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Information and documentation – Bibliographic reference model and serialization

THE CALENDARING AND SCHEDULING CONSORTIUM

TC VCARD

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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.

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This document was prepared by Technical Committee *VCARD*.

INTRODUCTION

ISO 690 has been in place for over 30 years as of this writing, as the ISO model of bibliographical referencing and citation (being one of several such standards). During the same time, a multitude of electronic referencing tools and conventions has evolved, and any of them can be used to encode at least a subset of the bibliographic information captured in ISO 690. However, there is no authoritative reference model on how to represent the guidelines of ISO 690 electronically. As a result, 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. Nor is there a fallback model of ISO 690 in place, to draw on where existing electronic referencing tools do not fully cover the requirements of the specification.

In addition, a rigorous logical model of ISO 690 would help identify any gaps, inconsistencies, or areas open for interpretation in the conceptual model proposed in the specification, and in the rendering model described there. (The latter is more liable to need ambiguities fixed than the former, since these will become apparent in any attempts to render references in a way compliant with ISO 690.)

This document proposes a reference model and serialisation for ISO 690. The serialisation can be used to represent references compliant to ISO 690; but 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 [1] has been used as a representative bibliographic tool, because of its popularity and relative completeness.

A separate document proposes an example rendering stylesheet for the serialisation of this model, which aligns with the examples used in ISO 690. ISO 690 prescribes some aspects of rendering (e.g. sequence, use of “in:” and “at:”), and leaves others to implementation (e.g. use of italics, use of punctuation). The stylesheet allows the container model and the rendering model of ISO 690 to be differentiated, and the rendering items prescribed by ISO 690 to be identified clearly.

1. SCOPE

This document provides a reference model and serialisation for [ISO 690](#).

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, *Code for the representation of names of languages*
- ISO 690, *Information and documentation – Guidelines for bibliographic references and citations to information resources*
- ISO 8601, *Data elements and interchange formats – Information interchange – Representation of dates and times*
- ISO 15924, *Information and documentation – Codes for the representation of names of scripts*

3. TERMS AND DEFINITIONS

For the purposes of this document, the terms and definitions given in [ISO 690](#) and the following apply.

3.1. bibliographer

entity responsible for creating a reference

4. REFERENCE MODEL

This document provides a number of data models that collectively provide the necessary data elements for the ISO 690 citation style.

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 [Appendix A](#).

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 [\[1\]](#).

5. DATA TYPES

Common data types used within this document are provided below.

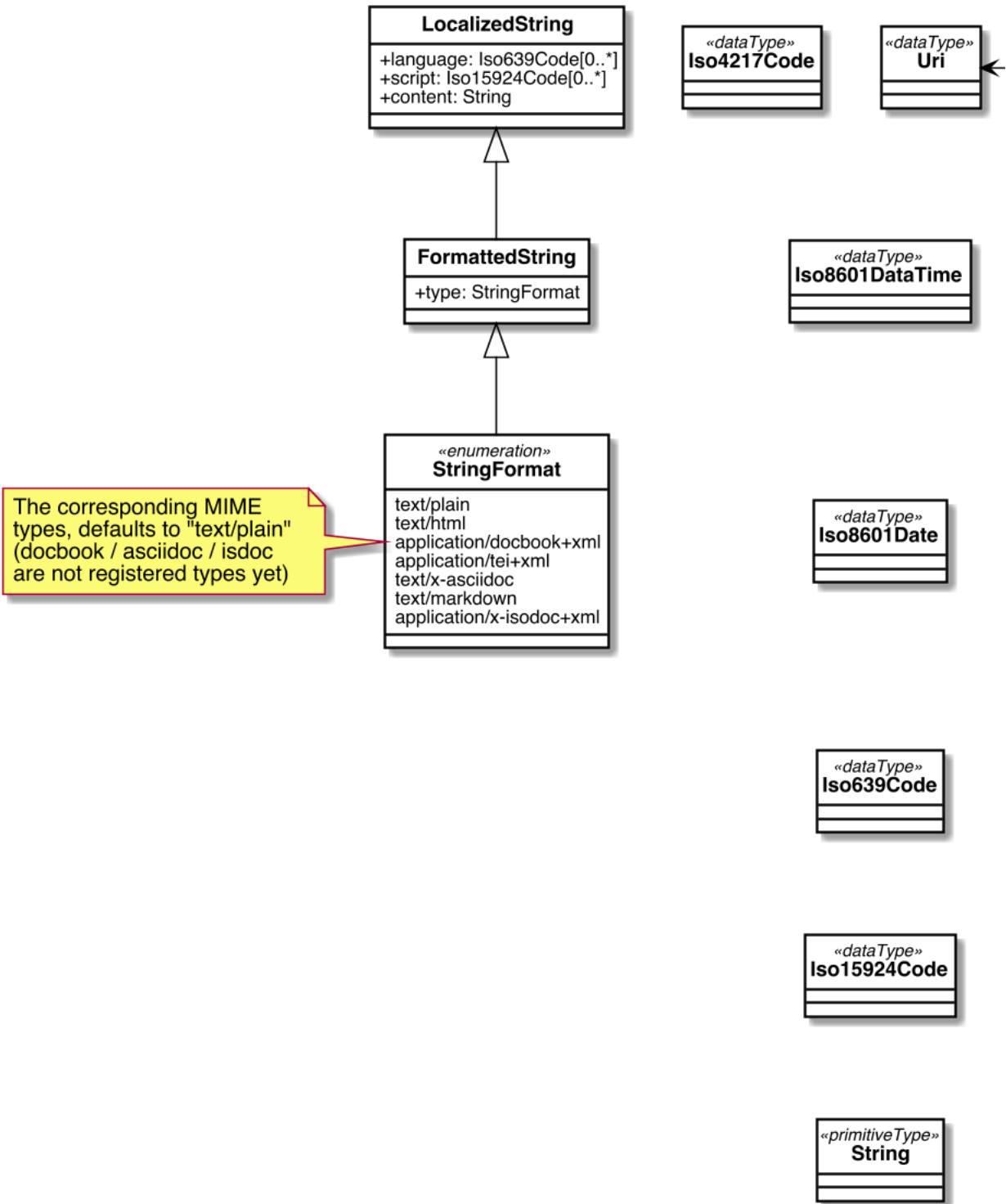


Figure 1

Uri	Container for URIs, as defined by RFC 3986 .
Iso8601Date	Gregorian date, as specified in ISO 8601 .
Iso8601DateTime	Gregorian date and time, as specified in ISO 8601 .
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 , 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 RFC 8288 .
FormattedString	String which is formatted according to conventions specified in a named MIME type (RFC 2046).
LocalizedString	FormattedString which optionally specifies its language and/or script.

