. Maps. A.M. no. 677/2.

EXAMPLE 398

M726.

EXAMPLE 399

Series 1106.

===== Scale

The scale should be given, if applicable, normally as a ratio (calculated if necessary), e.g., “1:50,000”, or, if given otherwise on the map, it may be cited as it appears. “Scale not shown” or “scale indeterminable” may be used if the scale is missing and it cannot be determined.

EXAMPLE 400

On the map: “one-inch-to-one-mile”.
Reference: “1:63,360” or “one-inch-to-one-mile”.

If the scale appears in graphic terms, e.g., a scale bar, it may be calculated as a ratio, e.g., “1:63,360” or given in the form on the map, e.g., “scale of miles, 10 [= 60 mm]”.

===== Size

The size of some cartographic resources including printed maps, charts and plans should be given as the height followed by the width, in millimetres, measured between the neat lines. Other dimensions, such as sheet size, may be given, if necessary.

EXAMPLE 401

250 mm × 350 mm, sheet 600 mm × 800 mm.

For three-dimensional items, height, width and depth should be given.

EXAMPLE 402

Model map: 450 mm × 350 mm × 20 mm.

For circular maps and globes, the diameter should be given.

EXAMPLE 403

Circular map: 500 mm diameter, on sheet 610 mm × 550 mm.

EXAMPLE 404

Globe: 70 mm diameter.

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===== Spectral characteristics

For remotely sensed cartographic images, the spectral characteristics of the sensor should be given, together with details of the satellite system, if not given elsewhere in the citation. Information about the amount of cloud cover should be given, if appropriate.

EXAMPLE 405

Bands 5, 6, 7, Landsat 2.

EXAMPLE 406

RBV, Landsat 3; 40% cloud cover.

EXAMPLE 407

Infra-red, Meteosat.

===== Additional information

The projection, prime meridian, orientation and reference systems such as grids and navigational lattices may be given if considered important. Sometimes it may be necessary to specify terrain (relief) and colours to distinguish similar cartographic resources from one another.

==== Separately issued cartographic resources

Separately issued cartographic resources may be referred to using the data elements described in this document.

EXAMPLE 408

CROWN LANDS AND SURVEY OFFICE [HK]. *Hong Kong*. [1:1,000]. Series HP1C. Hong Kong: Crown Lands and Survey Office, 1973. With contours and spot heights.

EXAMPLE 409

Etheldreda's Isle: a pictorial map of the Isle of Ely to commemorate the 1300th anniversary of the founding of Ely's conventual church. No scale. March (Cambs): T. A. Bevis, 1973. 400 mm × 490 mm. British Library Map Library **1640**(42).

EXAMPLE 410

Germania: *cum priuilegio*. [ca. 1: 3,000,000.] Antwerp: s.n., 1579. 360 mm x 480 mm. University of Berne, the Ryhiner Map Collection Ryh 4301 7. Available from: http://biblio.unibe.ch/web-apps/maps/zoomify.php?col=ryh&pic=Ryh_4301_7. [viewed 2017-06-10].

EXAMPLE 411

WAR OFFICE [UK]. *Vladivostock*. In: USSR in Asia Maritime Provinces, sheet VI-8. GSGS4219. 1:420,000. First ed. War Office (photolithographer and printer), 1941. Copied from a Russian Map.

EXAMPLE 412

[*Wildlife sanctuaries of Trinidad*.] [1:320,000.] Survey's litho printer (printer) [1967]. Publisher's number 139/67 T101.

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EXAMPLE 413

WYLD, James. *Map of the countries lying between Turkey and Birmah*. 1:8,000,000. London: James Wyld, 1839.

==== As a component part

If a cartographic resource has been issued as a component part within another information resource, it should be cited as part of that information resource. This also applies to the case where the cartographic resource is removed or reproduced from another information resource.

EXAMPLE 414

Relative magnitudes of planets [online]. In: MATTISON, H. and E. H. BURRITT. Atlas designed to illustrate Burritt's Geography of the heavens (...). New York: Sheldon, [1856?]. Available from: http://hdl.loc.gov/loc.gmd/g3180m.gct00292. Path: image 2/10.

EXAMPLE 415

National topographic map series. [Queensland index map]. 1:100,000. In: Australia. Division of National Mapping. Statement of activities, 1 July 1984 – 30 June 1985. Annex A.1. ISSN 0811-9600.

==== Electronic cartographic resources

If the cited cartographic resource is available in the Internet, its URI should be provided.

EXAMPLE 416

Google Maps map covering York, UK.

GOOGLE. *York* [UK]. Google Maps, 2019. Available from: https://goo.gl/maps/YTh1ggY4g64ziwS99. [viewed 2019-09-05].

EXAMPLE 417

Google Maps URI which includes GPS coordinates and scale.

GOOGLE. [*York, UK*]. Google Maps, 2019. Available from: https://www.google.com/maps/@53.9586419,-1.1156109,12z. [viewed 2019-09-05].

NOTE 23 The syntax of the URI in the Google examples differs from the generic URI syntax in order to accommodate specific requirements of cartographic information.

References of digital surrogates should contain the relevant metadata elements pertaining to the original printed version.

EXAMPLE 418

Pitäjänkartta 1:20000 : 4022 06, Viipuri. 58 x 62 cm. Maastokartta. Piirtänyt E. Björklund v. 1939. [Lahti]: [Maanmittauslaitos], [2001]. Dgital surrogate available at: http://vanhatpainetutkartat.maanmittauslaitos.fi/karjalankartat/, Pitäjänkartta_2000, 402206_Viipuri.

=== Audio-visual material

==== NEW

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=== Films, videos and broadcasts

— Source: ISO 690, Clause 5.5

If a single contributor is to be singled out as the creator of a resource, they are assigned the `bibitem/contributor/role@type` of "author". Otherwise, if the resource is treated as a collaborative effort, the various contributors should be listed with `bibitem/contributor/role@type` of "performer", with their contributions differentiated in the `bibitem/contributor/role`.

Programmes within a series have the series modelled as a `bibitem/series`. The title of the series is modelled as `bibitem/series/title`, and the title of the episode as `bibitem/title`. The transmitting organisation and channel are modelled as a contributor of type "distributor".

If an audiovisual resource is a contained item, the `bibitem/extent` gives its location within the host item; this is typically a timestamp for visual material, and a timestamp or a track for audio material.

EXAMPLE 419

The Death of Stalin. Directed by Armando Iannucci. 2017.

```
<bibitem type="film">
  <title>The Death of Stalin</title>
  <date type="published"><on>2017</on></date>
  <contributor>
    <role type="performer">Directed by</role>
    <person>
      <name>
        <surname>Iannucci</surname>
        <forename>Armando</forename>
      </name>
    </person>
  </contributor>
</bibitem>
```

EXAMPLE 420

Armando Iannucci. *The Death of Stalin*. 2017.

```
<bibitem type="film">
  <title>The Death of Stalin</title>
  <date type="published"><on>2017</on></date>
  <contributor>
    <role type="author">Directed by</role>
    <person>
      <name>
        <surname>Iannucci</surname>
        <forename>Armando</forename>
      </name>
    </person>
  </contributor>
</bibitem>
```

EXAMPLE 421

Columbo, Season 7, Episode 5. The Conspirators. Teleplay by Howard Berk. NBC. 1978-05-13.

```
<bibitem type="audiovisual">
  <title>The Conspirators</title>
```

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```
        <date type="transmitted"><on>1978-05-13</on></date>
        <contributor>
          <role type="performer">Teleplay by</role>
          <person>
            <name>
              <surname>Berk</surname>
              <forename>Howard</forename>
            </name>
          </person>
        </contributor>
        <contributor>
          <role type="distributor"/>
          <organization>
            <name>NBC</name>
          </organization>
        </contributor>
        <series>
          <title>Columbo</title>
          <number>Season 7</number>
          <partnumber>Episode 5</partnumber>
        </series>
      </bibitem>
```

==== General

Audio-visual materials include films, videos, radio and TV programmes and broadcasts. For audiobooks, see [audiobooks].

==== Metadata elements

Due to the diversity of audio-visual materials, it is impossible to provide a full list of metadata elements these citations may contain.

Table 7 shows the elements, in order, to be included in references to audio-visual material.

Metadata elements for audio-visual material

Elements (in order)	**Status**	**Relevant clause(s)/ subclauses**
Name of creator(s) (of the cited resource)	Required	Clause 8.2, [av-roles]
Standard identifiers of creators' public identities	Optional	Clause 8.2
Title of the item	Required	[form_of_title], [translation_of_title]
Content, Medium and/or Carrier	Required if relevant for the citation	[medium]
Subsidiary titles	Optional	[additional_titles] to [no_title]
Edition and version	Required	[edition_and_version]
Subsidiary creator	Optional	[subsidiary_creator]
Series title and number	Required if the item is likely to be identified as part (episode) of a series	[form_of_title], [series_title_number]
Place and publisher / distributor	Required if known	[place], [publisher]
Date of publication	Required if known	[av-date], [date-publication]
Rights metadata	Optional	[rights_metadata]
Date of restoration/revision	Required, if available	[web_specific]

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Elements (in order)	Status	Relevant clause(s)/ subclauses
Standard identifier *(ISAN, etc.)*	Required if available	[international_ standard_identifiers]
Distributor or online host	Required for electronic resources if available	[distributor_host]
Persistent identifier	Required if available	[av-persistent], [persistent_ identifiers]
Location and access (URI)	Required for online information resources with no persistent identifier or archived copy	[network_location]
Physical location	Required for archival resources when a limited number of copies are known to exist	[physical_location]
Playback requirements	Optional	[av-playback]
Relationships	Required if available	[relations]
Date of citation	Required for online information resources	[date-citation]
Other information may be added in whatever position is most appropriate	Optional	[additional-info]; [web_specific]

==== Data elements and guidance specific to type

===== Persistent identifiers

Actionable persistent identifier should be provided as HTTP URI if the cited information resource has a PID.

URI fragment may be used to specify and access a segment within an audio-visual resource such as a video. Such a segment may be for instance a conference presentation embedded in the broadcast covering the entire conference.

EXAMPLE 422

KÖNIG, Rainer. *Combining linear Support Vector Machines by constraining them to use the same set of features improves consistency of biomarker discovery for blood infections*. In: *Leipzig MMS Days*, 2017. [Start time 04:55:00, Duration 00:06:28:00]. Available from: https://doi.org/10.5446/30617#t=04:55.

EXAMPLE 423

HYSEN, Eric. *Let's build the road network of civic technology.* [online]. In: Open Knowledge Festival – Day 2. Available from: YouTube (distributor), https://www.youtube.com/watch?v=0UNRZEsLxKc#t=54m52s.

===== Roles

Many audio-visual materials are the co-operative output of many individuals, no one of whom has a dominant role as the creator. These resources should be cited with the title as the first element in the reference. If there is a principal creator, such as the director, the resource should be cited with his or her name as the first element.

If one individual is clearly responsible for the intellectual content of an item, he or she should be given as creator in the first element.

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EXAMPLE 424

HAWKING, Stephen. *Do black holes have no hair? 2016 Reith lecture*. BBC Radio. [2016-01-26].

Principal performers may be included as well.

EXAMPLE 425

Annihilation [film]. [Blu-Ray]. GARLAND, Alex (director). Natalie PORTMAN and Jennifer Jason LEIGH (performers). [London]: DNA Films, 2018.

===== Date of transmission

In addition to [date-publication], for audio-visual materials cited from a transmission rather than from the physical item, the date and time of transmission and the transmitting organization should be given, if no other unique identifier of the particular edition is available.

EXAMPLE 426

HAWKING, Stephen and Sue LAWLEY. *Desert island discs: Stephen Hawking.* [online]. [mp3]. BBC Radio 4, 1992-12-25. Available from: https://www.bbc.co.uk/programmes/p0093xb2. [viewed 2019-08-11].

EXAMPLE 427

HAWKING, Stephen and Sue LAWLEY. *Classic desert island discs: Stephen Hawking.* [online]. BBC Radio 4, [2018-04-15]. Available from: https://www.bbc.co.uk/programmes/p063yw6r. [viewed 2019-08-11].

Broadcast date and time should be omitted when citing dynamic sites.

EXAMPLE 428

The Archers. [online]. BBC Radio. [online]. Latest episodes available from: https://www.bbc.co.uk/programmes/b006qpgr [viewed 2019-05-12].

===== Medium, carrier and playback requirements

Sufficient information about physical medium and/or file formats of the cited audio-visual resource should be given if such information is needed for identification of suitable playback devices.

See [system_requirements] for a more detailed description of system requirements.

==== Films

For films, the primary date is the year of the initial release in the country of production.

EXAMPLE 429

Macbeth [film]. 1948. WELLES, Orson (director).

Medium and carrier of the version or edition cited, and its publication date should be included, if features of that version/edition are relevant (if, for instance, commentary only available on the 4K version of a movie is discussed).

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EXAMPLE 430

Inception [film]. 2010. NOLAN, Christopher (writer, director). [4K UHD + Blu-ray, 2015].

Publisher should be included, with the location if relevant and known. If the publisher has changed since the film was originally released and the current publisher is shown, the date should reflect the change.

EXAMPLE 431

Star Wars: Episode IV – A New Hope [film]. 1977. LUCAS, George (director). Twentieth Century Fox, 1977.

EXAMPLE 432

Cutter's Way [Cutter and Bone] [film]. PASSER, Ivan (director). Gürian Entertainments & United Artists, 1981.

Local distributor may be indicated in addition to the publisher.

EXAMPLE 433

The last command [silent film]. STERNBERG, Josef von (director). Paramount Pictures, 1928. London: distributed in the UK by Universal International Pictures (UK).

EXAMPLE 434

Macbeth [film]. 1948. WELLES, Orson (director). WELLES, Orson, Jeanette NOLAN, Dan O'HERLIHY [et. al] (actors). USA: Republic Pictures, 1948. Location of 35 mm viewing copy: National Film Archive, London.

EXAMPLE 435

Unknown soldier. [film]. 2017. [ISAN 0000-0005-007D-0000-Q-0000-0000-X]. LOUHIMIES, Aku (ohjaaja). [ISNI 0000 0000 7235 9611].

If a digitally restored version of the film is cited, the year of restoration should be provided alongside the year of original release. Restoration year is mandatory if the resource has been restored more than once or if the film has been modified (e.g. colorized) during restoration.

EXAMPLE 436

My fair lady [film]. [Blu-ray]. 1964 [restored 2015]. CUKOR, George (director).

Film includes film of musical performances. Such references should indicate the attributes of both films and musical performances.

EXAMPLE 437

MOZART, Wolfgang Amadeus. *The Magic Flute*. [DVD]. TAYMOR, Julie (director). Metropolitan Opera. LEVINE, James (conductor). Sony Classical, 2011.

EXAMPLE 438

METALLICA. *Orgullo, Pasión, y Gloria: Tres Noches en la Ciudad de México.* [DVD]. ISHAM, Wayne (director). Universal Records, 2009.

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==== Broadcasts

Broadcast is a continuous programme stream on certain channel or distribution networks, and it may or may not contain unique programmes with a title that could be referenced in addition to a time range reference of the broadcast segment in question.

Time range specification of a specific programme within broadcast, if included, may be encoded as the URI fragment part of the persistent identifier or URL in the reference. Start time and duration of the programme item may be provided as well.

EXAMPLE 439

HYSEN, Eric. *Let's build the road network of civic technology.* [online]. In: Open Knowledge Festival – Day 2. Available from: YouTube (distributor), https://www.youtube.com/watch?v=0UNRZEsLxKc#t=54m52s. [viewed 2019-07-14].

EXAMPLE 440

KÖNIG, Rainer. *Combining linear Support Vector Machines by constraining them to use the same set of features improves consistency of biomarker discovery for blood infections*. In: Leipzig MMS Days, 2017. [Start time 04:55:00, Duration 00:06:28:00]. Available from: https://doi.org/10.5446/30617#t=04:55. [viewed 2018-03-12].

EXAMPLE 441

Cantonese Radio Podcasts. [podcast] London: BBC News. Available from: https://www.bbc.co.uk/podcasts/cantoneseradio

==== Individual items

Individual items within a programme or broadcast should be cited as component parts, which may contain starting and ending time relative to the start of the programme or in case of a broadcast to absolute time. Duration may be specified after the starting time.

EXAMPLE 442

MONTY PYTHON. *The Parrot Sketch.* [online]. In: Monty Python's Flying Circus, Season 1, Episode 8. [Recorded 1969-11-25, broadcasted 1969-12-07.] Available from: Dailymotion (distributor), https://www.dailymotion.com/video/x2hwqnp. [viewed 2019-03-30].

EXAMPLE 443

THATCHER, Margaret. *Interview*. In: Six O'Clock News. TV, BBC 1, 29 Jan. 1986, 18:23 GMT.

EXAMPLE 444

Tribute to Elizabeth Taylor. In: Yle News, TV1. 2011-03-24T11:07:52:01+02:00 [Duration: 00:00:24:00].

EXAMPLE 445

About Time. In: Bell System Science Series. Burbank, (CA): Warner Bros, 1962. [broadcasted 1962-02-05.]

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The SMPTE timecode[12] (hour:minute:second:frame) may be used to specify individual frames of a film or video.

EXAMPLE 446

01:02:15:24 is an SMPTE timecode for one hour, two minutes, 15 seconds and 24 frames (starting at specified time).

==== Episode in series

For an individual episode within a series broadcasted in TV, the number and title of the season and episode should be given. They should be accompanied with the series title, the transmitting organization and channel, and the full date (i.e. year, month, day and, if necessary, the time of transmission) as expressed in the cited resource and/or in ISO 8601-1 format.

EXAMPLE 447

Yes. Prime Minister. Episode 1. The Ministerial Broadcast. BBC 2. 16 Jan. 1986. [1986-01-16].

EXAMPLE 448

News at Ten. ITV. 27 Jan. 2006. 22:00. [2006-01-27T22:00Z].

EXAMPLE 449

Dave Allen at large. BBC TV, 25 February 2006.

EXAMPLE 450

DIMBLEBY, David. *Any questions*. BBC Radio, 4 March 2006.

EXAMPLE 451

HENDERSON, David. *1985 Reith lectures*. BBC Radio, 3 and 4 Nov. – Dec. 1985.

When a series is released on a physical carrier, the publisher and the carrier type should be included.

EXAMPLE 452

MILLER, Bruce. *The Handmaid's tale. Season 1*. [DVD]. MGM Television, 2017.

EXAMPLE 453

MILLER, Bruce. *Offred*. In: The Handmaid's tale. Season 1. [DVD]. MGM Television, 2017.

EXAMPLE 454

Wrestling for equality. [podcast]. BBC News, World Service, 31 August 2019. [Duration: 00:23].

=== Art and graphic material

[12] https://en.wikipedia.org/wiki/SMPTE_timecode

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==== NEW

=== Graphic Works

— Source: ISO 690, Clause 5.6

The fuller description of a contributors role under `bibitem/contributor/role` allows for Latin role descriptions such as *pinxit* and *sculpsit*.

EXAMPLE 455

[Tent of Darius] C. Le Brun pinxit. S. Gribelin sculpsit. [painting]. 1702. At: Musée du Louvre, Inv. 2896.