6. BIBLIOGRAPHIC ITEM MODEL

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 (Appendix A).

The reference model for citations is provided in Appendix B.

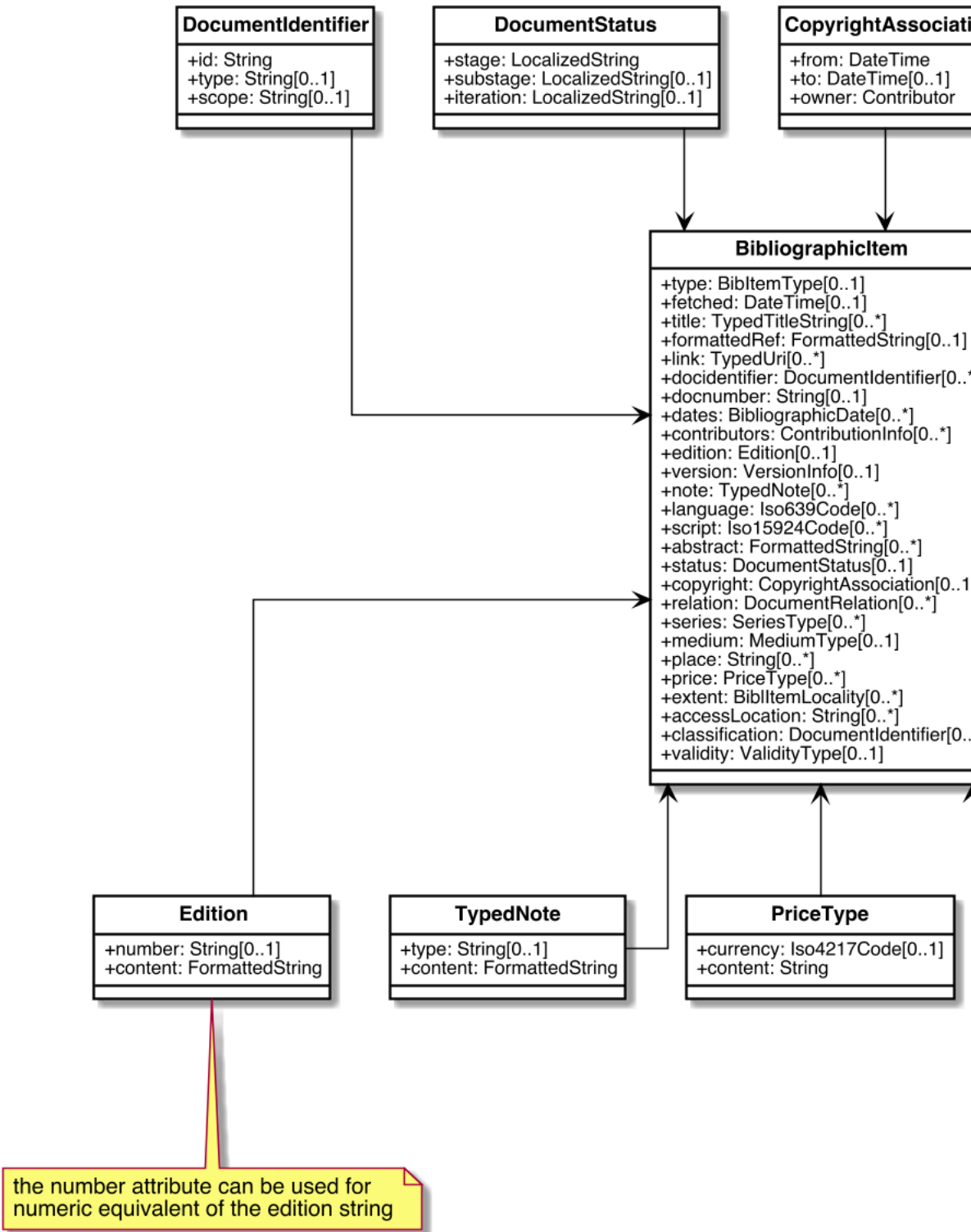


Figure 2-1

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/link	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.
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 physical medium of the bibliographic item.
BibliographicItem/medium/form	The form 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/classification	The classification of the bibliographic item according to a standard classification scheme.
BibliographicItem/validity	Information about how long the current description of the bibliographic item is valid for.

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 <code>Iso8601DateTime</code> .
ValidityInfo/validityEnds	the date and time when this object becomes invalid. The value type is <code>Iso8601DateTime</code> .
ValidityInfo/revision	issuance date/time of this object. The value type is <code>Iso8601DateTime</code> .

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>
</bibitem>
```

6.2. Series

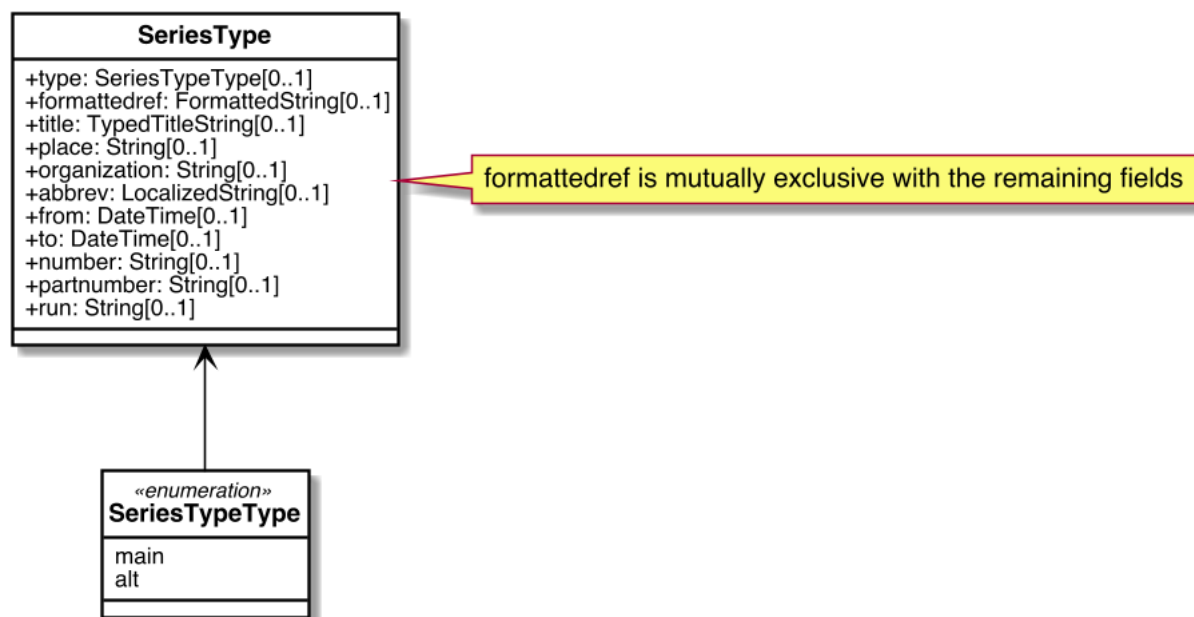


Figure 3-1

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.
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.

6.3. Bibliographic Dates

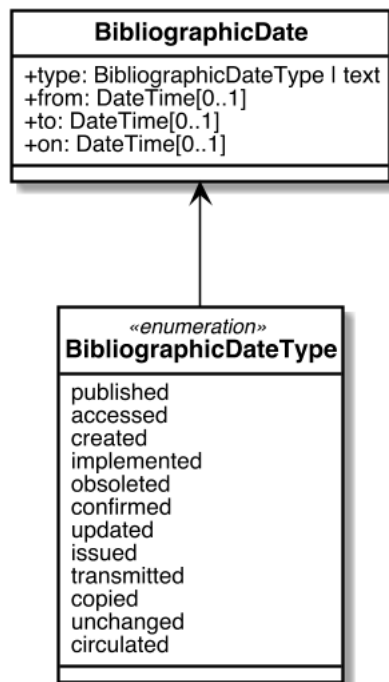


Figure 4-1

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).

6.4. Bibliographic Item Types

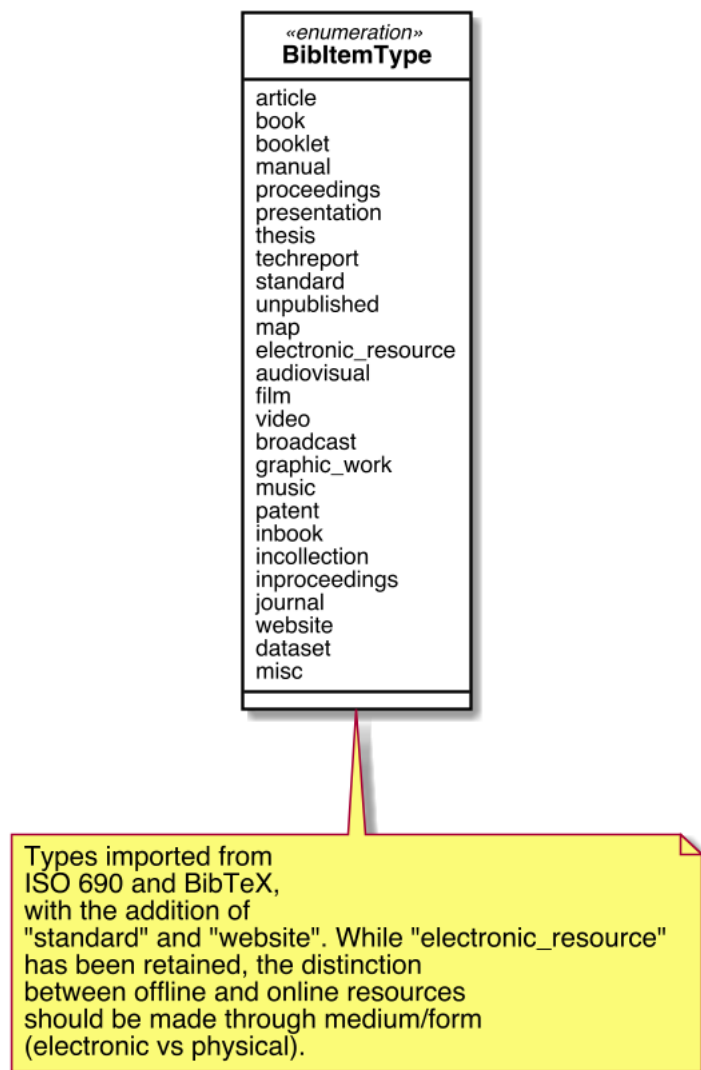


Figure 5-1

BibItem

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

7. CONTRIBUTION AND CONTRIBUTOR MODELS

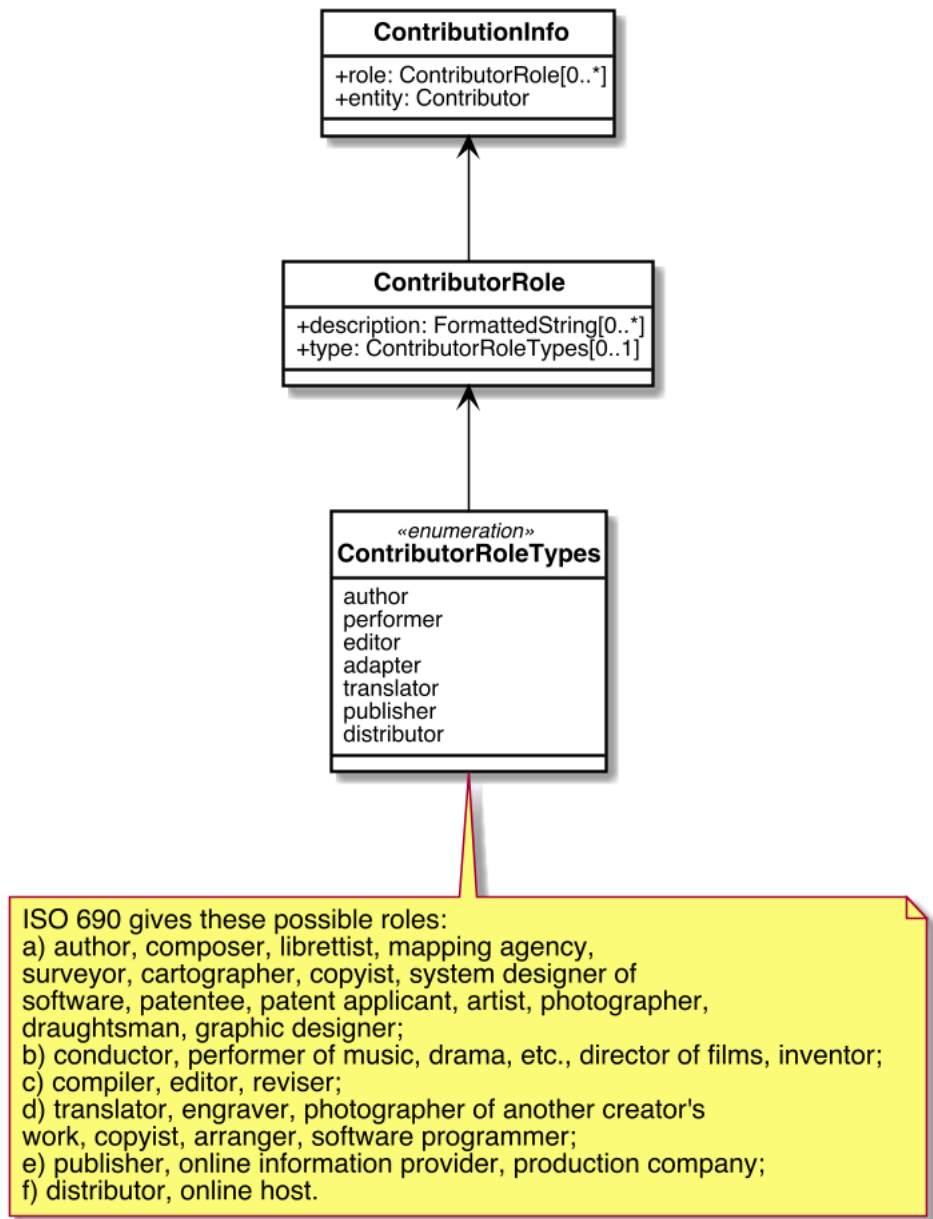


Figure 6-1

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.
ContributionInfo/role/description	The specific 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..