```
<bibitem type="graphical work">
  <title>[Tent of Darius]</title>
  <date type="created"><on>1702</on></date>
  <contributor>
    <role type="author">pinxit</role>
    <person><name><completeName>C. Le Brun</completeName></name></
person>
  </contributor>
  <contributor>
    <role type="author">sculpsit</role>
    <person><name><completeName>S. Gribelin</completeName></name></
person>
  </contributor>
  <medium>
    <form>painting</form>
  </medium>
  <accessLocation>Musée du Louvre, Inv. 2896.</accessLocation>
</bibitem>
```

==== General

Graphic materials are documents in the form of pictures, photographs, drawings, watercolours, prints, and other forms of two-dimensional pictorial representations.

These guidelines apply in citing all works of art in addition to graphic material, such as sculptures.

==== Metadata elements

Table 8 shows the elements, in order, to be included in references to art and graphic material.

Metadata elements for art and graphic material

Elements (in order)	Status	Relevant clause(s)/ subclauses
Name of creator(s) (of the cited resource)	Required	Clause 8.2, [art-roles]
Standard identifiers of creators' public identities	Optional	Clause 8.2
Title of the item	Required	[art-title], [form_of_title], [translation_of_title]
Medium designation	Required if available	[medium]
Size	Required if available	[element-size], [art-size]
Subsidiary titles	Optional	[additional_ titles] to [no_title]

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Elements (in order)	Status	Relevant clause(s)/ subclauses
Edition and version	Required if the item is not the first edition	[edition_and_version]
Subsidiary creator	Optional	[subsidiary_creator]
Series title and number	Required if the item is likely to be identified as part of a series	[form_of_title], [series_title_number]
Physical location	Required for print information resources if a limited number of copies are known to exist	[art-location], [physical_location]
Place and publisher	Required	[place], [publisher]
Date of publication	Required	[date-publication]
Rights metadata	Optional	[rights_metadata]
Date of update/revision	Required, if available, for online information resources	[web_specific]
Catalogue and catalogue number	Optional	[art-catalog]
Standard identifier	Required if available	[international_ standard_identifiers]
Distributor or online host	Required for electronic resources if available	[distributor_host]
Persistent identifier	Required if available	[persistent_identifiers]
Location and access (URI)	Required for online information resources with no persistent identifier or archived copy	[network_location]
Relationships	Required if available	[relations]
Date of citation	Required for dynamic online information resources	[date-citation]
Other information may be added in whatever position is most appropriate	Optional	[additional-info]; [web_specific]

==== Data elements and guidance specific to type

===== Title

The form of title used for graphic material should be one of the following, listed in order of preference (in preference to [form_of_title], [title-alt]):

1) a title forming part of the original design;
2) a handwritten title on the cited information resource, or custodian's description;
3) a popular or traditional title, e.g., Mona Lisa;
4) a title in embedded metadata; and
5) a title elsewhere; including external metadata sources.

If there is no clear title, in addition to the possible titles provided in [no_title], the title can describe the object depicted (e.g., the person, building, location).

EXAMPLE 456

> STARKEY, Hannah. [*Judo fighters*] [photograph]. In: Moments in the modern world: photographic works by Hannah Starkey 1997–2000.

The subject matter and print process should also be supplied, if available.

EXAMPLE 457

> PELHAM, Henry, del. [*Quin Abbey, Co. Clare. General view*] [engraving].

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===== Roles

Several individuals may be concerned in the production of graphic material. If their names are recorded on the item, they should be included with an indication of their roles.

EXAMPLE 458

DANIELL, William (fecit). *Benj. West, R. A.* [lithograph, b&w]. George DANCE (delineavit). London: 1809.

In this example, “delineavit” indicates identity of the draughtsman, and “fecit” indicates identity of the creator.

EXAMPLE 459

Flora dispensing her favours on the earth [engraving]. R. A. COSWAY (pinxit), and T. WOOLNOTH (sculpsit).”

In this example, “pinxit” indicates identity of the painter, and “sculpsit” indicates identity of the sculptor.

Abbreviations of roles, such as for print addresses, are allowed. For instance:

— The person who printed the lithograph may be indicated by abbreviations such as “lith.”, “lith. impr.”, “litho.”, “lithog.”.
— The person who created the original art may be indicated by abbreviations such as “invt.” or “inv.” (for “invenit”).
— The person who commissioned the work may be indicated by abbreviations such as “f.f.” (for “fieri fecit”).

===== Location

If the location of a graphic work in a museum or repository is essential to its identification, physical location should be included.

EXAMPLE 460

GOSSE, Sylvia (1881–1968). *The Garden, Rowlandson House* [etching and aquatint, 1912]. At: British Museum, Department of Prints and Drawings, London. Register number 1915-27-41.

===== Size

The size of a graphic work may be specified as the height followed by the width, in millimetres, measured between the neat lines. Other dimensions, such as sheet size, may be given, if necessary.

EXAMPLE 461

DÜRER, Albrecht. *A hare* [watercolour, 1502]. 25 cm × 23 cm. At: Albertina, Vienna, Austria.

===== Catalogue and catalogue number

Collected graphic and art material are often listed in catalogues. The catalogue may be specified as additional information after the title, prefixed with the phrase “Catalogued in:” or its equivalent.

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Since there is a relation between the cited graphic work and the catalogue or catalogues in which the work is described, rules in [relations] apply.

EXAMPLE 462

Catalogued in: WHITE, Christopher and Karel G. BOON. *Rembrandt's Etchings*, Vol. 1, Amsterdam: Van Gendt & Co., 1969.

EXAMPLE 463

Catalogued in: FELDMAN, F. and J. SCHELLMANN. *Andy Warhol Prints: A Catalogue Raisonné 1962 – 1987*, 4th Ed. New York: Distributed Art Publishers, Inc., 2003.

The catalogue number, called the "catalogue raisonné" ("reasoned catalogue" in English), is used to identify a specific item within a catalogue. It should be given after the catalogue in order to facilitate location.

EXAMPLE 464

Catalogued in: WHITE, Christopher and Karel G. BOON. *Rembrandt's Etchings*, Vol. 1, Amsterdam: Van Gendt & Co., 1969. Listed catalogue raisonné no. B 348.

EXAMPLE 465

Catalogued in: FELDMAN, F. and SCHELLMANN, J. *Andy Warhol Prints: A Catalogue Raisonné 1962 – 1987,* 4th Ed. New York: Distributed Art Publishers, Inc., 2003. Listed and illustrated as catalogue raisonné no. II. 52.

==== Individual works

A graphic or artwork may be individually referenced using data elements described in this document.

EXAMPLE 466

WARHOL, Andy. *Consomme, from the Campbell's Soup I Portfolio*. In: Campbell's Soup, 1968. Catalogued in: FELDMAN, F. and SCHELLMANN. J. *Andy Warhol Prints: A Catalogue Raisonné 1962 – 1987*, 4th Ed. New York: Distributed Art Publishers, Inc., 2003. Listed and illustrated as catalogue raisonné no. II. 52.

EXAMPLE 467

DANIELL, William (fecit). *Benj. West, R. A.* [lithograph, b&w]. George DANCE (delineavit). London: 1809.

EXAMPLE 468

GOSSE, Sylvia (1881–1968). *The Garden, Rowlandson House* [etching and aquatint, 1912]. At: British Museum, Department of Prints and Drawings, London. Register number 1915-27-41.

EXAMPLE 469

PELHAM, Henry, del. [*Quin Abbey, Co. Clare. General view*] [engraving]. Sparrow (sculpsit), 1794.

Digital surrogate information can also be provided as online access locations.

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EXAMPLE 470

TOPICAL PRESS. [*Chamberlain returns from Munich*] [photograph]. London: BBC Hulton Picture Library, 1938, No. P36339. Digital surrogate available from: Getty Images, http://www.gettyimages.fi/photos/neville-chamberlain. [viewed 2017-02-21].

EXAMPLE 471

REMBRANDT, Harmensz. van Rijn. The artist's mother seated, in an oriental headdress: half-length [etching, 1631]. At: British Museum, Department of Prints and Drawings, London. Catalogued in: WHITE, Christopher and Karel G. BOON. *Rembrandt's Etchings*, Vol. 1, Amsterdam: Van Gendt & Co., 1969. Listed catalogue raisonné no. B 348. Digital surrogate available from: https://www.artsy.net/artwork/rembrandt-harmensz-van-rijn-the-artists-mother-seated-in-an-oriental-headdress-half-length. [viewed 2017-06-16].

EXAMPLE 472

CHAGALL, Marc. *Paris Through the Window*. 1913 [still image]. At: Solomon R. Guggenheim Museum, New York. New York: Artists Rights Society (ARS); Paris: ADAGP, 2005. Digital surrogate available from: Solomon R. Guggenheim Founding Collection, https://www.guggenheim.org/artwork/793 Digital surrogate available from: Wikiart, http://www.wikiart.org/en/marc-chagall/paris-through-the-window-1913 Archived copy available from: Internet Archive (distributor), {chagall_archive}. [viewed 2017-07-04].

==== As a component part

If a graphic work has been removed or reproduced from a known book or other information resource, it should be cited as part of that information resource.

EXAMPLE 473

Rembrandt's Etchings. Amsterdam: van Gendt & Co. and London: A. Zwemmer Ltd, 1969, vol. I, Text, p. 154.

EXAMPLE 474

SPY [pseud. of (Sir) Leslie WARD]. Convocation, caricature of the Very Revd Edward Bickersteth, Dean of Lichfield. In: JEHU, Junior [pseud. of Thomas Gibson BOWLES]. *Vanity Fair Album*. London: 1884, vol. 16, Men of the Day, no. 321.

EXAMPLE 475

DÜRER, Albrecht. A hare [watercolour, 1502]. In: SCHILLING, E. *Albrecht Dürer Drawings and Watercolours*. London: Zwemmer, 1949, frontispiece.

EXAMPLE 476

North by Northwest [film still]. HITCHCOCK, Alfred (director). MGM, 1959. Available from: H. W. Wilson Cinema Image Gallery.

EXAMPLE 477

COSWAY, R.A. (pinxit) and T. WOOLNOTH (sculpsit). *Flora dispensing her favours on the earth* [engraving]. In: THORNTON, Robert J. New illustration of the sexual system of Carolus von Linnaeus. London: 1799–1810, frontispiece. Use or reproduction copyright restrictions of image available from the Sterling Morton Library, The Morton Arboretum.

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If the component part and the host resource have the same creator, it is not necessary to repeat the name.

EXAMPLE 478

STARKEY, Hannah. [*Judo fighters*] [photograph]. In: Moments in the modern world: photographic works by Hannah Starkey 1997–2000. Irish Museum of Modern Art, 2000. ISBN 1-873654-90-1.

==== Temporary or destroyed work

It is possible to cite surrogates of installations and other works of art which were temporary (or have been destroyed) and no longer exist.

EXAMPLE 479

CREED, M. *Work 227: The lights going on and off* [installation, 2000]. At: Museum of Modern Art, New York, NY. Available from: https://www.moma.org/collection/works/101549.

EXAMPLE 480

KLIMT, G. *Philosophy* (University of Vienna Ceiling Paintings) [oil painting, 1897–1907] At: Great Hall, University of Vienna. Available from: FLEIDL, G. *Gustav Klimt 1862–1918 The World in Female Form*, p. 77, Cologne: Taschen, 1994.

=== Music material

==== NEW

=== Music

— Source: ISO 690, Clause 5.7
— Serialisation: `bibitem/contributor/role`

Librettists and composers are both contributors of role type “author”; the role of composer and librettist needs to be differentiated in the contributor role for proper rendering.

The type “music” covers both music scores and music recordings, as is done in ISO 690. The two are differentiated in `medium`; following the practice in ISO 690, `medium/content` “notated music” is used for music scores, while `medium/carrier` is used for recordings (audio disc = CD, online resource). While it is possible to cite music in the abstract, without referencing either a score or a recording (especially if the score is not published), this is not good practice, for the same reason that particular editions are required for citation of textual works.

EXAMPLE 481

ADAMS, John Coolidge. *Nixon in China*. Libretto by Alice GOODMAN. 2004 [1987]. Vocal score. New York: Boosey & Hawkes.

```
<bibitem type="music">
  <title>Nixon in China</title>
  <date type="created"><on>1987</on></date>
  <date type="published"><on>2004</on></date>
  <contributor>
    <role type="author">composer</role>
    <person><name><completeName>John Coolidge ADAMS</completeName></
name></person>
```

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```
  </contributor>
  <contributor>
    <role type="author">libretto by</role>
    <person><name><completeName>Alice GOODMAN</completeName></name></
person>
  </contributor>
  <contributor>
    <role type="publisher">
    <organization><name>Boosey &amp; Hawkes</name></organization>
  </contributor>
  <medium>
    <content>notated music</content>
    <genre>vocal score</genre>
  </medium>
  <place>New York</place>
</bibitem>
```

EXAMPLE 482

ADAMS, John Coolidge. *Nixon in China*. Libretto by Alice GOODMAN. 2009. Marin Alsop (Conductor). Colorado Symphony Orchestra. [Audio CD]. 3 CDs. Naxos.

```
<bibitem type="music">
  <title>Nixon in China</title>
  <date type="created"><on>1987</on></date>
  <date type="published"><on>2004</on></date>
  <contributor>
    <role type="author">composer</role>
    <person><name><completeName>John Coolidge ADAMS</completeName></
name></person>
  </contributor>
  <contributor>
    <role type="author">libretto by</role>
    <person><name><completeName>Alice GOODMAN</completeName></name></
person>
  </contributor>
  <contributor>
    <role type="performer">conductor</role>
    <person><name><completeName>Marin ALSOP</completeName></name></
person>
  </contributor>
  <contributor>
    <role type="performer"/>
    <organization><name>Colorado Symphony Orchestra</name></
organization>
  </contributor>
  <contributor>
    <role type="publisher">
    <organization><name>Naxos</name></organization>
  </contributor>
  <medium>
    <carrier>audio disc</carrier>
  </medium>
  <place>New York</place>
  <extent type="locality:CD">
    <referenceTo>3</referenceTo>
  </extent>
</bibitem>
```

==== General

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Citable music material includes printed resources (sheet music), recordings on hand-held devices and on-line resources.

==== Metadata elements

Table 9 shows the elements, in order, to be included in references to music material.

Metadata elements for music material

Elements (in order)	Status	Relevant clause(s)/ subclauses
Name of creator(s) (of the cited resource)	Required	[music-creator], Clause 8.2
Standard identifiers of creators' public identities	Optional	Clause 8.2
Title with opus number	Required if present	[music-title], [form_of_title], [translation_of_title]
Media type	Required if present	[medium]
Subsidiary titles	Optional	[additional_ titles] to [no_title]
Edition and version	Required if the item is not the first edition	[edition_and_version]
Subsidiary creator	Optional	[subsidiary_creator]
Series title and number	Required if the item is likely to be identified as part of a series	[form_of_title], [series_title_number]
Place and publisher	Required	[place], [publisher]
Date of publication	Required	[date-publication]
Rights metadata	Optional	[rights_metadata]
Date of update/revision	Required, if available, for online information resources	[web_specific]
Standard identifier *(ISRC, etc.)*	Required if available	[international_ standard_identifiers]
Distributor or online host	Required for electronic resources if available	[distributor_host]
Persistent identifier	Required if available	[persistent_identifiers]
Location and access (URI)	Required for online information resources with no persistent identifier or archived copy	[network_location]
Physical location	Required for print information resources if a limited number of copies are known to exist	[physical_location]
Relationships	Required if available	[relations]
Date of citation	Required for dynamic online information resources	[date-citation]
Other information may be added in whatever position is most appropriate	Optional	[additional-info]; [web_specific]

==== Data elements and guidance specific to type

===== Title

The title for classical musical works must include the opus number or catalogue number where available.

EXAMPLE 483

Violin concerto in D minor, Op. 47.

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EXAMPLE 484

Toccata and fugue in D minor, BWV 565.

===== Creator

In references to written music, the composer should normally be shown as the creator, and the librettist or lyricist as the (first) subsidiary creator, even if a librettist or lyricist is given equal prominence in the source.

EXAMPLE 485

PACINI, Giovanni. *II Corsaro*. Libretto by Giacomo FERRETTI after Lord Byron.

EXAMPLE 486

GERSHWIN, George. *Fascinating Rhythm.* Ira GERSHWIN (lyricist).

==== Performed and recorded music

In references to recorded music, the composer should be shown as the creator, and the librettist or lyricist, as in [music-creator], should appear as the first subsidiary creator, if applicable. The conductor, soloists and other artists or groups involved with the recording should be named as subsidiary creators. Creator and contributor information should enable unique identification of the information resource; this may require even including persons in other roles, such as cantors.

EXAMPLE 487

SIBELIUS, Jean. *Violin concerto in D minor, Op. 47.* Maxim VENGEROV (violin). [CD]. Chicago Symphony Orchestra. Daniel BARENBOIM (conductor). Teldec Classics, 1996.

EXAMPLE 488

EVANS, Bill. *Sleeve note to Kind of Blue*. [Sound disc]. Columbia, 1959. CBS (E) SBPG 62066. Reissued in 1997 as Columbia Legacy CD CK 64935.

==== Printed music

For printed music, a score that is musically identical with a full score, but reduced in size, may be described as a miniature score or pocket score if it does not exceed 200 mm in height, or as a study score if it exceeds 200 mm in height.

EXAMPLE 489

BACH, C. Ph. E. *Sonate G-moll für Violine und obligates Cembalo*. Herausgegeben von Anne Marlene GURGEL. Leipzig: Peters, 1981.

EXAMPLE 490

BRITTEN, Benjamin. *Eight folk song arrangements for high voice and harp*. Osian ELLIS (ed.). London: Faber Music, 1980.

EXAMPLE 491

HANDEL, Georg Friedrich. *Two trio sonatas for two violins and basso continuo* [Op. 5 no. 4, 5]. FLESCH, Siegfried (ed.). Kassel: Nagels Verlag; London: Bärenreiter, 1981.

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EXAMPLE 492

MENDELSSOHN BARTHOLDY, Felix. *Six Christmas pieces*, op. 72 [for piano]. FERGUSON, Howard (ed.). London: Associated Board of the Royal Schools of Music, 1983.

If a printed score has an identifier, it should be included. The identifier is usually an ISMN [International Standard Music Number], but a printed score may also have an ISBN in addition to or even instead of ISMN. If ISMN is available, it should be used instead of the ISBN.

EXAMPLE 493

MOZART, Wolfgang Amadeus. *Die Sinfonien I*. Kassel: Bärenreiter, 2005. ISMN M-006-20466-3.

EXAMPLE 494

MOZART, Wolfgang Amadeus. *The Magic Flute in Full Score.* [notated music]. Emanuel SCHIKANEDER (librettist). Study score, 15.5 × 21.5 cm. Mineola, NY: Dover, [s.a.]. ISBN 9780486466163.

Multiple creators of a musical score may be indicated, with their roles.

EXAMPLE 495

PACINI, Giovanni. *Il Corsaro*. Libretto by Giacomo FERRETTI after Lord BYRON. [facsimile edition of the printed piano-vocal score with an introduction by Philip GOSSETT]. New York, London: Garland Publishing, 1985.

Digital surrogates of music scores may be provided via specification of the online access location.

EXAMPLE 496

MELARTIN, Erkki. *Sinfonia nro 3, op. 40, F-duuri* [nuottijulkaisu]. [online]. Erkki Melartin –seura, [2017]. ISMN 979-0-55011-134-9. Saatavissa: http://erkkimelartin.fi/em/wp-content/uploads/2017/02/Sinfonia-3-score.pdf [viitattu 2019-07-03].

EXAMPLE 497

BOMTEMPO, João Domingos (1775–1842). [*Quinteto para piano e cordas*] [18XX] [online]. Biblioteca Nacional de Portugal, Biblioteca Nacional Digital, 2006-06-23, 10:32:53. Available from: http://purl.pt/792. [viewed 2010-06-19].

==== As a component part

If the cited resource is a part of a larger work, or one of the works published together in an aggregation, information about the musical work or recording should be included in the reference. For example, a track within an album. The creator name may be repeated if deemed necessary.

EXAMPLE 498

BACH, J. S. *Toccata and Fugue in D minor, BWV 565.* In: BACH, J. S. Organ works complete. [Sound disc]. George RITCHIE (organ). Richmond, VA: Raven, 2006.

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EXAMPLE 499

MOZART, W. A. *La ci darem la mano.* In: Don Giovanni, K, 527. [online]. Bryn Terfel, baritone, and Renée Fleming, soprano. Available from: YouTube (distributor), https://www.youtube.com/watch?v=xx1DLnPULUk. [viewed 2018-04-12].

EXAMPLE 500

GORDON, Dexter [ISNI 0000 0001 1948 6061]. Settin' the pace. In: *Long Tall Dexter, the Savoy sessions.* [Sound disc]. New York: Savoy, 1976. SIL2211, side B, track 5. Arista Records Inc., New York, NY (distributor). Originally released on Savoy MG 9003, 1947.

EXAMPLE 501

BOWIE, David. TVC 15. In: *Station to station.* [Sound disc]. New York: RCA Records, 1976.

EXAMPLE 502

M-FLO. Prism. In: *Prism*. [CD, Maxi-Single]. Track 1. RZCD-45022. Tokyo: Rhythm Zone, 2001-05-09.

In sheet music, if reference to a particular bar is required, the bar count before or after rehearsal marks should be used. Bar numbers should not be cited unless they are printed on the score.

=== Patents

==== NEW

=== Patents

— Source: ISO 690, Clause 5.8

Patents are encoded similarly to contributions within a serial (ISO 690, Clause 5.2), with the series designation for the patent preceded by the country name or code. The date of application is encoded as a date of type "issued".

EXAMPLE 503

Green, Martin Andrew. *Artificial amorphous semiconductors and applications to solar cells*. Australia, [Patent] application number 2005238988. Appl: 2005-04-29.

```
<bibitem type="patent">
  <title>Artificial amorphous semiconductors and applications to
solar cells</title>
  <date type="issued"><on>2005-04-29</on></date>
  <contributor>
    <role type="author"/>
    <person>
      <surname>Green</surname>
      <forename>Martin</forename>
      <forename>Andrew</forename>
    </person>
  </contributor>
  <series>
    <title>Australia, [Patent] application number</title>
    <number>2005238988</number>
  </series>
```

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```
        </bibitem>
```

==== General

There are two kinds of patent publications: patent applications and issued patents. In some countries only patent applications are published.

==== Metadata elements

Table 10 shows the elements, in order, to be included in references to patents.

Metadata elements for patents

Elements (in order)	Status	Relevant clause(s)/ subclauses
Patent applicant(s)	Required	Clause 8.2
Patent application country	Required	[patent-parent]
Standard identifiers of creators' public identities	Optional	Clause 8.2
Title of the item	Required	[form_of_title], [translation_of_title]
Subsidiary creator	Optional, if inventor is not applicant	[patent-inventors], [subsidiary_creator]
Date of application	Required if present	[patent-additional], [date]
Date of issuance	Required if present	[patent-additional], [date]
Patent number	Required if present	[patent-number]
Location and access (URI)	Required for online information resources with no persistent identifier or archived copy	[network_location]
Physical location	Required for print information resources if a limited number of copies are known to exist	[physical_location]
Relationships	Required if available	[relations]
Other information may be added in whatever position is most appropriate	Optional	[additional-info]; [web_specific]

The name of the proprietor or applicant creator (see [creator_selection]) should precede the title of the patent document. The country name or code (see [organization_parent]) and the official designation of the series within which the patent document is numbered (host document) should follow. The patent serial number should suffice as numeration. The patent number should be presented as in the original patent application / publication.

NOTE 24 The order of elements in a reference to a patent is, with the exception of the date, the same as for a reference to a component part within a serial (see [metadata-serial]).

==== Data elements and guidance specific to type

===== Type

If it is not already clear in the reference, the fact that an item is a patent should be stated.

===== Parent body

For patents, the ISO 3166-1 country code or the World Intellectual Property Organization (WIPO) ST3 code Clause 8.2.1.1, Example 1 may be used to replace the name of the country of origin or originating office.

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EXAMPLE 504

GB [for United Kingdom].

===== Patent inventors

Inventors of the patent may be shown in the reference as subsidiary creators with the role “inventor”. This is unnecessary if the patent application was filed by the same individual.

EXAMPLE 505

Reginald John ENGLAND (inventor).

EXAMPLE 506

Mihal LAZARIDIS and David Paul YACH (inventors).

===== Additional information

Additional information may be given between the title and the official designation, such as:

— any classification symbols, and
— the dates of application and/or issuance.

EXAMPLE 507

PHILIP MORRIS INC. *Optical perforating apparatus and system*. European patent application 0021165 A1. 1981-01-07.

EXAMPLE 508

CARL ZEISS JENA, VEB. *Anordnung zur lichtelektrischen Erfassung der Mitte eines Lichtfeldes*. Switzerland, Patentschrift 608626. 1979-01-15.

===== Patent number

Relevant patent numbers should be provided in the reference, such as the patent application number, and the patent issuance number.

EXAMPLE 509

GB Patent Specification 1060631.

EXAMPLE 510

U.S.A. patent application US201615059466 20160303.

==== Patent applications

The date of patent application submission may be provided preceded by “Application date:” or its abbreviation “Appl:”.

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EXAMPLE 511

WINGET LTD. *Detachable bulldozer attachment for dumper vehicles*. Reginald John ENGLAND (inventor). 8 March 1967. Appl: 10 June 1963. Int.CI: E02F 3/76. GB CI: E1F 12. GB Patent Specification 1060631.

EXAMPLE 512

BLACKBERRY LTD (CA). *Method and handheld electronic device having a graphical user interface which arranges icons dynamically*. Inventors: Mihal LAZARIDIS and David Paul YACH. U.S.A. patent application US201615059466 20160303. Appl. 2016-06-30. US Patent Office. Available from: https://worldwide.espacenet.com/. [viewed 2017-05-12].

==== Issued patents

The date of patent issuance may be provided preceded by “Issuance date:” or its abbreviation “Iss:”.

EXAMPLE 513

CHRISTENSEN, G. K. *Toy building set*. Appl: 1968-11-18. Iss: 1971-08-10. US Patent 3,597,875.

=== Reports in series and similar information resources

==== General

Reports and similar information resources issued in series by research bodies, standards bodies and similar organizations are often identified by the series title and number. In references to such resources, the series title and number are essential elements.

==== Metadata elements

Table 11 shows the elements, in order, to be included in references to reports.

Metadata elements for reports

Elements (in order)	**Status**	**Relevant clause(s)/ subclauses**
Name of creator(s)	Required	Clause 8.2
Standard identifiers of creators’ public identities	Optional	Clause 8.2
Title of component part	Required	[form_of_title], [translation_of_title], [series_title_number], [component_parts]
Additional information for component part	Optional	[additional-info]
In:	Optional	[reports-series-title], [component_parts]
Title of the host serial	Required	[form_of_title], [translation_of_title], [series_title_number]
Medium designation	Required if the item is not in print	[medium], [web_specific]
Subsidiary titles	Optional	[additional_titles] to [no_title], [component_parts]
Edition and version	Required if edition exists	[reports-edition], [edition_and_version]
Place and publisher	Required	[place], [publisher]
Date of publication	Required	[date-publication]

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Elements (in order)	Status	Relevant clause(s)/ subclauses
Rights metadata	Optional	[rights_metadata]
Numeration (of volume, etc. , containing the component part)	Required	[numeration]
Page number range (of the component part)	Required	[numeration_part_cited]
Standard identifier	Required if available	[international_ standard_identifiers]
Distributor or online host	Required for electronic resources if available	[distributor_host]
Persistent identifier	Required if available	[persistent_identifiers]
Network location and access	Required for online information resources with no persistent identifier or archive copy	[network_location]
Physical location	Required for print information resources if a limited number of copies are known to exist	[physical_location]
Relationships	Required if available	[relations]
Date of citation	Required for dynamic online information resources	[date-citation]
Other information may be added in whatever position is most appropriate	Optional	[additional-info]; [web_specific]

==== Data elements and guidance specific to type

===== Series title

Series title may be abbreviated in a generally recognized form, e.g., “RFC” for the “Internet Engineering Task Force’s Request for Comment series”. Additional information may be provided as appropriate; for instance, there are several categories of RFC’s, and citations may specify the category.

===== Edition

If a specific edition and/or part of the information resource is cited, the edition and/or part should be indicated as in the original resource (with e.g., the version number or year).

If the edition is not given, the citation refers to the latest edition of the information resource.

==== Standards

===== General

The name of the standardisation organization should be provided as specified in [serial_title_qualifier].

EXAMPLE 514

> INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO). *ISO 690:2010 Information and documentation – Guidelines for bibliographic references and citations to information resources.*

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EXAMPLE 515

INTERNATIONAL TELECOMMUNICATIONS UNION (ITU). *Recommendation ITU-T E.119 – Requirements for safety confirmation and broadcast message service for disaster relief.*

EXAMPLE 516

INTERNET ENGINEERING TASK FORCE (IETF). *RFC 3979: Intellectual Property Rights in IETF Technology* [online]. Best Current Practice. S. BRADNER (ed.). 2005. Available from: http://www.ietf.org/rfc/rfc3979.txt. [viewed 2012-06-18].

EXAMPLE 517

CALCONNECT. *CC 18012:2019 Date and time — General recurrence representation* [online]. 2018. Available from: CalConnect Document Registry, https://standards.calconnect.org/csd/cc-18012.html. [viewed 2019-09-06].

EXAMPLE 518

NATIONAL INFORMATION STANDARDS ORGANIZATION. ANSI/NISO Z39.53-2001, *Codes for the representation of languages for information interchange*. [online]. Bethesda, Maryland: NISO Press, 2001. National Information Standards series. ISSN 1041-5653. Available from: http://groups.niso.org/apps/group_public/document.php?document_id=6540. [viewed 2018-05-11].

Standards may be cited in an undated reference, by omitting the edition in the citation. An undated reference covers the latest edition with published amendments and corrigenda that apply. However, if there has been a major change with the latest edition of the standard, such as if the standard is split into two or more parts, the citation no longer covers that edition.

EXAMPLE 519

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO). *ISO 8601-1 Date and time – Representations for information interchange – Part 1: Basic rules.*

A dated reference of a standard specifies a particular edition. Such reference only covers the stated edition; neither future modifications of that edition (corrigenda and amendments) nor future editions of the standard will be included.

EXAMPLE 520

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO). *ISO 14001:2004 Environmental management systems — Requirements with guidance for use.*

In a dated reference, all published corrigenda and amendments may be included by adding a phrase equivalent to “(inclusive)” after the edition, in the language of citation.

EXAMPLE 521

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO). *ISO 14001:2004 (inclusive) Environmental management systems — Requirements with guidance for use.*

NOTE 25 While unlikely, it is possible that corrigenda or amendment changes precisely the content that has been cited, which can lead to confusion and misunderstanding.

If a standard has more than one active identifier from the standardisation organization, both identifiers should be shown

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===== Jointly published standards

If the standard is a joint publication by two or more standards bodies, one of them may be selected as the primary publisher.

EXAMPLE 522

> INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO). ISO/IEC TS 31035-2:2014. *Information technology – Digital publishing – EPUB3 – Part 2: Publications*. Available from: https://www.iso.org/standard/63567.html. [paywall].

A joint publication may be assigned different publication identifiers by different standardisation organizations. In this case, these identifiers should be displayed for clarity, separated by a "|" symbol.

EXAMPLE 523

> INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO). *ISO/IEC 13818-1:2007 | Recommendation ITU-T H.222.0 (2006), Information technology — Generic coding of moving pictures and associated audio information: Systems*.

===== Dual-published standards

If the same standard has been published by two or more standards bodies, the standard used should be cited, except if it has access limitations and the other standard does not. In that case, both versions may be listed.

EXAMPLE 524

> INTERNATIONAL DIGITAL PUBLISHING FORUM. *EPUB Publications 3.0*. Recommended specification 11 October 2011. [online]. Available from: http://www.idpf.org/epub/30/spec/epub30-publications-20111011.html. [viewed 2019-04-14].

EXAMPLE 525

> INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO). ISO/IEC TS 31035-2:2014. *Information technology – Digital publishing – EPUB3 – Part 2: Publications*. Available from: https://www.iso.org/standard/63567.html. [paywall]. Also published as: INTERNATIONAL DIGITAL PUBLISHING FORUM. EPUB Publications 3.0. Recommended specification 11 October 2011. Available from: http://www.idpf.org/epub/30/spec/epub30-publications-20111011.html. [viewed 2019-04-14].

NOTE 26 The standard in Example 524 has the same content as the standard in Example 525.

===== Draft standards

Citation guidelines published by the standards body shall be followed. For instance, according to the ISO guidelines on citing standards and their draft editions (see [editions]), citing International Standards, Final Draft International Standards (ISO/FDIS) and Draft International Standards (ISO/DIS) is allowed, but earlier versions shall not be cited.

An ISO/DIS or even an ISO/FDIS specification may still change significantly before it is published as an International Standard. Therefore it is recommended to only refer to final published ISO deliverables, such as International Standards, Technical Specifications and Technical Reports.

It is acceptable to cite ISO and IEC deliverables under preparation, according to ISO/IEC Directives Part 2, once they have reached the enquiry or approval stages of the International

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Harmonized Stage Codes. DIS (Draft International Standard) stage. WDs (Working Drafts) and CDs (Committee Drafts) shall not be cited.

Once an international standard has been published, its DIS and FDIS versions published during the preparation of the standard shall no longer be cited.

EXAMPLE 526

> INTERNATIONAL ORGANIZATION FOR STANDARDIZATION. *ISO/DIS 690, Information and documentation — Guidelines for bibliographic references and citations to information resources.*

ITU draft Recommendations may be cited as “Draft new Recommendation” with its provisional name.

EXAMPLE 527

> INTERNATIONAL TELECOMMUNICATIONS UNION. *Draft new Recommendation ITU-R BT.[COLOURDIFF] – Objective metric for the assessment of the potential visibility of colour differences in television.*

IETF (Internet Engineering Task Force) Internet-Drafts (working documents) may be cited as “work in progress”. The edition of the draft shall be included after the title as additional information. If the draft is an individual contribution, the author or authors shall be the primary creators.

EXAMPLE 528

> KUNZE, J. and E. BERMES. *The ARK Identifier Scheme (draft-kunze-ark-22)*. Internet-Draft [work in progress]. Internet Engineering Task Force, June 22, 2019.

NOTE 27 Edition number of an Internet-Draft does not tell anything about the maturity level of the draft.

If a national or international standards body does not have published guidelines on how to cite their draft specifications, maturity level of each draft has to be estimated separately, on the basis of e.g. voting results and the number and nature of comments. If there is a possibility that the standard will not be approved, its draft versions should only be cited if necessary.

===== Adopted standards

National standardization bodies publish adoptions or translations of International Standards as national standards. These specifications can differ slightly from the original document.

If an adopted or translated International Standard has been referenced, the national standard shall be cited instead of the original International Standard.

EXAMPLE 529

> STANDARDISOIMISLIITTO (SFS). SFS-ISO 2108:2018 *Tieto ja dokumentointi. Kirjan kansainvälinen standarditunnus (ISBN).* Helsinki: SFS, 2018.

===== Multi-part standards and standard series

Some standards are published in multiple parts, forming a standard series. Each of these parts are potentially published at different times. A citation to the standard series itself is considered to include all amendments and corrigenda of all cited parts.

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It is possible to cite multiple parts of a standard series using an explicit reference. These parts may be indicated in the standard series' document identifier, and all part titles should be omitted from the citation.

EXAMPLE 530

> INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO). *ISO 8601-{1,2} Date and time – Representations for information interchange.*

In cases where part numbers are not contiguous, or where a citation wishes to cite multiple parts but not all parts of a standard series, the parts cited may be explicitly described in the document identifier.

EXAMPLE 531

> INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO). *ISO 22745-{1–2,13–14} Industrial automation systems and integration – Open technical dictionaries and their application to master data.*

It is possible to make a blanket reference which covers all parts of a standard series. Such reference should be indicated by a phrase equivalent to "(all parts)", in the language of citation, placed after the standard series' document identifier, while omitting all part numbers and titles.

EXAMPLE 532

> INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO). *ISO 8601 (all parts) Date and time – Representations for information interchange.*

EXAMPLE 533

> STANDARDISOIMISLIITTO (SFS). *SFS-EN ISO 7263 (kaikki osat) Corrugating medium. Determination of the flat crush resistance after laboratory fluting*. Helsinki: SFS, 2018.

Some multi-part standards do not have consistent document identifiers. For instance, ISO 19157:2013 and ISO 19157-2:2016 both belong to the same standards series, but the former does not have a part number of 1, as it was originally intended to be a standalone standard until part 2 was developed.

When the document identifiers differ within the same standard series, the standards should be cited explicitly to maximize clarity. The "(all parts)" syntax should not be used to refer to the standard series.

EXAMPLE 534

> INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO). *ISO 19157:2013 Geographic information — Data quality.*
>
> INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO). *ISO/TS 19157-2:2016 Geographic information — Data quality — Part 2: XML schema implementation.*

An undated reference with a standard series that contain different identifiers only covers the last edition which was not yet published in two parts.

EXAMPLE 535

> INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO). *ISO 19157 Geographic information — Data quality.*

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Some standardization organizations organize their standards documents in series and sub-series. References to them can be made by utilizing the standard series (or sub-series) identifier.

EXAMPLE 536

INTERNATIONAL TELECOMMUNICATIONS UNION (ITU). *Recommendation ITU-T M.3016.x-series (2005), Security for the management plane*.

EXAMPLE 537

INTERNATIONAL TELECOMMUNICATIONS UNION (ITU). *Recommendations ITU-T Q.4xx-series (1988), Specifications of Signalling System R2*.

=== Archival materials

==== NEW

=== Archival materials

— Source: ISO 690, Clause 5.10

The fonds or collection of an archival item is modelled as a series. The box and folder number is encoded as an access location. The reference code is encoded as an identifier. The archive is encoded as a contributor of type “distributor” (since the archive makes the resource available, even if to a restricted public).

EXAMPLE 538

HICKS, H. D. *Correspondence from Henry Davies Hicks to the Annapolis County electorate*. [1956-10-24]. MS-2-511, Box 15, Folder 9. Henry Davies Hicks fonds. At: Dalhousie University Archives, Halifax, Nova Scotia, Canada.

```
<bibitem type="archival">
  <title>Correspondence from Henry Davies Hicks to the Annapolis
County electorate</title>
  <docidentifier type="reference code">MS-2-511</docidentifier>
  <date type="created">1956-10-24</date>
  <contributor>
    <role type="author"/>
    <person>
      <surname>Hicks</surname>
      <initials>H. D.</initials>
    </person>
  </contributor>
  <contributor>
    <role type="distributor">archive</role>
    <organization>
      <name>Dalhousie University Archives</name>
      <address>
        <city>Halifax</city>
        <state>Nova Scotia</state>
        <country>Canada</country>
      </address>
    </organization>
  </contributor>
  <series>
    <title>Henry Davies Hicks fonds</title>
  </series>
  <accessLocation>Box 15, Folder 9</accessLocation>
```

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```
</bibitem>
```

==== General

Archival materials may be individual documents or collections of documents. They may be printed or born digital resources, and there are also digital surrogates of other types of material, such as manuscripts or art.

An archival information resource may be a publication; e.g., a book, article or graphical work, and if so, it is referenced accordingly. Normally this is not the case and archival resources usually require additional information (such as fonds/collection or geographic location).

Archival materials include all kinds of governmental publications but also private documents such as letters, diaries or other textual documents; photographs, and various (other) ephemeral resources, or digital surrogates of these resources.
NOTE 28 This document does not cover citing ephemeral resources outside the archival context.