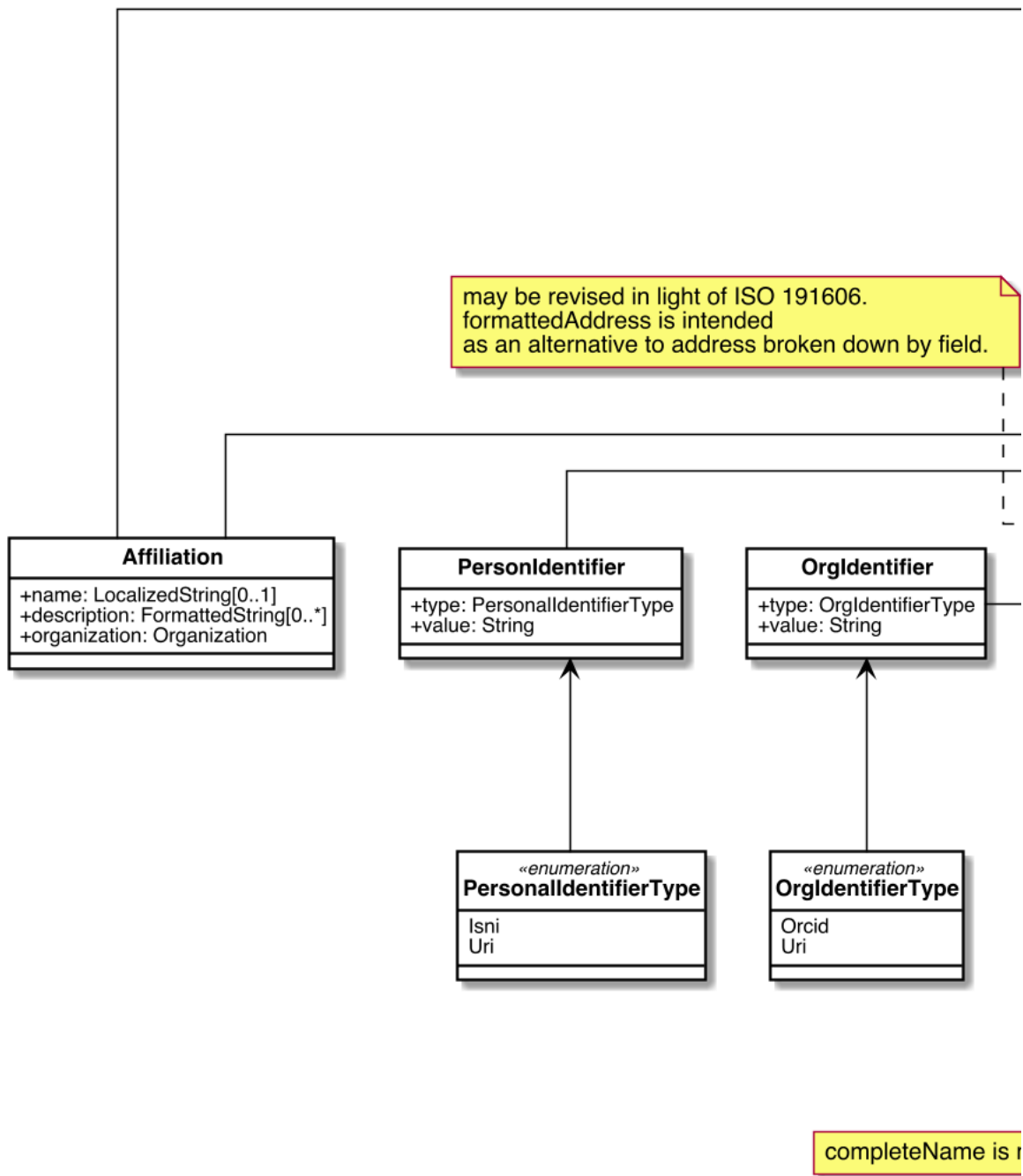


Figure 7-1

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.
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/uri	A URI with information about the person.
Person/name/affiliation	The affiliation of the person within an organization.
Person/name/affiliation/name	The name of the affiliation of the person.
Person/name/affiliation/description	A more detailed description of the affiliation of the person.
Person/name/affiliation/organization	The organization with which the person is affiliated.
Person/name/identifier/value	An identifier of the person according to an international identifier scheme.
Person/name/identifier/type	The international identifier scheme for the identifier of the person.
Person/name/contact	Contact information for the person, including address, phone number, and email.
Organization/name	The name of the organization.
Organization/subdivision	The subdivision of the organization directly involved with the production of the bibliographic item.
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.

8. BIBLIOGRAPHIC DOCUMENT RELATIONS

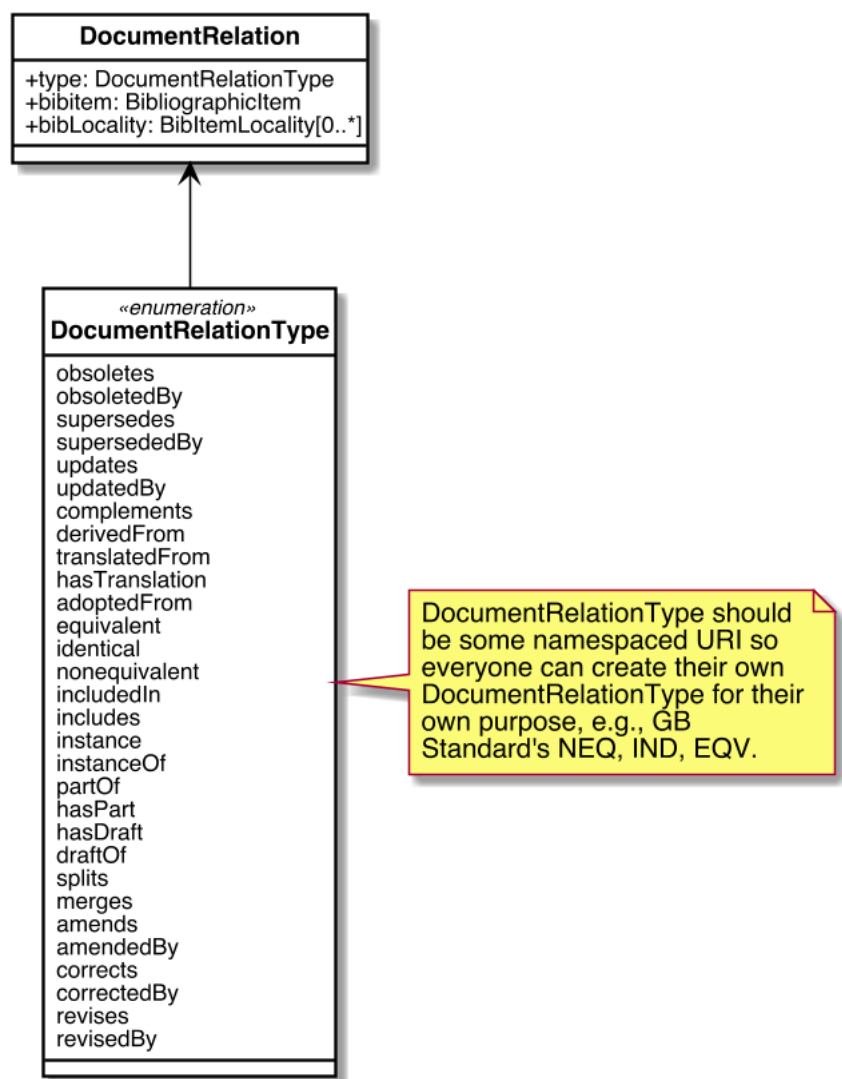


Figure 8-1

DocumentRelation/type	The type of document relation described
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, if it is not the entire bibliographic item that is so related.

9. PROVENANCE

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]”).

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.

This means indicating the provenance of bibliographic information, and allowing 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