==== Metadata elements

Table 12 shows the elements, in order, to be included in references to archival information sources.

Metadata elements for archival sources

Elements (in order)	**Status**	**Relevant clause(s)/ subclauses**
Name of creator(s)	Required	Clause 8.2, [archival-owner]
Standard identifiers of creators' public identities	Optional	Clause 8.2
Title of the item	Required	[archival-title], [form_of_title]
Medium designation	Required	[medium], [web_specific]
Name of the fonds / collection	Required, if applicable	[archival_materials]
Name and location of the host archive	Required, if applicable	[archival_materials]
Date of publication	Required, if applicable	[season_month_day_time]
Distributor or online host	Required for electronic resources if available	[distributor_host]
Persistent identifier	Required if available	[persistent_identifiers]
Network location and access	Required for electronic archive sources	[network_location]
Relationships	Required if available	[relations]
Other information may be added in whatever position is most appropriate	Optional	[additional-info], [web_specific]

==== Data elements and guidance specific to type

===== Title

Titles of archival materials are sometimes vague (e.g., "Correspondence") and therefore additional elements should be included in the citation whenever necessary.

===== Creator

Personal and / or organizational authors should be included when possible.

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EXAMPLE 539

SUBCOMMITTEE ON MENTAL HYGIENE PERSONNEL IN SCHOOL PROGRAMS. *Meeting of Subcommittee on Mental Hygiene Personnel in School Programs. (1949, November 5–6).*

If the host organization does not own the cited information resource, the owner should be mentioned (if known and if the information is not confidential).

==== Individual documents

If a hand-held document is cited, the location information has to be sufficiently precise.

EXAMPLE 540

SUBCOMMITTEE ON MENTAL HYGIENE PERSONNEL IN SCHOOL PROGRAMS. *Meeting of Subcommittee on Mental Hygiene Personnel in School Programs.* (1949, November 5–6). In: David Shakow Papers (M1360). At: Archives of the History of American Psychology, University of Akron, Akron, OH.

EXAMPLE 541

HICKS, H. D. *Correspondence from Henry Davies Hicks to the Annapolis County electorate*. [1956-10-24]. In: Henry Davies Hicks fonds. MS-2-511, Box 15, Folder 9. At: Dalhousie University Archives, Halifax, Nova Scotia, Canada.

For digital information resources, URI may replace the physical location information.

EXAMPLE 542

TALBOT, E. 1570?. *Letter from Henry Cavendish.* In: Bess of Hardwick's Letters. Available from: https://www.bessofhardwick.org/letter.jsp?letter=9 [Normalized version]

If the cited digital document is a surrogate, the location of the original document may also be given.

EXAMPLE 543

ORTEIG, R. *Telegram, 1932 May 23, Paris, to Amelia Earhart, London.* (1932-05-23). In: The George Palmer Putnam Collection of Amelia Earhart Papers. At: Purdue University Libraries, Archives and Special Collections, Purdue University, West Lafayette, IN. Purdue ID: b2f30i12. ark:/34231/c6hh6h7x. Digital surrogate available from: http://earchives.lib.purdue.edu/cdm/singleitem/collection/earhart/id/3422/. [viewed 2019-03].

References to born-digital documents may be made using data elements specified in this document, including digital identification mechanisms.

==== Collections

Collection level citations should specify the creator and the title of the collection and the location.

EXAMPLE 544

SELL, John M. *John M. Sell Civil War Collection.* At: Special Collections and Archives, Oviatt Library, California State University, Northridge, Los Angeles, CA.

If the cited collection is part of a larger collection, both collections should be specified.

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EXAMPLE 545

ALLPORT, G. W. *Correspondence*. (1930–1967). In: Gordon W. Allport Papers (HUG 4118.10). At: Harvard University Archives, Cambridge, MA.

=== Research datasets

==== NEW

=== Datasets

— Source: ISO 690, Clause 5.11

The organisation publishing or producing the dataset is modelled as a publisher; the organisation hosting the dataset in a repository is modelled as a distributor. Data compilers, editors, investigators, and data managers are all modelled as editors. Timestamps are modelled as extents; queries wherever possible should be preented as URIs. Where that is not possible, the description of the necessary query to access the required data subset should be presented as an `accessLocation`.

EXAMPLE 546

MILBERGER, S. (2002). *Evaluation of violence against women with physical disabilities in Michigan, 2000–2001* (ICPSR version) [dataset] [data in several file formats and codebook/ questionnaire in PDF]. Detroit: Wayne State University [producer]. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor

```
<bibitem type="dataset">
  <title>Evaluation of violence against women with physical
disabilities in Michigan, 2000-2001</title>
  <date type="created">2002</date>
  <contributor>
    <role type="editor"/>
    <person>
      <name>
        <surname>Milberger</surname>
        <initials>S.</initials>
      </name>
    </person>
  </contributor>
  <contributor>
    <role type="publisher">producer</role>
    <organization>
      <name>Wayne State University</name>
      <address>
        <city>Detroit</city>
      </address>
    </organization>
  </contributor>
  <contributor>
    <role type="distributor">repository</role>
    <organization>
      <name>Inter-university Consortium for Political and Social
Research</name>
      <address>
        <city>Ann Arbor</city>
        <state>MI</state>
      </address>
    </organization>
```

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```
  </contributor>
  <version>
    <draft>ICPSR version</draft>
  </version>
  <note>data in several file formats and codebook/questionnaire in
PDF</note>
</bibitem>
```

EXAMPLE 547

LEUPRECHT [et al.]. tas_CNRM-CERFACS-CNRM-CM5_RCP4.5_r1i1p1_CLMcom-CCLM4-8-17, [dataset]. Version 2. [Subset used: January to June 2014]. Vienna, Austria. CCCA Data Centre [distributor], 2016. Available from: https://hdl.handle.net/20.500.11756/93887ecf. [accessed 2017-06-28].

```
<bibitem type="dataset">
  <title>tas_CNRM-CERFACS-CNRM-CM5_RCP4.5_r1i1p1_CLMcom-CCLM4-8-17</
title>
  <docidentifier type="handle">https://hdl.handle.net/20.500.11756/
93887ecf</docidentifier>
  <date type="created">2016</date>
  <date type="accessed">2017-06-28</date>
  <contributor>
    <role type="editor"/>
    <person>
      <name>
        <surname>Leuprecht</surname>
      </name>
    </person>
  </contributor>
  <contributor>
    <role type="editor"/>
    <person>
      <name>
        <completename>et al.</completename>
      </name>
    </person>
  </contributor>
    <contributor>
    <role type="distributor"/>
    <organization>
      <name>CCCA Data Centre</name>
    </organization>
  </contributor>
  <version><draft>Version 2</draft></version>
  <place>Vienna, Austria</place>
  <extent type="time">
    <referenceFrom>January 2014</referenceFrom>
    <referenceTo>June 2014</referenceTo>
  </extent>
</bibitem>
```

==== General

Research datasets are usually electronic information resources, but they may be hybrid or even traditional (printed, hand-held). Whatever the form, traditionally datasets, like computer programs, have not been cited in publications. However, they should be treated in the same way as conventional publications, in order to give due credit to creators of these materials.

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This document provides guidelines only for citing electronic research datasets; more information about citing other kind of datasets are available from other sources.

Since datasets are very diverse, no guidelines are provided on how to cite particular categories of data, with one exception (see [unpublished] on citing research interviews).

In addition to the actual data (possibly in different versions and in multiple file formats) datasets often contain related items, such as codebooks and (in e.g., social sciences) questionnaires used for data collection. Programs and documentation for data analysis may also be available. These related items are often linked to a landing page to which the PID resolves. All these items may be cited independently.
NOTE 29 Other dataset citation guidelines include Digital Curation Centre's guide "How to Cite Datasets and Link to Publications" Clause 8.2.1.1, Example 1; and Data citation principles published by FORCE11[13], as well as DRYAD[14] and Dataverse.[15]

==== Metadata elements

Table 13 shows the elements, in order, to be included in references to research datasets.

Metadata elements for research datasets

Elements (in order)	**Status**	**Relevant clause(s)/ subclauses**
Name of creator(s)	Required when referencing a specific content.	Clause 8.2, [datasets-roles]
Standard identifiers of creators' public identities	Optional	Clause 8.2
Title of the item	Required	[form_of_title]
Edition and version	Optional	[datasets-edition], [edition_and_version]
Medium designation	Required	[medium]; [web_specific]
Name of the host archive	Required, if applicable	[form_of_title]
Date of publication	Required	[season_month_ day_time]
Copyright	Optional	[rights_metadata]
License	Optional	[datasets-license], [rights_metadata]
Data source	Optional	[datasets-source]
Distributor or online host	Required if available	[distributor_host]
Persistent identifier	Required	[datasets-persistent], [persistent_identifiers]
Usage instructions	Optional	[datasets-instructions]
Relationships	Required if available	[relations]
Data used	Required if dataset was postprocessed	[datasets-edition] Edition and version
Provenance	Optional	[datasets-provenance]
Location and access (URI)	Optional (since the persistent identifier is required)	[network_location]
File size	Required if available	[element-filesize], [datasets-size]

[13] https://www.force11.org/group/joint-declaration-data-citation-principles-final

[14] http://datadryad.org/

[15] http://dataverse.org/

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Elements (in order)	Status	Relevant clause(s)/ subclauses
Other information may be added in whatever position is most appropriate	Optional	[additional-info]; [web_specific]

==== Data elements and guidance specific to type

===== License

The licenses of both the data itself and related items such programs should be included in the reference if these resources are not in the public domain.

===== Roles

People responsible for the cited dataset and related items may include for instance investigators, technicians, data managers, compilers, editors and programmers. Names and roles of creators mentioned in the research dataset documentation and the full name of the project or organization responsible should be provided.

A name identifier (e.g. ISNI, ORCID) should be provided in brackets after the name if known. If the host organization changes its name or is merged with another organization, the identifier makes it possible to find the name of the current organization.

The name of the host organization or organizations shall be given. Identifier, if any, should be provided.

EXAMPLE 548

> TURNER, D.P., W.D. RITTS, and M. GREGORY. *BigFoot NPP Surfaces for North and South American Sites*, 2002–2004. [dataset]. Oak Ridge National Laboratory Distributed Active Archive Center [ORNL DAAC], Oak Ridge, (TN), USA, 2006.

If the cited research dataset has been created by a project and no personal authors are described, the project may be specified as the author. Since projects are usually short-lived, the name of the organization hosting the project shall then be provided as well.

Publisher or distributor of the dataset, such as a data repository, shall be included in the reference if it is different from the host organization.

EXAMPLE 549

> MILBERGER, S. *Evaluation of violence against women with physical disabilities in Michigan, 2000–2001* (ICPSR version) [dataset] [data in several file formats and codebook/ questionnaire in PDF]. Detroit: Wayne State University (producer), 2002. Ann Arbor, MI: Inter-university Consortium for Political and Social Research (distributor).

===== Persistent identifiers

Persistent identifiers such as DOI names shall be given, if available. If the dataset has also a traditional standard identifier, it should be included as well.

EXAMPLE 550

> TURNER, D.P., W.D. RITTS, and M. GREGORY. *BigFoot NPP Surfaces for North and South American Sites*, 2002–2004. [dataset]. Oak Ridge National Laboratory Distributed Active Archive Center [ORNL DAAC], Oak Ridge, (TN), USA, 2006. Available from: https://doi.org/10.3334/ORNLDAAC/750 [viewed 2019-02-15].

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===== Linked resources

A user may need to access various other resources before it is possible to utilize the dataset or the tools for processing the data. These resources include user guides, codebooks and questionnaires.

Software user guide citations shall contain a link to an archived copy, since these documents are short-lived; when the application is updated, the user guide changes as well.

EXAMPLE 551

CKAN 2.8. User Guide. 2019. Available from: https://docs.ckan.org/en/2.8/user-guide.html [viewed 2019-09-13]. Archived copy available from: Internet Archive (distributor), https://web.archive.org/web/20190628220306/https://docs.ckan.org/en/2.8/user-guide.html [viewed 2019-09-13].

EXAMPLE 552

A codebook within the dataset is cited:

POLITIIKKA JA NUORET 1999. *Koodikirja*. [verkkoaineisto]. Tampere: Yhteiskuntatieteellinen tietoarkisto [tuottaja ja jakaja]. Saatavissa: http://www.fsd.uta.fi/aineistot/luettelo/FSD2047/cbF2047.pdf]. [katsottu 2017-01-26]. Osa aineistoa HELLSTEN, Villiina & MARTIKAINEN, Tuomo: Politiikka ja nuoret 1999 [sähköinen tietoaineisto]. Versio 1.0 (2005-04-07). Yhteiskuntatieteellinen tietoarkisto (jakaja). Saatavissa: http://urn.fi/urn:nbn:fi:fsd:T-FSD2047 [katsottu 2017-07-04].

EXAMPLE 553

A questionnaire within the dataset is cited:

RUOSTETSAARI, Ilkka ja Jaana KUUSIPALO: *Valtarakennetutkimus 1991. Kyselylomake.* [verkkoaineisto]. Tampere: Yhteiskuntatieteellinen tietoarkisto [jakaja]. [viitattu 2010-02-02]. Saatavissa: http://www.fsd.uta.fi/aineistot/luettelo/FSD1090/quF1090_fin.pdf. Kyselylomake on osa aineistoa RUOSTETSAARI, Ilkka ja Jaana KUUSIPALO: Valtarakennetutkimus 1991 [sähköinen aineisto]. FSD1090, versio 1.1 (2004-04-27). Tampere: Yhteiskuntatieteellinen tietoarkisto (jakaja), 2004.

If the cited dataset is part of a series, it should be given.

EXAMPLE 554

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES. SUBSTANCE ABUSE AND MENTAL HEALTH SERVICES ADMINISTRATION. OFFICE OF APPLIED STUDIES. *Treatment episode dataset — discharges (TEDS-D) — concatenated, 2006 to 2011 (ICPSR 30122). Version V5.* [dataset]. In: Treatment Episode Data Set — Discharges (TEDS-D) Series. Ann Arbor, MI: Inter-university Consortium for Political and Social Research (distributor), 2015. Available from: https://doi.org/10.3886/ICPSR30122.v5. [viewed 2019-09-05].

===== File size

File size of the dataset shall be included in the reference after the URI if the dataset is “big data”,[16] but it may be included whenever known.

[16] https://en.wikipedia.org/wiki/Big_data

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EXAMPLE 555

PORTES, Alejandro and Rubén G. RUMBAUT. *Children of Immigrants. Longitudinal Study (CILS) 1991–2006 ICPSR20520, version 2* (Jan 23, 2012). [dataset]. Ann Arbor, MI: Inter-university Consortium for Political and Social Research (distributor), 2012. Available from: https://doi.org/10.3886/ICPSR20520.v2. [82.7 MB]. [accessed 2018-05-06].

===== Dataset and publications

It may be necessary to cite both the publication based on the data, and the research dataset. These interlinked citations establish a connection between the data and the results based on the data.

EXAMPLE 556

HENEGHAN C., M. THOMPSON, M. BILLINGSLEY and D. COHEN *Medical-device recalls in the UK and the device-regulation process: retrospective review of safety notices and alerts*. BMJ Open 1(1): e000155. 2011. Available from: http://dx.doi.org/10.1136/bmjopen-2011-000155. [accessed 2015-12-02].

EXAMPLE 557

HENEGHAN C., M. THOMPSON, M. BILLINGSLEY and D. COHEN. *Data from: Medical-device recalls in the UK and the device-regulation process: retrospective review of safety notices and alerts* [dataset]. 2011. Available from: Dryad Digital Repository (distributor), https://doi.org/10.5061/dryad.585t4. [accessed 2015-12-03].

===== Provenance information

Research data provenance is information about the inputs, entities, systems, and processes that influenced the cited dataset. Provenance information assists reproduction of the data and therefore, has a major role in increasing trust and credibility. It provides also a historical record of the data and its origins.

Provenance information may be provided as plain text or as structured metadata, based on for instance W3C PROV data model.[17] The model specifies agents, entities and activities relevant for provenance. An agent may be a person, organization or software agent. Citations should contain provenance metadata elements which may be relevant for future users of the data, such as the name(s) of researchers, programmers or funders; the name(s) of the program(s) the data was created or can be analysed (if a specific tool is needed) with.

===== Edition and version

Research datasets are often dynamic: new data is constantly added and past errors corrected. A single dataset can also be available in different versions, enabling variety of uses, and in multiple file formats. If there are several options, data used shall be cited in such a way that it is possible to identify the version and / or file format used from the reference.

EXAMPLE 558

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES. SUBSTANCE ABUSE AND MENTAL HEALTH SERVICES ADMINISTRATION. OFFICE OF APPLIED STUDIES. *Treatment episode dataset — discharges (TEDS-D) — concatenated, 2006 to 2011 (ICPSR 30122). Version V5.* [dataset].

[17] https://www.w3.org/TR/prov-dm/

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If only a subset of the dataset has been used, this subset should be specified. Following the Research Data Alliance Working Group on Data Citation recommendation[18], this is done by providing a link to a query with which it is possible to extract the relevant data. Creation of such queries should be supported by the organizations hosting the datasets.

EXAMPLE 559

> LEUPRECHT [et al.]. tas_CNRM-CERFACS-CNRM-CM5_RCP4.5_r1i1p1_CLMcom-CCLM4-8-17, [dataset]. Version 2. [Subset used: January to June 2014]. Vienna, Austria. CCCA Data Centre (distributor), 2016. Available from: https://hdl.handle.net/20.500.11756/93887ecf. [accessed 2017-06-28].

Citations like the one above should facilitate re-creation of the dataset cited, even when this requires technological changes such as migration.[19]

This is possible if datasets are time-stamped and versioned, and if there are time-stamped queries with which to retrieve the desired subset of the data. This approach is promoted by the Research Data Alliance Data Citation WG[20]. It supports a dynamic, query centric view of research datasets, which is a prerequisite for accurate data citations. Assigning persistent identifiers to queries to be executed against datasets[21] is a good starting point.

=== Web sites and their component parts

==== General

In this document, Web resource is any asset that can be identified, addressed or handled in some way on the Web or in a Web archive. Such resources are often dynamic, which makes citing them a challenge. For instance, newspaper home pages can change several times per day. There are of course also static documents; for instance, doctoral dissertations never change even on the Web, although their locations can.

==== Metadata elements

Table 14 shows the elements, in order, to be included in references to web sites and web pages.

Metadata elements for web sites

Elements (in order)	Status	Relevant clause(s)/ subclauses
Name of creator(s) (of the cited resource)	Required	Clause 8.2
Standard identifiers of creators' public identities	Optional	Clause 8.2
Page title	Required	[form_of_title], [translation_of_title]
Web site title	Required	[form_of_title], [translation_of_title]

[18] https://rd-alliance.org/system/files/documents/RDA-DC-Recommendations_151020.pdf

[19] https://www.rd-alliance.org/system/files/documents/iPRES2016-Proell.pdf

[20] https://www.rd-alliance.org/group/data-citation-wg/outcomes/data-citation-recommendation.html

[21] https://www.rd-alliance.org/system/files/RDA-DC-Recommendations_151020.pdf

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Elements (in order)	Status	Relevant clause(s)/ subclauses
Version	Required if version exists	[web-version], [edition_and_version]
Subsidiary creator	Optional	[subsidiary_creator]
Place and publisher	Optional	[place], [publisher]
Date of publication	Optional	[date-publication]
Rights metadata	Optional	[rights_metadata]
Date of update/revision	Required, if available, for online information resources	[web_specific]
Distributor or online host	Required for electronic resources if available	[distributor_host]
Standard identifier	Required if available	[international_ standard_identifiers]
Persistent identifier	Required if available	[persistent_ identifiers]
Archive location(s) (URI)	Optional	[web-archive], [network_location]
Archive date and time	Optional	[web-archive], [date]
Location and access (URI)	Required for online information resources with no persistent identifier or archived copy	[network_location]
Relationships	Required if available	[relations]
Date of citation	Required for dynamic online information resources	[date-citation]
Other information may be added in whatever position is most appropriate	Optional	[additional-info]; [web_specific]

==== Data elements and guidance specific to type

===== Archive reference

A Web archive reference should provide the name of the Web archive as the distributor, the date and time[22] the information resource (Web page, collection of pages etc.) was archived and the archive URI. The original URI should also be included, if it is not embedded in the archive URI. These elements of the citation should be specified by appropriate headers, such as “archived”.

EXAMPLE 560

> *British Library Web site February 1997* [online]. British Library, 1997. Archived copy available from: Internet archive (distributor), https://web.archive.org/web/19970218190613/http://www.bl.uk/. [archived 1997-02-18]. [viewed 2019-02-28].

===== Edition or version

Reference to a past edition or version of a Web information resource should specify edition or version (e.g. by number) and/or date and time in an appropriate manner and provide a link to the archived copy used.[23]

[22]If a Web page consists of several components, different files may have been harvested at different times. Due to this, archived copy of a page may not be fully synchronized.

[23]Web archives, such as the Internet Archive (http://archive.org) allow the users to search archived copies of documents with their URIs. Users may also make archival copies of web pages. If the link in the reference is dead or if the retrieved document is no longer the cited document due to content drift, it may still be possible to retrieve the cited document from an archive. Referencing archived Web

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EXAMPLE 561

INTERNATIONAL DOI FOUNDATION. *DOI Handbook* [online]. Version 4.2.0, February 2005. Archived copy available from: Internet Archive (distributor), https://web.archive.org/web/20060111075618/http://www.doi.org/hb.html. [archived 2006-01-11].

==== Web site

If the reference covers the entire web site, a coverage note should be supplied after the web site title.

EXAMPLE 562

BBC Weather [web site]. Available from: https://www.bbc.com/weather.

EXAMPLE 563

Words Without Borders: The online magazine for international literature [online]. PEN American Center, ©2005. Available from: http://www.wordswithoutborders.org. [viewed 2016-06-12]. https://portal.issn.org/resource/ISSN/1936-1459.

EXAMPLE 564

Language Log [web site]. Available from: https://languagelog.ldc.upenn.edu/nll/ [viewed 2019-09-03]

If there is any doubt that both the cited information resource and its URL will be stable, citation should include a link to an archived copy of the resource. The original location may be provided as well.

In an inline reference, if the context makes it clear that the entire site is being referenced, it is sufficient to give just the name of the service and the URI of the entry page.

EXAMPLE 565

The BBC Web site (http://www.bbc.com/) contained a lot of material that was useful for me.

If the cited information resource is a defunct web site, such as the domain having been taken over by another host, the time span of the relevant archived copies should be specified.

EXAMPLE 566

The National Digital Library Project. Archived copy available from: Internet archive (distributor), {kdk_fi_archive} [2011/2018-08]. [viewed 2019-05-05].

==== Web archives

Time span of archived copies may be provided.

documents increases precision and persistence, but the latter depends on sustainability of the Web archives.

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EXAMPLE 567

BBC Weather [web site]. Archived copy available from: Internet archive (distributor), {bbc_archive} [2002–2019]. [viewed 2019-06-12].

See [AnnexB] for more information on the use of Web archives.

==== Web page

The citation shall contain the name of the page / site and the dates it has been used and archived.

If the cited Web page is dynamic and a specific version is used, an archived version of the resource shall be cited. If an accurate archival copy of the page is not found, one shall be made.

If version information is not relevant, archive reference may be omitted.

If all versions of a dynamic pages are cited simultaneously, Web archive citation shall be generic and specify the date range covered (see Example 569 and Example 570).

There are Web sites (belonging for instance to newspapers) that are harvested several times per day. Web archives may have thousands of copies of e.g., home pages of these sites. Almost all of these copies will be different within one archive, but due to harvesting techniques, even the copies in different archives harvested at (almost) the same time may differ from one another. Only the archival copy actually used should be cited, not a copy from another archive even if it has been harvested at about the same time. If for any reason it is necessary to cite another archived copy, it is important to check that it contains the cited information.

Web archives usually do not check if the harvested Web page has changed since it was harvested last time. Some or even all harvested copies of the page can be identical. Even in such cases it is important to include the date, since the page may change in the future.

EXAMPLE 568

ISO home page [online]. Available from: https://www.iso.org/home.html

EXAMPLE 569

ISO home page 2010-2017 [online]. Archived copy available from: Internet Archive (distributor), https://web.archive.org/web/*/https://www.iso.org/iso/home.html [2010-05/2017-02]. [viewed 2019-09-01].

EXAMPLE 570

ISO home page 2017-. Archived copy available from: Internet Archive (distributor), https://web.archive.org/web/*/https://www.iso.org/home.html [2017-02-27/-].

EXAMPLE 571

ISO home page. [2016-01-03]. Geneve: International Organization for Standardization, 2016. Archived copy available from: Internet archive (distributor), https://web.archive.org/web/20160103090843/http://www.iso.org/iso/home.html. [archived 2016-01-03T09:08:43Z]. [viewed 2019-02-28].

EXAMPLE 572

CLARK, Carol. *On the threshold of a brave new world* [online]. In: Blueprint of the body. CNN.com, 2000. In-depth specials. Archived copy available from: Internet Archive

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(distributor), https://web.archive.org/web/20010223233730/http://www.cnn.com/SPECIALS/2000/genome/story/overview/. [archived: 2001-02-23 23:37:30Z]. [viewed 2015-02-14].

EXAMPLE 573

FREEMAN, John. *Book reviews pushed to the margins* [online]. The blog books. Guardian Unlimited, 25 April 2007, 12:27 BST. Archived copy available from: Internet Archive (distributor), https://web.archive.org/web/20070505044910/http://blogs.guardian.co.uk/books/2007/04/last_week_the_london_book.html. [viewed 2016-04-26].

EXAMPLE 574

McLEAN, Renwick. *Canary Islands species threatened by soft borders* [online]. International Herald Tribune. Paris, France, 21 June 2006. Archived copy available from: Internet Archive (distributor), https://web.archive.org/web/20060811105404/http://www.iht.com/articles/2006/06/20/news/ecology.php/. [viewed 2016-05-07].

EXAMPLE 575

PAX, Salam. *Where Is Raed?* [online]. 21 Feb. 2003, 19:17. Available from: Blogger (distributor), http://dear_raed.blogspot.com. Path: Homepage; archive; 2003. [viewed 2018-08-06].

EXAMPLE 576

INTERNATIONAL ISBN AGENCY. *E-Books and ISBNs: a position paper and action points from the International ISBN Agency* [online]. [London]: International ISBN Agency, 2010. Available from: http://www.isbn.org/sites/default/files/images/isbn_agency_e-books_position_paper.pdf. [viewed 2012-02-06].

EXAMPLE 577

Internet forum [online] [2017-05-26]. In: Wikipedia (distributor). Archived copy available from: Internet Archive (distributor), https://web.archive.org/web/20170702110010/http://en.wikipedia.org/wiki/Internet_forum. [archived 2017-07-02]. [viewed 2018-07-04].

EXAMPLE 578

PLAGGE, Kallie. *Mario Kart 8 Deluxe review on Nintendo Switch* [online] [2017-04-20]. Available from: https://www.gamespot.com/reviews/mario-kart-8-deluxe-review/1900-6416660/ [viewed 2019-09-02].

==== Component part of a web page

If it is necessary to specify a component part within a larger resource such as a Web page, its media type may be supplied in brackets, e.g., [still image]. Note that a component part can be a part of a resource which is itself a component part.

EXAMPLE 579

DNA [still image]. In: CLARK, Carol. On the threshold of a brave new world. In: Blueprint of the body [online]. Archived copy available from: Internet Archive (distributor), https://web.archive.org/web/20010820180003/http://www.cnn.com/SPECIALS/2000/genome/story/overview/dna.strips.jpg. [archived 2001-08-20T18:00:03Z]. [viewed 2019-05-12].

=== Social media and services

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==== NEW

— Source: ISO 690, Clause 5.12

Social media items are typically items of `bibitem/@type` “webresource”, although they may not always have an associated exposed URI (particularly for social media accessed primarily via phone app, rather than web browser). As with ISO 690, a distinction is made between items publicly available (or at least, broadcast to a defined group of people), and one-on-one text messages; the latter are conflated with voice and face-to-face communications between individuals, and are cited as personal communications.

A person’s real name may be related to the online identity assumed by the author of the item, if both are known. The online identity is treated as a pseudonym of the real life identity, and is serialised in the same way ([variantnames]).

The particular form of social media communication (e.g. blog post, forum post, tweet, message) should be given through `medium/genre`. At a lower priority, the service name or type should be encoded as `medium/form`, since it relates to how the content is to be accessed by an intermediary app. (For example, a tweet is not just accessed by a web browser, as a web resouurce; it is accessed and rendered by a web browser in the context of Twitter.)

EXAMPLE 580

GATES, B. [BillGates]. (2013, February 26). #Polio is 99% eradicated. Join me & @FCBarcelona as we work to finish the job and #EndPolio. [Tweet]. Available from: https://twitter.com/BillGates/status/306195345845665792. [viewed 2016-07-06T12:30:15+02:00]. See also VIDEO: http://b-gat.es/X75Lvy.