```
<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 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.

10. CATEGORIES OF INFORMATION RESOURCE

- Source: [ISO 690, Clause 15](#)
- 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 15](#)), as well as rendering rules specific to information resource categories (e.g. [ISO 690, Clause 15.6.4](#): series title appears before item title for broadcasts). For that reason, bibliographic items should indicate what bibliographic type they belong to.

NOTE 1 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 distinction between:

"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 2 The above distinction aligns with BibTeX usage.

The following types have been added:

- dataset: an electronic dataset. Used to avoid the overloading of "electronic resource" as a type.
- website: a web site or web page. Used to avoid the overloading of "electronic resource" as a type.

11. CREATOR

11.1. General

- Source: ISO 690, Clause 5
- Serialisation: `bibitem/contributor, Person, Organization, Affiliation`

11.2. Selection

ISO 690, Clause 5.1 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, distributor, corresponding to ISO 690, Clause 5.1.a through ISO 690, Clause 5.1.f), while `bibitem/contributor/role/description` contains one or more specific descriptions of the role of the contributor.

Whether subsidiary creators should be included in a bibliographic item, and which creators should be included, is at the discretion of the bibliographer; see ISO 690, Clause 5.4.5; ISO 690, Clause 5.4.6.

Exceptionally, “translator” is differentiated from the other “adaptor” roles of ISO 690, Clause 5.1.d, because it is so different to other adaptor roles such as engraver or photographer.

NOTE 1 Although both composer and librettist are included as authors under ISO 690, Clause 5.1.a, but the two roles are clearly differentiated in ISO 690, Clause 15.8.1, with the composer given priority over the librettist.

NOTE 2 Inventor is atypical of the “performer” roles included in ISO 690, Clause 5.1.b, and could arguably be regarded as an author role instead, alongside patentee.

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

EXAMPLE 1

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>
  </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>
    </bibitem>
  </relation>
</bibitem>
```



```

    </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 2

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>
    </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 3

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 4

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

```

<bibitem type="audiovisual">
  <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>

```

```
<place>Frankfurt</place>
</bibitem>
```

11.3. Personal names

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 (unlike the recommendation of [ISO 690, Clause 5.2.1](#)) language-specific conventions for ordering of name components are to be observed; e.g. “James CLARK, John COWAN, MURATA Makoto”.

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.

EXAMPLE 1

BACH, J.S.

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

EXAMPLE 2

PICASSO, Pablo

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

EXAMPLE 3

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 4

KING, Martin Luther, Jr.

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

EXAMPLE 5

STEWART, John H.

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

11.4. Organisations

The model caters for both full names and abbreviations of organisations (ISO 690, Clause 5.3.1). 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 5.3.3.

EXAMPLE 1

St. Thomas University [Florida].

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

EXAMPLE 2

St. Thomas University [New Brunswick].

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

EXAMPLE 3

ACADEMY OF ATHENS. Research Centre for Modern Greek Dialects.

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

11.5. Pseudonyms

If both the assumed and the real name of the creator are known, the supplementary real name (ISO 690, Clause 5.5) should be modelled as a note:

EXAMPLE

TWAIN, Mark [pseud. of Samuel Langhorne CLEMENS]

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

11.6. Anonymous and Varii

Descriptors of authors, such as “Anon” (ISO 690, Clause 5.6) or “Various Authors”, should be given as completeName elements. As with pseudonyms, the real name of the creator if known can be modelled as a note.

EXAMPLE 1

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 2

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

12. TITLE

12.1. General

- Source: [clause 6.2](#)
- Serialisation: `bibitem/title`

12.2. Alternative titles

A resource can have multiple titles ([ISO 690, Clause 6.1.2](#)), including alternative titles ([ISO 690, Clause 6.1.3](#)) and subtitles ([ISO 690, Clause 6.1.4](#)). 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) ([ISO 690, Clause 6.2](#)), 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.

“Untitled” can be treated as a main title ([ISO 690, Clause 6.1.7](#)).

EXAMPLE 1

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"/>
    <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>
```

EXAMPLE 2

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

```
<bibitem type="book">
  <title type="original" lang="zh" script="Hant">孙子兵法</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>
</bibitem>
```

EXAMPLE 3

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

```
<bibitem type="audiovisual">
  <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>
</bibitem>
```

13. DOCUMENT RELATIONS

13.1. General

- Source: [ISO 690, Clause 6.2](#), [ISO 690, Clause 6.4](#)
- Serialisation: `bibitem/relation`

The model allows for various relations between bibliographic items, with one related item embedded within the other.

13.2. Relation types

The base class of relation types is taken from [ISO 690](#), and represents generic bibliographical requirements, particularly inclusion in a host item ([Clause 13.3](#): `includedIn`, `includes`) and translation ([Clause 13.4](#): `translatedFrom`, `hasTranslation`). The class has been expanded substantially to deal with the requirements of standards documents:

Generic Relations:

<code>translatedFrom</code>	document A is a translation of document B
<code>hasTranslation</code>	document A has a translation as document B
<code>includedIn</code>	document A is included in document B, through a well-defined relation outlined in Clause 13.3 , and with distinct metadata
<code>includes</code>	document A includes document B, through a well-defined relation outlined in Clause 13.3 , and with distinct metadata
<code>hasPart</code>	document A includes document B, with no distinct metadata
<code>partOf</code>	document A is included in document B, with no distinct metadata
<code>complements</code>	document A is a complement or supplement of document B
<code>derivedFrom</code>	document A is derived from document B
<code>instance</code>	document A is an instance of document B (e.g. an edition, a format, a single copy)
<code>instanceOf</code>	document A has as an instance document B (e.g. an edition, a format, a single copy)
<code>hasDraft</code>	document A has as a draft document B
<code>draftOf</code>	document A is a draft of document B
<code>updates</code>	document A updates document B
<code>updatedBy</code>	document A is updated by document B

Standards Relations:

<code>obsoletes</code>	document A supersedes document B, and renders it obsolete
<code>obsoletedBy</code>	document A is superseded by document B, and is rendered obsolete
<code>supersedes</code>	document A supersedes document B, but is not rendered obsolete
<code>supersededBy</code>	document A is superseded by document B, but is not rendered obsolete
<code>adoptedFrom</code>	document A is adopted by a standards organisation from document B by a different organisation
<code>identical</code>	document A is adopted from document B, without any change
<code>equivalent</code>	document A is adopted from document B, without any significant textual change
<code>nonequivalent</code>	document A is adopted from document B, and has been altered textually significantly
<code>merges</code>	document A results from a merger of earlier documents B1, B2, B3...
<code>splits</code>	document A is split off from earlier document B
<code>corrects</code>	document A updates document B, and the change does not affect the intended meaning
<code>correctedBy</code>	document A is updated by document B, and the change does not affect the intended meaning
<code>amends</code>	document A updates document B, and the change is a minor change to the intended meaning
<code>amendedBy</code>	document A is updated by document B, and the change is a minor change to the intended meaning
<code>revised</code>	document A updates document B, and the change is a major change to the intended meaning

revisedBy document A is updated by document B, and the change is a major change to the intended meaning

13.3. Host Item

Of the bibliographic types identified in [Clause 10](#), incollection, inproceedings, and inbook are all inherently related to a host item. Other types also potentially involve relations with host items; for example, the relation between a record track and a record, or a broadcast segment and a broadcast show. The relation between host item and contained item is modelled through “includedIn”.

The relation between any two items includes a locality element, which indicates which part of the first item is related to the second. (For example, which part of the first item is superseded by the second.) The locality in the relation element can be used with “includedIn” relations, to indicate the extent of the contained item within the host item; but for consistency, it is preferable to use the extent element in the contained item, which has the same meaning.

The expected relations between host and contained items are as follows:

Table 1

Host	Contained
book, booklet, manual, techreport	incollection (if has its own title—autonomous item), inbook (if it does not have its own title—e.g. numbered chapter, page span)
journal	article
proceedings, conference	inproceedings
thesis, standard, patent	inbook
map	map
electronic resource	electronic resource
broadcast	broadcast
music	music
graphic work	graphic work
film	film
video	video

In general: text-based resources have components that can be considered a different kind of resource; components of non-textual resources are considered to be of the same type as their host.

EXAMPLE 1

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.

Dispreferred extent encoding:

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

```

Preferred extent encoding:

```

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

```

EXAMPLE 2

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

```

<bibitem type="audiovisual">
  <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>
</bibitem>

```

Translations are items derived from an item in a different language. Typically in bibliographies, the details of the source item are not provided for a translation, outside of the original author, and possibly the date of publication and the source language title of the original title. If the information about the source item is limited to these, no relation need be invoked in the title: the source title can be modelled as an original title variant (Clause 12.2); the author differentiated from the translator as creators (Clause 11.2); and the date of authorship differentiated from the date of translation (Clause 16.4: `date[@type = "created"]` vs `date[@type = "published"]`).

However, if any further details of the source item need to be provided (e.g. source language: ISO 690, Clause 14.5), they should be modelled through an overt relationship between the source item and the translation.

EXAMPLE 1

PRUS, Bolesław. 1912 [1895–1896]. *La Faraono* [Faraon]. Translated by Kabe (pseud. of Kazimierz BEIN). 2nd revised edition. Paris: Hachette.

```
<bibitem type="book">
  <title lang="eo">La Faraono</title>
  <title type="original" lang="pl">Faraon</title>
  <date type="created"><from>1895</from><to>1896</to></date>
  <date type="published"><on>1912</on></date>
  <contributor>
    <role type="author"/>
    <person>
      <name>
        <surname>Prus</surname>
        <forename>Bolesław</forename>
      </name>
    </person>
  </contributor>
  <contributor>
    <role type="translator"/>
    <person>
      <name>
        <completeName>Kabe</completeName>
        <note>pseud. of Kazimierz Bein</note>
      </name>
    </person>
  </contributor>
  <contributor>
    <role type="publisher"/>
    <organization>
      <name>Hachette</name>
    </organization>
  </contributor>
  <edition>2nd revised edition</edition>
  <language>eo</language>
</relation>
<place>Paris</place>
</bibitem>
```

EXAMPLE 2

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>
    </person>
  </contributor>
</bibitem>
```

```
</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>
```

14. MEDIUM

- Source: ISO 690, Clause 7, ISO 690, Clause 14.3, ISO 690, Clause 15.2.2, ISO 690, Clause 15.5.5, ISO 690, Clause 15.5.6
- Serialisation: bibitem/medium

ISO 690 differentiates between the medium of the item (ISO 690, Clause 7, ISO 690, Clause 15.2.2), the size of the item (ISO 690, Clause 14.3, ISO 690, Clause 15.5.6), and for maps, the scale of the item (ISO 690, Clause 15.5.5). These are all modelled as elements of the item medium; the medium itself is modelled as medium/form.

There is no fixed vocabulary modelled for medium/form. The size and scale of the item 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 1

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

```
<bibitem type="audiovisual">
  <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>
</bibitem>
```

EXAMPLE 2

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>

15. EDITION

- Source: [ISO 690, Clause 8](#)
- Serialisation: `bibitem/edition`, `bibitem/date`

Editions are modelled as free text, given the variety of ways they can be represented ([ISO 690, Clause 8.1](#)). 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.

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”]` ([ISO 690, Clause 8.2](#)).

EXAMPLE 1

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>
  </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 2

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>
```

EXAMPLE 3

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

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


16. PRODUCTION

16.1. General

- Source: ISO 690, Clause 9
- Serialisation: `bibitem/place`, `bibitem/contributor[role@type = "publisher"]`, `bibitem/date`

16.2. Place

Strictly speaking the place of production (ISO 690, Clause 9.1) is an attribute of the publisher. It is modelled as a top-level attribute of the bibliographic item in case only one of the places of the publisher is associated with the production of the item, and to allow the place to be extracted by consumers of the serialisation more readily.