```
<bibitem type="social_media">
  <title>#Polio is 99% eradicated. Join me & @FCBarcelona as we work
to finish the job and #EndPolio</title>
  <date type="published"><on>2013-02-26</on></date>
  <date type="accessed"><on>2016-07-06T12:30:15+02:00</on></date>
  <contributor>
    <role type="author"/>
    <person>
      <name>
        <surname>Gates</surname>
        <initial>B.</initial>
      </name>
      <variant type="username">
        <completename>BillGates</completename>
      </variant>
    </person>
  </contributor>
  <uri>https://twitter.com/BillGates/status/306195345845665792</uri>
  <medium>
    <form>Twitter</form>
    <genre>tweet</genre>
  </medium>
  <relation type="complements">
    <bibitem type="video">
       <uri>http://b-gat.es/X75Lvy</uri>
    </bibitem>
  </relation>
</bibitem>
```

==== General

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Information shared via social media and services is frequently used in research, both within and outside the academic community (Clause 8.2.1.1, Example 1).

This document does not specify rules on what kind of social media may or may not be cited, but if the information is not publicly available, it should be cited as personal communications. Organizations may specify their own limitations on what they think is acceptable.

Guidelines listed below are partially based on the ones published by the American Psychological Association Clause 8.2.1.1, Example 1.
NOTE 30 Social media services include Twitter, Facebook, LinkedIn, Instagram, Snapchat, etc.

==== Metadata elements

Table 15 shows the elements, in order, to be included in references to social media and services.

Metadata elements for social media and services

Elements (in order)	Status	Relevant clause(s)/ subclauses
Name of poster(s) (person who posted the message)	Required when referencing a specific content. Social media identity must also be provided	[social-creator], Clause 8.2
Standard identifiers of posters' public identities	Optional	Clause 8.2
Title of message (name of the page or the content or caption of the post)	Required; normally the subject line is used as the title of the message	[social-title], [form_of_title]
Service name	Required, if applicable	[social-service-name]
Medium designation	Required	[social-medium], [medium]
Date message was sent	Required	[social-date], [season_month_day_time]
Time message was sent	Required, if available	[social-date], [season_month_day_time]
Creator of original content(s) (person who created the posted information)	Required if known when referencing a specific content, only supplied when distinct from poster. Social media identity must also be provided	[social-creator], Clause 8.2
Standard identifiers of creators' public identities	Optional, only supplied when creator distinct from poster	Clause 8.2
Distributor or online host	Required for electronic resources if available	[distributor_host]
Persistent identifier	Required if available	[persistent_identifiers]
Archive location(s) (URI)	Optional	[social-archive], [network_location]
Archive date and time	Optional	[web-archive], [date]
Location and access (URI)	Optional if the persistent identifier is given; otherwise required	[social-network-location], [network_location]
Relationships	Required if available	[relations]
Date / time viewed	Required	[date-citation], [season_month_day_time]

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Elements (in order)	Status	Relevant clause(s)/ subclauses
Other information may be added in whatever position is most appropriate	Optional	[additional-info]; [web_specific]

==== Data elements and guidance specific to type

===== Creator

A personal author's last name and initials, or organization's full name should be provided. A name identifier may be provided in brackets after the name.

EXAMPLE 581

PARLAND – VON ESSEN, J.

EXAMPLE 582

National Library of Finland. Library network services.

Following the real name, social media identity information should be supplied when available. The author's screen name should be given as associated information (in brackets). The screen name is considered to be the user identifier that allows others use to address the creator on the service. It is preferable to prefix the service name to the screen name.
NOTE 31 The author's screen name is provided to facilitate communication to the creator.

EXAMPLE 583

TRUMP, Donald J. [Twitter: @realDonaldTrump]

EXAMPLE 584

OBAMA, Barack [Facebook: @barackobama]

The poster is the person who posted the content, not necessarily the person who created it. The real creator should be included in the reference when applicable.

In a citation, if the service name is provided in other parts of the reference, omission of the service name in the screen name is possible.

EXAMPLE 585

OBAMA, Barack [@barackobama]. Available from: Facebook, https://www.facebook.com/

===== Title

The name of the page or the content or caption of the post should be specified as the title. Translation of the title may be provided after the title.

The titles of status updates, tweets, pages, blog posts or photographs should not be italicized; the titles of items that stand alone, such as videos and photo albums, should be italicized.

If the item contains no words (e.g., a photograph without a caption), a description of the item should be provided as a supplied title.

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EXAMPLE 586

THE SIMPSONS [Twitter: @TheSimpsons]. [*Happy Labor Day animation*]. Available from: Twitter, https://twitter.com/TheSimpsons/status/1168539078444208131

===== Medium

Medium designation (e.g., Tweet, Facebook status update, photograph, blog post, timeline, video file) should be provided after the title.

EXAMPLE 587

Essetter [Small essays]. [blog].

EXAMPLE 588

Öppen tillgång – till vilket pris? [blog post].

===== Service name and type

Service name or type should be specified. This information is especially important if it might otherwise be difficult to tell the nature of the resource.

EXAMPLE 589

[Facebook page].

EXAMPLE 590

[Facebook status update].

EXAMPLE 591

[Tweet].

EXAMPLE 592

[Twitter page].

EXAMPLE 593

[blog].

EXAMPLE 594

[blog post].

===== Date

Full date should be specified in ISO 8601 format for items that have a date associated with them; otherwise, the year is sufficient.

The date and time the content has been viewed should be provided in addition to the date associated with the post.

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EXAMPLE 595

Essetter [Small essays]. [blog]. [2009–].

EXAMPLE 596

Öppen tillgång – till vilket pris? [blog post]. [2016-07-07]. [viewed 2018-09-04].

The accurate time should be provided in the ISO 8601-1 format when citing social media.

EXAMPLE 597

[accessed 2010-04-22T14:30:15Z].

===== Network location

Network location of the cited resource shall be provided.

EXAMPLE 598

PARLAND – VON ESSEN, J. *Öppen tillgång – till vilket pris?* [blog post]. [2016-07-07]. Available from: http://essetter.blogspot.fi/2016/07/oppen-tillgang-till-vilket-pris.htm. [viewed 2018-07-19].

EXAMPLE 599

COHEN, Dan. *Digital Ephemera and the Calculus of Importance* [blog post]. May 17, 2010. Available from: https://dancohen.org/2010/05/17/digital-ephemera-and-the-calculus-of-importance/. [viewed 2018-02-12].

When a social media Web site is first mentioned in the text, just the URI may be provided.

EXAMPLE 600

The blog, called Essetter, is available from: http://essetter.blogspot.fi/.

===== Archived copy

Like other Internet resources, social media may be short-lived. Therefore, if there is a copy of the resource in a Web archive, URI to the archived copy may be provided as well.

EXAMPLE 601

PARLAND – VON ESSEN, J. *Öppen tillgång – till vilket pris?*[blog post]. [2016-07-07]. Available from: http://essetter.blogspot.fi/2016/07/oppen-tillgang-till-vilket-pris.htm. Archived copy available from: Internet archive (distributor), https://web.archive.org/web/20161107150327/http://essetter.blogspot.fi/2016/07/oppen-tillgang-till-vilket-pris.html. [archived: 2016-11-07T15:03:27Z]. [viewed 2018-07-19].

If there is a reason to believe that the resource will suffer from link rot or content drift, only the URI of the archived copy may be given.

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Generic Web archives do harvest social media resources, but there is a subscription-based program for archiving social media, ArchiveSocial.[24]

==== Services

Record aggregators, such as blogs, message boards and forums, can all be considered services. They may be cited using data elements provided in this document. Forum posts and comments may be referred to in the same way.

EXAMPLE 602

Citing an entire message board service:

Planet Science [message board]. BBC Science & Nature message boards. Available from: http://www.bbc.co.uk/dna/mbsn/F2801717. [registration required]. [viewed 2017-06-13].

EXAMPLE 603

Citing an entire blog:

DODSON. S. [languagehat]. *Language Hat*. Available from: http://languagehat.com

Inline citations may be made by referencing the URIs of the service or of the service accounts.

EXAMPLE 604

BBC has multiple Twitter accounts (including https://twitter.com/bbc, https://twitter.com/bbcnews, https://twitter.com/bbcbreaking and https://twitter.com/bbcworld) which reach millions of people every day. We have analyzed the content of BBC's Twitter feeds during the year 2015.

==== Stream of records

A stream of records may be referenced by referring to their appropriate URIs.

EXAMPLE 605

Facebook page:

BRITISH BROADCASTING CORP. [n. d.]. *Timeline* [Facebook page]. Available from: https://www.facebook.com/bbcnews/. [viewed 2015-07-07].

EXAMPLE 606

Twitter page:

NATIONAL INSTITUTE OF MENTAL HEALTH [NIMHgov]. [n.d.]. *Tweets* [Twitter page]. Available from https://twitter.com/NIMHgov. [viewed 2014-07-15].

==== Individual records

Individual records may be referenced on a service using data elements provided.

[24] https://archivesocial.com/

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EXAMPLE 607

Citing a particular post in a forum:

UBUNTU COMMUNITY. *ForumsGovernance* [online]. Edited 2017-11-27 15:50:48. In: Ubuntu forums. Available from: http://www.ubuntuforums.org/ Path: Ubuntu forums; Forum community; Forum Governance. [viewed 2018-06-10].

EXAMPLE 608

Citing a blog post:

PARLAND – VON ESSEN, Jessica. *Öppen tillgång – till vilket pris?* [blog post]. (2016-07-07). Available from: http://essetter.blogspot.fi/2016/07/oppen-tillgang-till-vilket-pris.html. [viewed 2016-07-13].

EXAMPLE 609

Citing a blog post:

NICHOLAS, Nick. *What Metanorma is* [blog post] (2018-12-05). Available from: https://www.metanorma.com/blog/2018-12-05-intro-to-metanorma/ [viewed 2019-09-05].

EXAMPLE 610

Citing a blog post in a collection:

FRANKLIN, MJ. *Three cheers for 'Hamlet', the greatest Shakespeare play of all time*. In: Mashable: Shakespeare. Available from: http://mashable.com/2016/04/23/this-be-madness-hamlet-winner/. [viewed 2017-06-04].

EXAMPLE 611

Citing a blog post comment:

LOLOS, E. 2019-05-09. Comment on: Nicholas, N. Greek -eza Ethnonyms. Available from: http://hellenisteukontos.opoudjis.net/greek-eza-ethnonyms/#comment-1361

EXAMPLE 612

Citing a Facebook status update from a group author:

APA STYLE. (2011, March 10). *How do you spell success in APA Style? Easy! Consult Merriam-Webster's Collegiate Dictionary or APA's Dictionary of Psychology. Read more over at the APA Style Blog* [Facebook status update]. Available from: https://www.facebook.com/APAStyle/posts/206877529328877. [viewed 2015-05-25].

Some records such as posts and status updates do not usually have titles. The message body may be treated as its title; though truncation may be required in citation.

EXAMPLE 613

Citing a Facebook post:

ADAMS, John [@earbox]. (2019-03-23). *Christina and Michelle Naughton's new album "American Postcard" releases today on Warner Classics & Erato.* Available from: https://www.facebook.com/earbox/posts/2430059523679590. [viewed 2019-08-10]

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EXAMPLE 614

Citing a tweet from an organizational author:

STANFORD MEDICINE [SUMedicine]. *Animal study shows sleeping brain behaves as if it's remembering*: http://stan.md/RrqyEt #sleep #neuroscience #research [Tweet]. 2012-10-09. Available from https://twitter.com/SUMedicine/status/255644688630046720. [viewed 2014-06-17].

EXAMPLE 615

Citing a tweet from an organizational author:

THE SIMPSONS [@TheSimpsons]. *The one day of the year where it's this easy. Happy #LaborDay from #TheSimpsons! [with Happy Labor Day animation]*. Available from: Twitter, https://twitter.com/TheSimpsons/status/1168539078444208131

EXAMPLE 616

Citing a photo from a Facebook post:

OBAMA, Barack [@barackobama]. [*Portrait of Dolores Huerta*] [photo]. Available from: Facebook, https://www.facebook.com/obamafoundation/photos/a.635434296657262/1115943111939709/ [viewed 2019-09-05].

EXAMPLE 617

Citing a photo from tweet posted by a group author:

THE SIMPSONS [@TheSimpsons]. [*Happy Labor Day animation*]. [photo] Available from: Twitter, https://twitter.com/TheSimpsons/status/1168539078444208131

EXAMPLE 618

Citing a tweet from an individual author:

GATES, B. [BillGates]. (2013, February 26). *#Polio is 99% eradicated. Join me & @FCBarcelona as we work to finish the job and #EndPolio.* [Tweet]. Available from: Twitter, https://twitter.com/BillGates/status/306195345845665792. [viewed 2016-07-06T12:30:15+02:00]. See also VIDEO: http://b-gat.es/X75Lvy.

EXAMPLE 619

Citing an Instagram post by an organizational author:

MANCHESTER UNITED F.C [@manchesterunited]. *# St Mary's Stadium # #MUFC* 2019-09-01. Available from: Instagram, https://www.instagram.com/p/B10wy1OAiS9/ [viewed: 2019-09-05]

EXAMPLE 620

Citing an Instagram post by an individual author:

MERKEL, Angela [@bundeskanzlerin]. *Stille Teilnahme der Kanzlerin und eine Rede des Bundespräsidenten…* 2019-09-02. Available from: Instagram, https://www.instagram.com/p/B131I-poO6O/ [viewed: 2019-09-05]

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EXAMPLE 621

Citing an IRC message:

[Theriex]. 2009-04-04. [Discussion on #kubuntu channel]. [IRC chat]. Available from: https://irclogs.ubuntu.com/2009/04/04/%23kubuntu.txt

Some social media allow direct links to comments; but some do not. The following example indicates the limitations when there is no direct link and that the comment date is not precisely dated.

EXAMPLE 622

Citing a comment on YouTube:

[YouTube: HGA Mxsfitlxvin]. 2019-05-XX. Comment on: [musiquelabruyere], *ADAMS — Short Ride in a Fast Machine*. Available from: YouTube, https://www.youtube.com/watch?v=DJvniUzPoDU. [viewed 2019-08-10]

Newsgroups should be treated as serials. USENET posts should be cited by date and time.

EXAMPLE 623

Citing a USENET post:

TANENBAUM, A.S. 1992-01-29, 12:12:50 GMT. *LINUX is obsolete.* comp.os.minix [USENET]. Available from https://groups.google.com/forum/#!topic/comp.os.minix/wlhw16QWltI%5B1-25%5D

==== Posting of content belonging to an original creator

The poster and original content creator should be distinguished. The original content and its creator should be cited as part of the information resource being cited.

A relationship binds the cited information resource with the original information resource, therefore rules in [relations] apply. Relation labels may be created as appropriate to facilitate citations.

EXAMPLE 624

In this example, the relation label is “Original tweet from:”:

GORKA, Sebastian [Twitter: @SebGorka]. [Screenshot of tweet of Donald J. TRUMP] [tweet], 2019-07-14. Original tweet from: Donald J. TRUMP [Twitter: @realDonaldTrump]. *@SebGorka Wins Big, No Contest!* [tweet]. 2019-07-12. Available from: Twitter, https://twitter.com/SebGorka/status/1150351166997442562

=== Unpublished information resources

==== General

Unpublished documents are a diverse group of information resources, including for instance personal communications, but also medieval or modern manuscripts, raw scientific data, preprints of scientific publications, doctoral dissertations and master’s theses.

==== Metadata elements

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Table 16 shows the elements, in order, to be included in references to unpublished information resources.

Metadata elements for unpublished information resources

Elements (in order)	Status	Relevant clause(s)/ subclauses
Name of creator(s)	Required	Clause 8.2
Standard identifiers of creators' public identities	Optional	Clause 8.2
Title of the item	Required	[form_of_title], [translation_of_title]
Subsidiary titles	Optional	[additional_titles] to [no_title]
Resource type	Required	[unpublished-resource-type]
Subsidiary creator	Optional	[subsidiary_creator]
Date of creation	Required if available	[date]
Service or host archive	Required, if applicable	[archival_materials]
Physical location	Required for print information resources if a limited number of copies are known to exist	[physical_location]
Persistent identifier	Required if available	[persistent_identifiers]
Location and access (URI)	Required for online information resources with no persistent identifier or archived copy	[network_location]
Date of citation	Required for dynamic online information resources	[date-citation]
Relationships	Required if available	[relations]
Other information may be added in whatever position is most appropriate	Optional	[additional-info]; [web_specific]

==== Data elements and guidance specific to type

===== Resource type and location

Resource type and the location or the name of the service via which the cited resource is available should be included.

Resource type specific metadata elements, such as manuscript shelf mark, should be cited according to the practice of the memory institution which owns the resource.

==== Personal communications

Personal communications include for instance letters, emails and diaries, but also lectures and conversations, either face to face or via telephone.

Unpublished personal communications should be referenced in text only, with the exact date and, if necessary, time in ISO 8601-1 format. A published, archived or recorded information resource (e.g., a letter, diary or performance) should be cited accordingly (e.g., as a publication, archival information resource or as an audio-visual material).

EXAMPLE 625

> FRANKLIN, Benjamin. *Letter to Thomas Paine: Reason and Religion, from Philadelphia, 1786-07-03* [letter] [personal communication].

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EXAMPLE 626

JOBS, Steve. *Re: International Customers are not happy*. 2010-04-15. [email] [personal communication]

EXAMPLE 627

Nick Nicholas [opoudjis], personal communication, Skype direct message, 2001-01-01.

Inline citation examples follow.

EXAMPLE 628

According to Mr. J. Smith (personal communication, 2018-10-08), the situation was serious.

EXAMPLE 629

“I wouldn’t want to experience such a storm again (59 years old female participant)”.

EXAMPLE 630

“I enjoyed my first year at the university (Student A)”.

==== Group communications

Group communications, such as mailing lists, may be cited in a similar way as with serials.

EXAMPLE 631

CLAWSON, B. [tuv’el]. 2000-04-18. *RE: chaw’ chu’*. tlhIngan-Hol mailing list. Available from: https://www.kli.org/tlhIngan-Hol/2000/April/msg00190.html

==== Dissertations and theses

The resource type of doctoral dissertations and master’s theses should be indicated in the citation.

EXAMPLE 632

MACKIE, A. G. *The Impact of National Identity on the Brexit Vote: Explaining the Variance in Support of the European Union Between Scotland and England*. [Master’s thesis]. [online]. Helsinki: University of Helsinki, Faculty of Social Sciences, 2016. Available from: E-thesis, http://urn.fi/URN:NBN:fi:hulib-201807022863 [viewed 2018-10-16].

==== Manuscript

Medieval manuscript folio numbers, including the recto/verso reference, should be provided when the citation does not cover the entire manuscript.

If there is a facsimile of the cited medieval manuscript, it may be mentioned in the reference.

EXAMPLE 633

ATWOOD, Margaret. *Scribbler moon.* [Manuscript]. Location: Oslo, Deichmanske bibliotek.

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EXAMPLE 634

SALA, P. *Petit Livre d'Amour*. [Manuscript]. British Library Stowe MS 955, fols. 3r–12v. London: British Library. Available from: British Library Digitised Manuscripts, http://www.bl.uk/manuscripts/FullDisplay.aspx?ref=Stowe_MS_955. Facsimile with comments by Janet Backhouse and Yves Giraud. Lucerne: Faksimile Verlag, 1994.

==== Preprint

If a preprint is cited, the name of the access provider and the repository should be included in the citation. If there are several versions of the preprint, version number of the cited version should be included as well.

Publication process information should be provided if available. For instance, if a cited version of a scientific article has already passed peer review and has been submitted for publication, a phrase "Manuscript submitted for publication" may be used.

EXAMPLE 635

JENKINS, S. and Janne RUOSTEKOSKI. *Controlled manipulation of light by cooperative response of atoms in an optical lattice.* Manuscript submitted for publication. Available from: University of Southampton Institutional Research Repository, ePrints Soton, http://eprints.soton.ac.uk/id/eprint/338797. [viewed 2017-06-24].

There are different policies regarding the usage of some unpublished resources, such as preprints. Some publishers may forbid their usage, while some others may require that preprints are treated as personal communications (that is, cited in the text only). This document does not provide guidelines in this respect, but it should be remembered that although most preprints will eventually be published, significant changes may take place during the peer review process. For instance, the published version of the article cited in Example 635 (see https://doi.org/10.1103/PhysRevA.86.031602) is quite different from the preprint.

==== Phone calls

A personal phone call may be referred to, both for a transcript and its recording.

EXAMPLE 636

NIXON, R.M. and DEAN, J.W., III. *1973-03-14, 08:55-08:59. [Phone call]*. Transcript available from: http://nixontapes.org/watergate/037-099.pdf

EXAMPLE 637

NIXON, R.M. and DEAN, J.W., III. *1973-03-14, 08:55-08:59. [Phone call]*. Recorded audio available from: http://nixontapes.org/watergate/037-099.mp3

==== Presentation

Presentations may be referred to as unpublished information resources.

EXAMPLE 638

OLSSON, N. 2012. *One Search*. Presentation given in Google Atmosphere on Tour series, Royal Institute of Technology, Stockholm. Transcript available from: https://www.kth.se/blogs/1337/presentationer/one-search-presentation-transcript/ Slides available from: https://www.kth.se/blogs/1337/files/2012/06/atmosphere-on-tour.pdf

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A presentation video may also be referred to.

EXAMPLE 639

ONGARO, E. 2019-05-17. *Physics Capstones*. Presentation given at Sonoma State University. Available from: https://www.youtube.com/watch?v=AK24mOEq448

Presentation slides may be cited as well.

EXAMPLE 640

AINSWORTH, S. G., NELSON, M. L., VAN DE SOMPEL, H. *Evaluating the Temporal Coherence of archived pages*. 2015. Available from: https://www.slideshare.net/phonedude/evaluating-the-temporal-coherence-of-archived-pages. Archival copy available from: Internet Archive (distributor), https://web.archive.org/web/20151118113319/https://www.slideshare.net/phonedude/evaluating-the-temporal-coherence-of-archived-pages [slides 5–7] [archived 2015-11-18] [viewed 2019-02-28].

== Reference model XML serialization

The following is a sample serialisation of Clause 4 in XML. This is not intended to be the only possible serialisation of Clause 4, whether in XML or in another format. In fact, existing reference tools such as BibTeX Clause 8.2.1.1, Example 1 are expected to be used as serialisations. The sample serialisation is intended to provide illustrations of the model, and to discuss the model succinctly by referencing its elements. (Of course, the serialisation can be used in practice as a basis for data exchange of references.)

The serialisation is the canonical grammar of the relaton-models repository, included verbatim below; refer to Clause 8.2.1.1, Example 1 for an introduction to the format. The repository grammar is the single source of truth for the serialisation.

```
grammar {
# ALERT: we cannot have comments on root element, as they intervene with
link:++https://github.com/metanorma/metanorma/issues/437++[] fix
#
# Instantiations of this grammar may replace leaf strings
# with more elaborated types; e.g. title (text) replaced with
# title-main, title-intro, title-part; type replaced with
# enum.
#
# Some renaming at leaf nodes is permissible
#
# Obligations can change both from optional to mandatory,
# and from mandatory to optional; optional elements may
# be omitted; freely positioned alternatives may be replaced
# with strict ordering
#
# DO NOT introduce a namespace here. We do not want a distinct namespace
# for these elements, and a distinct namespace for any grammar inheriting
# these elements; we just want one namespace for any child grammars
# of this.

# link:++https://www.myintervals.com/blog/2009/05/20/iso-8601-date-
validation-that-doesnt-suck/++[]
# iso8601date = xsd:string { pattern = "([\+-]?\d{4}(?!\d{2}\b))((-?)((0[1-
9]|1[0-2])(\3([12]\d|0[1-9]|3[01]))?|W([0-4]\d|5[0-2])(-?[1-7])?|(00[1-
9]|0[1-9]\d|[12]\d{2}|3([0-5]\d|6[1-6])))([T\s]((([01]\d|2[0-3])((:?)[0-
5]\d)?|24\:?00)([\.,]\d+(?!:))?)?(\17[0-5]\d([\.,]\d+)?)?([zZ]|([\+-])
([01]\d|2[0-3]):?([0-5]\d)?)?)?)?" }
```

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```
# Somewhat dumbed down for XSD regex:
## Date/Time conforming with ISO 8601
ISO8601DateTime = xsd:string { pattern = "([\+\-]?\d{4})((-?)((0[1-9]|1[0-
2])((-?)([12]\d|0[1-9]|3[01]))?|W([0-4]\d|5[0-2])(-?[1-7])?|(00[1-9]|0[1-
9]\d|[12]\d{2}|3([0-5]\d|6[1-6])))([T\s]((([01]\d|2[0-3])((:?)[0-5]\d)?|
24:?00)([\.,]\d+)?)?((:?)[0-5]\d([.,]\d+)?)?([zZ]|([\+\-])([01]\d|2[0-3]):?
([0-5]\d)?)?)?)?" }
## Date conforming with ISO 8601
ISO8601Date = xsd:string { pattern = "([\+\-]?\d{4})((-?)((0[1-9]|1[0-2])
((-?)([12]\d|0[1-9]|3[01]))?|W([0-4]\d|5[0-2])(-?[1-7])?|(00[1-9]|0[1-9]\d|
[12]\d{2}|3([0-5]\d|6[1-6])))?" }

BibData =
  BibliographicItem

## The publication or preparation status of a document
status =
  element status {
     ## The stage of the document status, e.g. "Published", "Unpublished",
"Committee Draft", "Preprint"
     stage,
     ## The substage of the document status. These are used particularly
in Standards Defining Organizations
     substage?,
     ## The iteration of the given status that the document is currently
in (e.g. "3" for a third draft)
     iteration?
}

## The stage of the document status, e.g. "Published", "Unpublished",
"Committee Draft", "Preprint"
stage = element stage {
  ## A canonical abbreviation of the document stage
  attribute abbreviation { text }?,
  ## The name of the document stage
  text
}

## The substage of the document status. These are used particularly in
Standards Defining Organizations
substage = element substage {
  ## A canonical abbreviation of the document substage
  attribute abbreviation { text }?,
  ## The name of the documen substage
  text
}

iteration = element iteration { text }

language = element language { LanguageType }

locale = element locale { LocaleType }

script = element script { ScriptType }

## Edition of a bibliographic item
edition = element edition {
   ## Number of edition.
   ## NOTE: The number attribute can be used to represent the numeric
equivalent of the edition string
```

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```
    attribute number { text }?,
    ## Formatted, human-readable edition string
    text
}

## multiple values are comma-delimited
LocalizedStringAttributes =
  attribute language { LanguageType }?,
  attribute locale { LocaleType }?,
  attribute script { ScriptType }?

LocalizedString =
  LocalizedStringAttributes,
  text

#LocalizedString =
#  LocalizedStringAttributes,
#  text
#
#LocalizedString =
#  LocalizedString1 |
#  element variant { LocalizedString1 }+

LocalizedMarkedUpString =
  LocalizedStringAttributes,
  PureTextElement+
#LocalizedMarkedUpString =
  #LocalizedMarkedUpString1 |
  # Variants of the string, with the same content, but in different
language, script, or format
  #element variant { LocalizedMarkedUpString1 }+

# Unlike UML, change type to format: type is overloaded
# Would be need if plain were default value and could omit the attribute
# Added LocalizedStringOrXsAny
#LocalizedStringOrXsAny1 =

LocalizedStringOrXsAny =
  LocalizedStringAttributes,
  ( text | AnyElement )+

#LocalizedStringOrXsAny =
#  LocalizedStringOrXsAny1 |
#  element variant { LocalizedStringOrXsAny1 }+

## String which is formatted according to conventions specified in a named
MIME type
#FormattedString =
  ## MIME type for string (defailts to text/plain).
  ## NOTE: pass:c,q,a,m,p[`docbook`], pass:c,q,a,m,p[`AsciiDoc`], pass:c,q,
a,m,p[`Metanorma`] are not registered IANA Media Types
  #attribute format {
    #"text/plain" | "text/html" | "application/docbook+xml" |
    #"application/tei+xml" | "text/x-asciidoc" | "text/markdown" |
"application/x-metanorma+xml" | text
  #}?,
  ### String
  #LocalizedStringOrXsAny

## Description of a contributor to the production of the bibliographic item
```

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```
contributor =
  element contributor {
    ## A description of the role of the contributor in the production of
the bibliographic item
    role+,
    ## The contributor involved in the production of the bibliographic
item.
    ## May be either a person or an organization
    ContributorInfo
}

## A description of the role of the contributor in the production of a
bibliographic item
role =
  element role {
    ## The broad class of role of the contributor. Mandatory in order to
enforce orderly management of contributors.
    ## Detailed in link:++https://www.relaton.org/model/creator/++[]
    attribute type {
      "author" |
      "performer" |
      "publisher" |
      "editor" |
      "adapter" |
      "translator" |
      "distributor" |
      "realizer" |
      "owner" |
      "authorizer" |
      "enabler" |
      "subject"
    },
    ## A more detailed description of the role of the contributor
    roledescription*
}
ContributorInfo =
  ( person | organization )

## A more detailed description of the role of the contributor
## Some descriptions are reserved words; in particular, the editorial
committee of a standard has the role description "committee"
roledescription =
  element description { LocalizedMarkedUpString }

## Person associated with a bibliographic item
person =
  element person {
    ## The name of the person
    fullname?,
    ## Credentials given for the person postnominally, e.g. "PhD"
    credential*,
    ## The affiliation of the person within an organization
    affiliation*,
    ## An identifier of the person according to an international
identifier scheme
    person-identifier*,
    ## Contact information for the person, including URI, address, phone
number, and email
    contact?
}
```

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```
## The name of a person
fullname = element name { FullNameType }

credential = element credential { text }

FullNameType =
    ## The initials of the person, used as an abbreviation for the person,
and including the
    ## surname. Can be used instead of the complete name. Distinct from
formatted-initials,
    ## which are the initials only of the forenames of the person
    name_abbreviation?,
    (
        ## A prefixed addition to the name of the person, such as "Dr"
        prefix*,
        ## A forename or given name of the person. Includes middle names
        forename*,
        ## The initials of the person, as a formatted string, including
punctuation, dropping
        ## punctuation as desired, and including hyphens where necessary.
For example,
        ## the initial set for Jean-Paul would be J, P; the formatted
initials would be "J.-P."
        ## or "J-P.". Can be used instead of forenames
        formatted-initials?,
        ## The surname, family name, or equivalent of the person
        surname?,
        ## A suffixed addition to the name of the person, such as "Jr"
        addition*,
        ## A preformatted version of the name of the person, not broken
down into its component parts
        completeName?
    ),
    ## An additional note about the name of the person
    biblionote*,
    ## A variant name of the person
    variantname*

name_abbreviation = element abbreviation { LocalizedString }
prefix = element prefix { LocalizedString }
formatted-initials = element formatted-initials { LocalizedString }
addition = element addition { LocalizedString }
surname = element surname { LocalizedString }

## A forename of a person
forename = element forename {
  ## An individual initial of the person, corresponding to the given
forename.
  ## Does not include final punctuation, but can include hyphens.
  ## Can be used instead of forenames, if formatted-initials are not
provided
  ##(in which case each initial will be punctuated following local
practice).
  attribute initial { text }?,
  ## A forename or given name of the person. Includes middle names
  LocalizedString
}
completeName = element completename { LocalizedString }
```

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```
## A variant name of a person
variantname = element variant {
  ## The type of variant name for the person. Examples include pseudonyms;
user names (online);
  ## real names (if the person is named with a pseudonym or user name);
previous legal names
  attribute type { text },
  ## The variant name itself
  FullNameType
}

## The affiliation of a person with an organization
affiliation =
  element affiliation {
    ## The name of the affiliation of the person with the organization;
typically a position title
    affiliationname?,
    ## A more detailed description of the affiliation of the person
    affiliationdescription*,
    ## The organization with which the person is affiliated
    organization?
}
affiliationname = element name { LocalizedString }

affiliationdescription = element description { LocalizedMarkedUpString }

## Organization associated with a bibliographic item
organization = element organization { OrganizationType }

OrganizationType =
    ## The name of the organization
    orgname+,
    ## The subdivision of the organization directly involved with the
production of the bibliographic item.
    ## Multiple subdivisions can be specified for an organization, with no
implication of hierarchical
    ## relation between them
    ## Editorial and advisory groups are represented as consecutive
subdivisions of the SDO
    subdivision*,
    ## Abbreviation under which the organization is known
    abbreviation?,
    ## An identifier of the organization according to an international
identifier scheme
    org-identifier*,
    ## Contact information for the organization, including address, phone
number, and email
    contact?,
    ## A logo for the organization
    logo*

orgname = element name {
   ## Type of organisation name, to differentiate variant names
   attribute type { text }?,
   LocalizedString
}

## Subdivision of organization associated with a bibliographic item
subdivision = element subdivision {
   ## The type of subdivision
```

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```
   attribute type { text }?,
   ## The subtype of subdivision; e.g. different types of technical
committee
   attribute subtype { text }?,
   ## The subdivision, modelled recursively as an organization
   OrganizationType
}

logo = element logo {
   ## The type of logo
   attribute type { text }?,
   image-no-id
}

## Depiction of the bibliographic item
depiction = element depiction {
  ## Description of what is being depicted
  attribute scope { text }?,
  ## Description of what kind of depiction this
  attribute type { text }?,
  ## A visual depiction of the bibliographic item
  image-no-id*
}

#NameWithVariants =
  #element primary { LocalizedString },
  #element variant { NameWithVariants1 }*
#
#NameWithVariants1 =
  #attribute type { text },
  #element primary { LocalizedString },
  #element variant { NameWithVariants1 }*

abbreviation =
  element abbreviation { LocalizedString }

## URI associated with a type
uri =
  element uri {
    ## The types of URI are open-ended, but include the IANA link
relations specified in RFC 8288
    attribute type { text }?,
    LocalizedStringAttributes,
    ## URI content
    xsd:anyURI
  }

# TODO may change
## Contact information for a person or organization
contact =
  ( address*, phone*, email*, uri* )

## The phone number associated with a person or organization
phone = element phone {
  ## The type of phone number; can include "Fax" and "Mobile"
  attribute type { text }?,
  ## The phone number itself
  text
}
```

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```
## Email address
email = element email { text }

## An address for a person or organization
address =
  element address {
      # iso191606 TODO
      ## The street and street number or equivalent in the address, as one
or more lines of text
      street*,
      ## The settlement or municipality in the address
      city?,
      ## The region of the country in the address
      state?,
      ## The country in the address
      country?,
      ## The postal code or equivalent in the address
      postcode?,
      ## Preformatted version of the address, not decomposed into its
component parts
      formattedAddress?
}

street = element street { text }
city = element city { text }
state = element state { text }
country = element country { text }
postcode = element postcode { text }

formattedAddress = element formattedAddress { (text | br)+ }

## An identifier of a person according to an international identifier
scheme
person-identifier =
  element identifier {
    ## The international identifier scheme for the identifier of the
person.
    ## Examples include "isni", "orcid", "uri"
    attribute type { text },
    ## The identifier value
    text
}

## An identifier of an organization according to an international
identifier scheme
org-identifier =
  element identifier {
    ## The international identifier scheme for the identifier of the
organization.
    ## Examples include GRID, LEI, CrossRef, and Ringgold
    attribute type { text }?,
    ## The identifier value
    text
}

## Representation of a citation of a bibliographic item, typically within
a document
citation =
  element citation { CitationType }
```

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```
CitationType =
    ## Bibliographic item that the citation applies to, referenced as the
anchor of a bibliographic description
    attribute bibitemid { IdRefType },
    (
       ## Describes the location of the cited information resource within
the subject of the bibliographic item.
       ## Multiple pass:c,q,a,m,p[``bibLocality``]s are interpreted as
discontinuous references.
       locality* |
       ## Describes the location of the cited information resource within
the subject of the bibliographic item in a multi-level manner.
       ## For example, the hierarchical specification "Part IV, Chapter 3,
Paragraphs 22-24"
       ## is represented as a single pass:c,q,a,m,p[`bibLocalityStack`],
composed of those three localities
       ## (as opposed to three pass:c,q,a,m,p[`bibLocality`] references,
which would be treated as three discontinuous references).
       ## Multiple pass:c,q,a,m,p[``bibLocalityStack``]s are themselves
interpreted as discontinuous references
       localityStack*
    ),
    ## Date of the citation, typically date of publication.
    ## A combination of the date time elements year, month and day should
be specified.
    ## Specification of month and day are optional.
    ## This date is not intended for disambiguation, since pass:c,q,a,m,
p[`bibitemid`]
    ## already identifies the source unambiguously; it is added for ease
of processing, in case author-date
    ## citations cannot straightforwardly extract the date from the
bibliographic source
    date?

date = element date { ISO8601Date }

## The extent or location of a bibliographic item being referred to.
## A sequence of locality elements is meant to indicate hierarchical
ordering, from greater to smaller.
## e.g. Chapter, then page, then paragraph.
## A discontinuous range can be represented by using two adjacent
localities with the same type
locality =
  element locality { BibItemLocality }

## Hierarchical arrangement of bibliographic localities, to refer to a
single span of text in a bibliographic item
localityStack =
   element localityStack {
     ## Logical connective linking localities. If not supplied, "and" is
understood
     attribute connective { "and" | "or" | "from" | "to" | "" }?,
     ## Component bibliographic localities which group together to
designate a single span of text.
     ## Earlier localities are assumed to include later localities, and be
of different types;
     ## e.g. "Chapter 7, paragraph 9–11"
     locality*
 }
```

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```
## The extent or location of a source bibliographic item being related to
a target bibliographic item
sourceLocality =
  element sourceLocality { BibItemLocality }

## Hierarchical arrangement of bibliographic localities, to refer to a
single span of text in a source bibliographic item,
## being related to a target bibliographic item
sourceLocalityStack =
   element sourceLocalityStack {
     attribute connective { "and" | "or" | "from" | "to" | "" }?,
     sourceLocality*
 }

BibItemLocality =
    ## The type of extent of a locality (e.g. section, clause, page)
    attribute type { LocalityType },
    ## The starting value of the extent, or point location
    referenceFrom?,
    ## The end value of the extent as a range, if applicable
    referenceTo?

## Type of indicator of a location or extent within a bibliographic item.
## When the value pass:c,q,a,m,p[`whole`] or pass:c,q,a,m,p[`title`] is
used, the corresponding pass:c,q,a,m,p[`BibItemLocality`]
## attribute pass:c,q,a,m,p[`identifier`] should be empty
## pass:c,q,a,m,p[`whole`] refers to the entire document.
## pass:c,q,a,m,p[`list`] is used for ordered lists in standards documents
## pass:c,q,a,m,p[`time`] is used for timestamps in audio and visual media
## pass:c,q,a,m,p[`anchor`] is used for locations within web pages
## pass:c,q,a,m,p[`line`] is a line number, dependent on printed form of
document
## pass:c,q,a,m,p[`locality:...`] is an extension point: it allows a free-
form text string that is human-readable
LocalityType = xsd:string { pattern = "section|clause|part|paragraph|chapte
r|page|title|line|whole|table|annex|figure|note|list|example|volume|issue|t
ime|anchor|locality:[a-zA-Z0-9_]+" }

referenceFrom = element referenceFrom { text }
referenceTo = element referenceTo { text }

# unlike UML, has id attribute; that results from including bibitem in a
docmodel
## Description of a bibliographic item
bibitem =
  element bibitem {
     attribute id { xsd:ID },
     BibliographicItem
}

## Description of a bibliographic item: no ID attribute (for use in
Relaton, metadata)
bibitem_no_id =
  element bibitem {
     BibliographicItem
}

## Used to present a group of bibliographic items as a single group;
## e.g. when summarising the collection of standards created by a
standards body.
```

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```
## A collection may be used for bibliographic exchange but is typically
not necesary for citation purposes
relaton_collection =
  element relaton-collection {
    ## The type of grouping of bibliographic items
    attribute type { text }?,
    ## The title given to the grouping of bibliographic items
    btitle,
    ## Contributors to the production of the bibliographic items as a
grouping,
    ## with corporate responsibility for all the items in the group
    ## (e.g. as compilers of a collection or corporate authors)
    contributor*,
    ## The individual items which constitute the group, expressed as
relations to the
    ## document group. The pass:c,q,a,m,p[`type`] attribute of each
relation is expected to be either pass:c,q,a,m,p[`includes`] or pass:c,q,a,
m,p[`hasPart`],
    ## depending on whether the items exist as independent documents, or
are parts of a multi-part document
    docrelation*
}

## Type of bibliographic item.
## The value list complies with the types provided in ISO 690:2021.
## NOTE: These values represent a strict superset to BibTeX
## publication types, and therefore any BibTeX type value can be
## mapped to these values. Some values here do not have a corresponding
## entry in BibTeX, for instance, "standard" and "website".
BibItemType =
    ## An article from a journal or magazine
    "article" |
    ## A monograph
    "book" |
    ## A booklet or pamphlet. The distinction between book and booklet is
not made frequently
    "booklet" |
    ## A manual
    "manual" |
    ## A conference proceedings
    "proceedings" |
    ## A presentation given in a formal meeting
    "presentation" |
    ## A dissertation given in an academic institution, as a summation of
research
    "thesis" |
    ## A technical report
    "techreport" |
    ## A standard, a document issued by a Standards Defining Organization
    "standard" |
    ## An intellectual creation which has not been published, e.g. a
manuscript.
    ## NOTE: Properly this does not represent a distinct bibliographic
type, and it
    ## should be avoided in favour of using the pass:c,q,a,m,p[`status`]
element of pass:c,q,a,m,p[`BibliographicItem`]
    "unpublished" |
    ## A map or other cartographic resource
    "map" |
    ## A resource avaiulable in digital form
```

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```
    ## NOTE: The overloaded type pass:c,q,a,m,p[`electronicResource`]
should be avoided where possible, particularly if the
    ## resource corresponds closely to a paper bibliographic type, such as
pass:c,q,a,m,p[`book`] or pass:c,q,a,m,p[`article`].
    ## The distinction between offline and online resources should be made
through pass:c,q,a,m,p[`medium`] (electronic vs physical).
    ## Specialisations of pass:c,q,a,m,p[`electronicResource`] include
pass:c,q,a,m,p[`dataset`], pass:c,q,a,m,p[`webResource`], pass:c,q,a,m,
p[`website`],
    ## pass:c,q,a,m,p[`socialMedia`], and pass:c,q,a,m,p[`software`].
    "electronic resource" |
    ## An audiovisual resource. Is a superclass of other types such as
pass:c,q,a,m,p[`video`] and pass:c,q,a,m,p[`music`]
    "audiovisual" |
    ## A film
    "film" |
    ## A video
    "video" |
    ## A broadcast made through mass media, including radio and television
    "broadcast" |
    ## Computer executable code, not itself human-readable text (though it
may generate such text)
    "software" |
    ## A graphic work, a work with two-dimensional or three-dimensional
content
    "graphic_work" |
    ## A musical work. Includes both notated music and music performances:
    ## The two are differentiated through pass:c,q,a,m,
p[`BibliographicItem/medium/content`] as "notated music" vs "performed
music"
    "music" |
    ## A patent
    "patent" |
    ## A (typically untitled) part of a book. May be a chapter (or
section, etc.) and/or a range of pages
    "inbook" |
    ## A part of a book having its own title, and typically having
distinct authorship
    "incollection" |
    ## An article in a conference proceedings
    "inproceedings" |
    ## A journal or periodical publication
    "journal" |
    ## A collection of web resources, presented under the same URL domain
and under the same (individual or corporate) authorship
    "website" |
    ## A human-readable or consumable web resource, a single item
accessible online via a web browser,
    ## which is not composed of components all of which can be accessed in
the same way.
    ## Includes media files, as well as individual web pages
    "webresource" |
    ## An electronic dataset, a collection of data that is not meant to be
human-readable, and which is typically only machine readable
    "dataset" |
    ## A instance of a resource curated and preserved in an archive, which
mediates any access to it.
    ## Typically it is physical, unique, and unpublished.
    ##  NOTE: The content of the resource may be published separately,
```

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```
    ##  but that makes it a distinct bibliographic item, as access to it
is no longer mediated through the archive
    "archival" |
    ## One or more resources within a collection that is typically
collectively authored by member users.
    ## Includes blog posts, forum posts, social media posts, tweets. Is
usually a pass:c,q,a,m,p[`webResource`],
    ## but not always (e.g. blogs on WeChat are only accessible within the
WeChat app.)
    "social_media" |
    ## A single communication intended for multiple persons, and publicly
accessible.
    ## May be electronic (e.g. Facebook status update) or voice (e.g.
evacuation alert), but is typically not print
    "alert" |
     ## A single communication intended for a restricted number of
authorised persons (typically one).
     ## May be electronic (e.g. Twitter direct message, email) or voice (e.
g. a remark made to someone,
     ## typically cited as "personal communication")
    "message" |
     ## An exchange of messages between two or more persons. May be
electronic (e.g. web chat) or voice (e.g. phone call)
    "conversation" |
     ## A compound resource consisting of other resources, which are
themselves presupposed to have their type specified..
    "collection" |
     ## Bibliographic type not adequately described in the foregoing
    "misc"

## Description of a bibliographic resource
BibliographicItem =
    ## The type of the bibliographic item
    attribute type { BibItemType }?,
    ## The version of the Relaton schema that this description conforms to
    attribute schema-version { text }?,
    ## The date at which the bibliographic item was last updated
    fetched?,
    ## A pre-formatted version of the full bibliographic item reference,
    ## rendered for human reading, and used to sidestep the rendering of
the reference out of its component parts
    formattedref?,
    ## The title(s) of the bibliographic item
    btitle+,
    ## The URI(s) associated with the bibliographic item
    bsource*,
    ## The identifier(s) of the bibliographic item in an international
standard scheme
    docidentifier+,
    ## Unprefixed, preferably numeric version of an identifier of the
bibliographic item, intended for sorting of bibliography
    docnumber?,
    ## One or more date-times associated with the production of or access
to the bibliographic item
    bdate*,
    ## Contributors to the production of the bibliographic item
    contributor*,
    ## The edition of the bibliographic item
    edition?,
```

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```
    ## The version of the bibliographic item (within an edition). Can be
used for drafts.
    ## Can be more than one, in case of multiple versioning schemes
    version*,
    ## Note(s) associated with the bibliographic item
    biblionote*,
    ## The language(s) in which the bibliographic item is expressed
    language*,
    ## The locale(s) in which the bibliographic item is expressed
    locale*,
    ## The script(s) in which the bibliographic item is written
    script*,
    ## The abstract of the bibliographic item
    bibabstract*,
    ## The publication or preparation status of the bibliographic item
    status?,
    ## The copyright status of the bibliographic item
    copyright*,
    ## The relation(s) of the bibliographic item to other bibliographic
items
    docrelation*,
    ## The series of the bibliographic item
    series*,
    ## The medium the subject is realized on.
    ## Medium can be used to differentiate between "electronic" and
"physical" manifestations of an information resource.
    medium?,
    ## The geographic location associated with the production of the
bibliographic item
    bplace*,
    ## The price set on accessing the bibliographic item.
    ## The price should be treated as nominal, rather than capturing all
possible pricings at a given time
    bprice*,
    ## The extent of the bibliographic item, if reference is not being
made to the entirety of the item described.
    ## Repeats for different levels of granularity (e.g. volume number,
page number), or for discontinuous ranges
    ## (e.g. multiple page ranges, pages plus plates)
    extent*,
    ## The bibliographic size of the bibliographic item, measured in the
same units as extent (i.e. pages, volumes,
    ## megabytes, hours, rather than cm^2.) Distinct from the physical
size of the bibliographic item, captured in medium/size
    bibliographic_size?,
    ## The location where the bibliographic item may be accessed.
    ## Used for archival resources. Also used for pathways to access
digital resources, where a URI is not practical
    accesslocation*,
    ## A license under which the bibliographic item has been issued.
    ## NOTE: This should preferably be encoded as  a URI or short
identifier, rather than descriptive text
    license*,
    ## The classification of the bibliographic item according to a
standard classification scheme
    bclassification*,
    ## Keyword(s) for the bibliographic item
    bkeyword*,
    ## Information about how long the current description of the
bibliographic item is valid for
```

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```
        validity?,
        ## Depiction of the bibliographic item, typically an image
        depiction*

    ## Reduced description of a bibliographic resource, without mandatory
    title and docidentifier, used for document relations
    ## Refer to pass:c,q,a,m,p[`BibliographicItem`] for definitions
    ReducedBibliographicItem =
        attribute type { BibItemType }?,
        attribute schema-version { text }?,
        fetched?,
        formattedref?,
        btitle*,
        bsource*,
        docidentifier*,
        docnumber?,
        bdate*,
        contributor*,
        edition?,
        version*,
        biblionote*,
        language*,
        locale*,
        script*,
        bibabstract*,
        status?,
        copyright*,
        docrelation*,
        series*,
        medium?,
        bplace*,
        bprice*,
        extent*,
        bibliographic_size?,
        accesslocation*,
        license*,
        bclassification*,
        bkeyword*,
        validity?,
        depiction*

    ## A title of a bibliographic item, associated with a type of title
    btitle = element title { TypedTitleString }

    bsource = element uri { TypedUri }

    formattedref = element formattedref {
      ## format of formatted reference; Metanorma assumes references are
    formatted as Metanorma XML
      attribute format { text }?,
      TextElement+
    }
    license = element license { text }

    fetched = element fetched { ISO8601DateTime }

    ## The time interval for which a bibliographic item is determined valid,
    and the associated revision date
    validity = element validity {
      ## The date and time when this bibliographic item becomes valid
```

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```
  validityBegins?,
  ## The date and time when this bibliographic item becomes invalid
  validityEnds?,
  ## The date and time of issuance of the version of the document
  ## for which this claim of validity is made, if applicable
  validityRevision?
}
validityBegins = element validityBegins { ISO8601DateTime }
validityEnds = element validityEnds { ISO8601DateTime }
validityRevision = element revision { ISO8601DateTime }


TypedTitleString =
  ## Type of title given to a bibliographic item. Indicative values
include:
  ## "alternative": alternate title for the item
  ## "original": The original title of the item. Includes the source
language title of a translated item
  ## "unofficial": A title that has become prevalent but has never been
the official or intended title of the item
  ## "subtitle": Subsidiary title of the item
  ## "main": The default title of the item, privileged in citation
  attribute type { text }?,
  ## (legacy attribute) format; can have value text/plain
  attribute format { text }?,
  ## Content of title
  LocalizedMarkedUpString

# TitleType = ( "alternative" | "original" | "unofficial" | "subtitle" |
"main" )

## URI with type
TypedUri =
  ## Type of URI
  attribute type { text }?,
  LocalizedStringAttributes,
  xsd:anyURI

## Type which allows date and time to be specified as either a Gregorian
## date and time, as specified in ISO 8601, as text, or as both
DateType =
  ## Date and time, as specified in text
  attribute text { text }?,
  ## Gregorian date and time, as specified in ISO 8601. Can be used
  ## as a canonical interpretation of the date and time given in pass:c,q,
a,m,p[`text`]
  ( ISO8601Date )?

## Indicates type of date within a bibliographic lifecycle.
## NOTE: Typically only the pass:c,q,a,m,p[`published`] date is of interest
BibliographicDateType =
  ## The date on which the document was published (distributed by the
publisher)
  "published" |
  ## Date a document was last accessed by the compiler of the
bibliographic record; routinely used for online publications.
  ## NOTE: Unlike in ISO 690:2021, no distinction is made between
  ## "viewed" and "accessed" based on whether the resource is human-
readable or machine-readable.)
  "accessed" |
```

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```
  ## The date on which the first version of the document was created
  "created" |
  ## The date on which the document takes effect. Applies to normative
documents
  "implemented" |
  ## The date on which the document was obsoleted/
  "obsoleted" |
  ## The date on which the document was reviewed and approved by the
issuing authority
  "confirmed" |
  ## The date on which the current version of the document was updated
  "updated" |
  ## The date on which the current version of the document was corrected,
without that correction considered to amount to a full document update
  "corrected" |
  ## The date on which the document was issued (authorised for publication
by the issuing authority).
  ## Is typically differentiated from pass:c,q,a,m,p[`published`] for
normative documents, such as standards and legislation
  "issued" |
  ## The date on which the document was broadcast
  "transmitted" |
  ## The date on which the document physically copied, or recreated
without any substantial change in content (allowing for change in medium)
  "copied" |
  ## The date on which the document was last renewed or reprinted without
any changes in content
  "unchanged" |
  ## The date on which the unpublished document was last circulated
officially as a preprint.
  ## For standards, this is associated with the latest transition to a
formally defined preparation stage,
  ## such as Working Draft or Committee Draft
  "circulated" |
  ## The date on which a document adapted for a new purpose or audience,
with some change in content (includes translation)
  "adapted" |
  ## The date on which a formal process for approval of a document was
initiated. Typically applies to standards documents in draft
  "vote-started" |
  ## The date on which a formal process for approval of a document was
closed. Typically applies to standards documents in draft
  "vote-ended" |
  ## The date on which the existence of a document is made public.
  ## Applies whether the resource has already been created or not, and
whether it is to be published or not
  "announced" |
  ## The document is guaranteed not to be changed or updated until this
date
  "stable-until"

## Significant date in the lifecycle of the bibliographic item, including
its production and its access
bdate = element date {
  bDateAttributes,
  (
    (
       ## The start of the date range described
       element from { ISO8601Date },
       ## The end of the date range described
```

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```
       element to { ISO8601Date }?
    ) |
    ## The point date described
    element on { ISO8601Date }
  )?
}

bDateAttributes =
  ## The phase of the production of or access to a bibliographic item
  attribute type { ( BibliographicDateType | text ) },
  ## An optional textual description of the date, especially when a
Gregorian date is not applicable
  attribute text { text }?

## An identifier of a bibliographic item in an international standard
scheme
docidentifier = element docidentifier { DocIdentifierType }

DocIdentifierType =
  ## The scheme or namespace of the identifier
  attribute type { text }?,
  ## The scope of the identifier, in case the identifier does not apply to
the document
  ## but to a superset or subset of entities; or in case the identifier
  ## is for a particular instance of the document, e.g. for a particular
format or edition of the document
  attribute scope { text }?,
  ## This is a primary identifier for the item, to be used in citation
  attribute primary { xsd:boolean }?,
  ## The identifier string
  LocalizedMarkedUpString
docnumber = element docnumber { text }

bclassification = element classification { DocIdentifierType }

## Place associated with the production of a bibliographic item
bplace = element place {
    ## City
    bibliocity?,
    ## Region that city is located in, given for disambiguation purposes.
    biblioregion*,
    ## Country that city is located in, given for disambiguation purposes.
    bibliocountry*,
    ## Name of the place, not broken down semantically
    formattedPlace?,
    ## URI in a geographical registry identifying the place
    uri?
}

bibliocity = element city { text }
formattedPlace = element formattedPlace { text }
biblioregion = element region { RegionType }
bibliocountry = element country { RegionType }

## Encoding of region in bibliographic pass:c,q,a,m,p[`place`]. ISO 3166
encoding is recommended
RegionType =
  ## ISO 3166 encoding
  attribute iso { text }?,
```

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```
  ## Whether the region should be included in rendering of the place, for
disambiguation
  attribute recommended { xsd:boolean }?,
  ## Name of the region
  text?

## Code for currencies, taken from ISO 4217
CurrencyType = text

## The price set on accessing the bibliographic item
bprice = element price {
   ## The currency denomination for the price
   attribute currency { CurrencyType },
   ## The currency amount for the price
   text
}

## Information about the medium and transmission of a bibliographic item
medium = element medium {
  ## The content type of the bibliographic item, reflecting the form of
  ## communication with which it is expressed and perceived. For example,
  ## pass:c,q,a,m,p[`text`], pass:c,q,a,m,p[`video`], pass:c,q,a,m,
p[`audio`].

  ## NOTE: This field is intended to convey the
  ## Content attribute of the MARC and Resource Description and Access
  ## standards, although its values are not restricted to that
  ## vocabulary; see link:++http://www.loc.gov/standards/valuelist/
rdacontent.html++[]
  bcontent?,
  ## The genre of the bibliographic item, as a classification of the
  ## type of communication it represents that is more specific than pass:c,
q,a,m,p[`content`] or pass:c,q,a,m,p[`BibliographicItem/type`].
  ## For example, "statistical dataset"
  genre?,
  ## The media type of the bibliographic item, used to access the content
  ## of the item, including file format for electronic media.

  ## NOTE: This field is intended to convey the
  ## Media attribute of the MARC and Resource Description and Access
  ## standards, although its values are not restricted to that
  ## vocabulary; see link:++http://www.loc.gov/standards/valuelist/
rdamedia.html++[]
  ## IANA Media Types are recommended for electronic resources
  form?,
  ## The storage medium of the physical representation of the
bibliographic item.

  ## NOTE: This field is intended to convey the
  ## Carrier attribute of the MARC and Resource Description and Access
  ## standards, although its values are not restricted to that
  ## vocabulary; see link:++https://www.loc.gov/standards/valuelist/
rdacarrier.html++[]
  carrier?,
  ## The size of the physical representation of the bibliographic item
  size?,
  ## The scale of the cartographic material in the bibliographic item
  scale?
}
```

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```
bcontent = element content { text }
genre = element genre { text }
form = element form { text }
carrier = element carrier { text }
size = element size { text }
scale = element scale { text }
accesslocation = element accesslocation { text }

## The size of a bibliographic item being referred to.
## A sequence of sizes can be used to indicate different numberings, e.g.
xii + 40 pp.,
## or different kinds of measures, e.g. pages + plates
sizevalue = element value {
  ## The type of size. Recommended values: page, volume, time (in ISO 8601
duration values),
  ## data (including unit), value (free-form string)
  attribute type { text },
  ## The quantity of the size
  text?
}

bibliographic_size = element size { sizevalue+ }

extent = element extent  {
  locality* | localityStack*
}

## Series to which a bibliographic item belongs. Series is to be
understood broadly,
## and it includes monograph series, journals, newspapers, and report
series within
## which the bibliographic item has appeared
series = element series {
  ## The type of series description expressed in this container
  attribute type { SeriesType }?,
  ## A pre-formatted version of the series description, incorporating
  ## all needed disambiguating information in human-readable format
  formattedref?,
  ## The title of the series
  btitle+,
  ## The place where the series is issued; used for disambiguation
  bplace?,
  ## The organization issuing the series; used for disambiguation
  seriesorganization?,
  ## The abbreviation under which the series is known
  abbreviation?,
  ## The start of the date range when the series has been known under the
given title
  seriesfrom?,
  ## The end of the date range when the series has been known under the
given title
  seriesto?,
  ## The number of the bibliographic item within the series
  seriesnumber?,
  ## The part-number of the bibliographic item within the series. For
example,
  ## if the series is a journal, the number is the volume number, and the
partnumber is the issue number
  seriespartnumber?,
```

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```
  ## An iteration of numbering of the series, if the series has restarted
numbering
  ## (as occurs in some journals); referred to as "series" in the context
of journals.
  ## For example, "n.s." (new series) or "2" indicates
  ## that the pass:c,q,a,m,p[`number`] given for the series applies to the
second iteration of numbering
  seriesrun?
}

## The type of series description given
SeriesType =
  ## Default type: The current, authoritative series description
  "main" |
  ## An alternative, potentially historical series description
  "alt" |
  text

seriesorganization = element organization { text }
seriesfrom = element from { ISO8601Date }
seriesto = element to { ISO8601Date }
seriesnumber = element number { text }
seriespartnumber = element partnumber { text }
seriesrun = element run { text }

## A note associated with the bibliographic item
biblionote = element note {
  ## The class of the note associated with the bibliographic item.
  ## May be used to differentiate rendering of notes in bibliographies
  attribute type { text }?,
  ## The content of the note
  LocalizedStringAttributes,
  (
    ## Multiple blocks of content
    BasicBlockNoId+ |
    ## Single block of content
    TextElement+
  )
}

## Abstract of bibliographic item
bibabstract = element abstract {
  LocalizedStringAttributes,
  ## What format the formatted abstract is in. In Metanorma, assumed to be
Metanorma XML
  attribute format { text }?,
  (
    ## Multiple blocks of content
    BasicBlockNoId+ |
    ## Single block of content
    TextElement+
  )
}

## The copyright status of a bibliographic item.
copyright =
  element copyright {
    ## The copyright date of the bibliographic item
    from,
    ## The date when the copyright of the bibliographic item expires
```

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```
    to?,
    ## The copyright owner for the bibliographic item.
    owner+,
    ## The extent of the bibliographic item, or contexts of use, for which
this
    ## assertion of copyright applies. For example, this description may
only apply
    ## to the preface of a book
    copyright_scope?
}

# TODO potentially should be locality | localityStack
copyright_scope = element scope { text }

from = element from { xsd:gYear }
to = element to { xsd:gYear }

## Copyright owner
owner =
  element owner { ContributorInfo }

## Type of the relationship between a main document (described in pass:c,q,
a,m,p[`BibliographicItem`]) and a target document
## Detailed in link:++https://www.relaton.org/model/relations/++[]
DocRelationType =
"includes" |
"includedIn" |
"hasPart" |
"partOf" |
"merges" |
"mergedInto" |
"splits" |
"splitInto" |
"instanceOf" |
"hasInstance" |
"exemplarOf" |
"hasExemplar" |
"manifestationOf" |
"hasManifestation" |
"reproductionOf" |
"hasReproduction" |
"reprintOf" |
"hasReprint" |
"expressionOf" |
"hasExpression" |
"translatedFrom" |
"hasTranslation" |
"arrangementOf" |
"hasArrangement" |
"abridgementOf" |
"hasAbridgement" |
"annotationOf" |
"hasAnnotation" |
"draftOf" |
"hasDraft" |
"predecessorDraftOf" |
"hasPredecessorDraft" |
"successorDraftOf" |
"hasSuccessorDraft" |
"editionOf" |
```

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```
      "hasEdition" |
      "updates" |
      "updatedBy" |
      "derivedFrom" |
      "derives" |
      "describes" |
      "describedBy" |
      "catalogues" |
      "cataloguedBy" |
      "hasSuccessor" |
      "successorOf" |
      "adaptedFrom" |
      "hasAdaptation" |
      "adoptedFrom" |
      "adoptedAs" |
      "reviewOf" |
      "hasReview" |
      "commentaryOf" |
      "hasCommentary" |
      "related" |
      "hasComplement" |
      "complementOf" |
      "obsoletes" |
      "obsoletedBy" |
      "identical" |
      "equivalent" |
      "nonequivalent" |
      "cites" |
      "isCitedIn"

      ## Relation between a bibliographic item and another bibliographic item
      docrelation =
        element relation {
          ## The type of document relation described, using a controlled
      vocabulary
          attribute type { DocRelationType },
          ## A more complete description of the type of document relation
      described
          element description { LocalizedMarkedUpString }?,
          ## The target bibliographic item to which this bibliographic item is
      described as related to
          element bibitem { ReducedBibliographicItem },
          ## The extent of the target bibliographic item which is related to
      this bibliographic item,
          ## provided that it is not the entire bibliographic item that is so
      related
          (locality* | localityStack*),
          ## The extent of this bibliographic item which is related to the
      target bibliographic item,
          ## provided that it is not the entire bibliographic item that is so
      related
          (sourceLocality* | sourceLocalityStack*)
      }

      ## A version of the bibliographic item (within an edition). Can be used
      for drafts
      version =
        element version {
          ## Versioning scheme, in case of multiple versioning schemes
          attribute type { text }?,
```

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```
    text
  }

vedition = element edition { xsd:int }
revision-date = element revision-date { ISO8601Date }
draft = element draft { text }

#bkeyword = element keyword {
    #LocalizedString |
    #(
       #element vocab { LocalizedString },
       #vocabid+
    #) |
    #(
       #element taxon { LocalizedString }+,
       #vocabid+
    #)
#}

## Keyword for a bibliographic item
bkeyword = element keyword {
   ## The keyword as a single, controlled or uncontrolled vocabulary item
   element vocab { LocalizedString }?,
   ## The keywords as a hierarchical taxonomy. For example, the sequence
of pass:c,q,a,m,p[`taxon`] elements
   ## pass:c,q,a,m,p[`pump`], pass:c,q,a,m,p[`centrifugal pump`], pass:c,q,
a,m,p[`line shaft pump`] represents a taxonomic classification
   element taxon { LocalizedString }*,
   ## Identifiers for the keyword as a controlled vocabulary
   vocabid*
}

## Item in a controlled vocabulary
vocabid = element vocabid {
    ## A label for the controlled vocabulary
    attribute type { text },
    ## A URI for the controlled vocabulary item
    attribute uri { xsd:anyURI }?,
    ## The code or identifier for the controlled vocabulary item
    element code { text }?,
    ## The term itself for the controlled vocabulary item
    element term { text }?
}

#Anycontents = mixed {
# link:++https://github.com/relaxng/jing-trang/issues/211++[]
# link:++https://lists.oasis-open.org/archives/office/200808/msg00024.html+
+[]
# link:++https://lists.oasis-open.org/archives/office/200808/msg00099.html+
+[]
# For this to work, we will actually strip any attributes in the
Anycontents before
# passing it for validation. Horrible I know, but there are no good
alternatives
# that also allow us to do grammar inheritance
 # (attribute * { text } | Any)*
#        Any*
#}
AnyElement = element * { ( text | AnyElement)+ }
```

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```
}
```

RELAXNG Compact serialisation of the reference model (canonical: relaton-models `relaton/grammars/biblio.rnc`)

== Mapping to BibTeX

This listing includes the BibTeX fields presented as part of the LaTeX Clause 8.2.1.1, Example 1 package, and (asterisked) the additional BibTeX fields in citavi Clause 8.2.1.1, Example 1.

=== Categories of information resource

From [resource_types].

BibTeX	Relaton
entry type	`bibitem@type`

=== Creator

From Clause 8.2.

Note that BibTeX processes names as follows:

```
author :=  authorName ("and" authorName)*
editor :=  editorName ("and" editorName)*
authorName := Surname, Forename MiddleName* | Forename MiddleName* Surname
editorName := Surname, Forename MiddleName* | Forename MiddleName* Surname
Surname := \s+ | "{" [^}]+ "}"
Forename := \s+ | "{" [^}]+ "}"
MiddleName := \s+ | "{" [^}]+ "}"
```

BibTeX	Relaton
authorName	`bibitem/contributor[role/@type = 'author']`
editorName	`bibitem/contributor[role/@type = 'editor']`
forename	`bibitem/contributor/person/name/forename`
surname	`bibitem/contributor/person/name/surname`
middlename	`bibitem/contributor/person/name/middlename`

=== Title

From [title].

BibTeX	Relaton
booktitle	`bibitem/relation[@type = 'includedIn']/bibitem/title`
title	`bibitem/title[@type = 'main']`
subtitle*	`bibitem/title[@type = 'subtitle']`

=== Document relations

From [doc-relations].

BibTeX	Relaton
none	–

=== Medium

From [medium].

BibTeX	Relaton
none	–

=== Edition

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From [editions].

BibTeX	Relaton
edition	`bibitem/edition`

=== Production

From [production].

BibTeX	Relaton	Note
address	`bibitem/place`	
howpublished	`bibitem/note`	
institution, school, organization	`bibitem/contributor[role/@type = 'distributor' and role = 'sponsor']/organization/name`	(The three never coocur in the same entry type)
month, year	`bibitem/date[@type = 'published']/on`, `bibitem/date[@type = 'created']/on`	
publisher	`bibitem/contributor[role/@type = 'publisher']/organization/name`	
urldate*	`bibitem/date[@type = 'accessed']/on`	

=== Numeration and pagination

From [numeration].

BibTeX	Relaton
chapter	`bibitem/extent[@type = 'chapter']/referenceFrom`

=== Series title and number

From [series_title_number].

BibTeX	Relaton	Note
journal, series	`bibitem/series/title`	(The two never coocur in the same entry type)

=== Identifiers

From [identifiers].

BibTeX	Relaton
doi*	`bibitem/docidentifier[@type = 'doi']`
isbn*	`bibitem/docidentifier[@type = 'isbn']`
lccn*	`bibitem/docidentifier[@type = 'lccn']`
issn*	`bibitem/docidentifier[@type = 'issn']`

=== Location

From [location].

BibTeX	Relaton	Note
number, volume	`bibitem/extent[@type = 'volume']/referenceFrom`	(The two do not coocur in any entry type)
pages	`bibitem/extent[@type = 'page']/referenceFrom`, `bibitem/extent[@type = 'page']/referenceTo`	
file2, url	`bibitem/uri`	

=== Additional general information

From [additional-info].

BibTeX	Relaton
note	`bibitem/note`
type	`bibitem/classification`

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BibTeX	Relaton
timestamp*	`bibitem/fetched`
comment*	`bibitem/note[@type = 'comment']`
id*	`bibitem/@id`
language*	`bibitem/language`

==== Classification

BibTeX	Relaton
keywords*	`bibitem/classification`

==== Price and availability

BibTeX	Relaton

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