EXAMPLE

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>
```

16.3. Publisher

The publisher is a subclass of creator (Clause 11). 5.1 differentiates between “publisher, online information provider, production company” and “distributor, online host” (ISO 690, Clause 5.1.e, ISO 690, Clause 5.1.f). Of the classes of creator that can be used as the publisher (ISO 690, Clause 9.2.1), “publisher or production company” and “printer or manufacturer” have `bibitem/contributor/role@type = "publisher"`; “distributor or issuing body” and “sponsoring body” have `bibitem/contributor/role@type = "distributor"` (and ISO 690, Clause 9.2.3 allows that those creators can be named in addition to publishers.)

16.4. Date

Dates are associated with specific phases of the production of a bibliographic item, and those phases are named through `date@type` (ISO 690, Clause 9.3.1). The default type used in bibliography is the date of publication (`date[@type = "published"]`), but the date of creation and updating are often given where they differ from the date of publication. The date of transmission is used instead for a broadcast. Dates of copying of a resource may be given separately to the date of creation. The date of reprinting is treated as the latest date of publication.

For a point date, only `date/on` is populated. For a date range, `date/from` and `date/to` are populated (ISO 690, Clause 9.3.6). 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; in an XML serialisation, they would be expected to follow the XML Schema `xs:datetime` representation ([4]). However bibliographic dates often contain information that cannot be restricted to an ISO 8601 date (ISO 690, Clause 9.3.2: dates in other calendars, date corrections; ISO 690, Clause 9.3.3: other subdivisions of the year; ISO 690, Clause 9.3.4: 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. Date corrections may also involve indications of provenance (Clause 9). 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`.

The date of copyright is associated expressly with the copyright holder, in `bibitem/copyright/date/from`. Unlike other bibliographic dates, the copyright date cannot be textual.

EXAMPLE 1

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 2

2018-05-09, 21:33:28

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

EXAMPLE 3

Islamic calendar 1439 [2017–2018]

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

EXAMPLE 4

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 5

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 6

1650?

```
<date type="created" text="1650?"> <on>1650</on> </date>
```

EXAMPLE 7

```
\[no date]  
<date type="created" text="[no date]"/>
```

EXAMPLE 8

```
1951 copied 1957  
<date type="created"> <on>1951</on> </date> <date type="copied"> <on>1957</on> </date>
```

EXAMPLE 9

```
1951-  
<date type="published"> <from>1951</from> </date>
```

EXAMPLE 10

```
© ISO, 2018  
<copyright> <from>1951</from> <owner><organization><name>ISO</name></organization></owner> </date>
```

17. NUMERATION AND PAGINATION

- Source: ISO 690, Clause 10
- Serialisation: `bibitem/extent`

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 (Clause 13.3), such as a journal article or book chapter (e.g. “pp. 25-45”). 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.]”), and a single value should be interpreted as a range (“[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 is unlikely to 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. Ποιήματα 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 Appendix B from the extent of a bibliographic 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.

Where localities are hierarchically related, they should be given in hierarchical order (ISO 690, Clause 10.1). However localities in an extent may be complimentary instead (e.g. “xiii+179 pp” for prefatory and main pagination; “114pp + 3 plates” for plates outside the main page numeration).

Extent includes the volume and issues of a journal (ISO 690, Clause 10.3).

EXAMPLE 1

Dedes, D. 1993. Ποιήματα 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">Ποιήματα 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>
</bibitem>
```

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). [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">
        <referenceFrom>308</referenceFrom>
      </extent>
    </bibitem>
  </relation>
  <extent type="page">
    <referenceFrom>89</referenceFrom>
    <referenceTo>112</referenceTo>
  </extent>
</bibitem>

```

EXAMPLE 3

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>Solomon</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>
<series>
  <title>Nevada Bureau of Mines and Geology Bulletin</title>
  <number>88</number>
</series>
<extent type="page">
  <referenceFrom>xiii</referenceFrom>
</extent>
<extent type="page">
  <referenceFrom>179</referenceFrom>
</extent>
</bibitem>

```

EXAMPLE 4

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">

```

```
<referenceFrom>114</referenceFrom>
</extent>
<extent type="plate">
  <referenceFrom>3</referenceFrom>
</extent>
</bibitem>
```

18. SERIES TITLE AND NUMBER

18.1. General

- Source: ISO 690, Clause 6.3, ISO 690, Clause 11
- Serialisation: `bibitem/series`

18.2. Journals

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 [Clause 17](#), rather than as part of the series.

18.3. Standards

Standards body identifiers for standards (ISO 690, [Clause 15.10](#)) are modelled as series numbers.

EXAMPLE

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 informat
  <contributor>
    <role type="publisher"/>
    <organization>
      <name>International Organization for Standardization</name>
    </organization>
  </contributor>
  <series>
    <title>ISO</title>
    <number>690</number>
  </series>
</bibitem>
```

18.4. Qualifiers

Organization and Place of Publication can be added to series titles for disambiguation (ISO 690, [Clause 6.3.1](#)). Organization in this instance is only modelled as a strings, rather than as a detailed object (cf. [Clause 11.4](#)). The `formattedTitle` element is used to enforce the formatting of the series title and its qualifiers.

EXAMPLE 1

Life. MDPI.

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

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

EXAMPLE 2

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

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

18.5. Earlier and later titles

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` (ISO 690, [Clause 6.3.3](#)).

EXAMPLE

New Scientist. 1956-1971.

New Scientist and Science Journal. Jan 21, 1971-Sept 30, 1971. + *New Scientist*. 1971-.

```
<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>
</series>
```

18.6. Series runs

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 the first two volumes of the new series run were numbered 1/26 and 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 (from Anthropological Institute of Great Britain and Ireland to Royal Anthropological Institute of Great Britain and Ireland), the series run is preferred to differentiate the two runs.

EXAMPLE

\J. 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>
```

19. IDENTIFIERS

- Source: [ISO 690, Clause 12](#)
- Serialisation: `bibitem/docidentifier`

[ISO 690, Clause 12](#) argues 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.

Standards body identifiers for standards ([ISO 690, Clause 15.10](#)) are modelled as series numbers rather than as identifiers ([Clause 18](#)).

EXAMPLE

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

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

20. LOCATION

- Source: ISO 690, Clause 13, ISO 690, Clause 15.2.6, ISO 690, Clause 15.7.2
- Serialisation: `bibitem/accessLocation`

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 (ISO 690, Clause 13, ISO 690, Clause 15.7.2). 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/link`) is not sufficient (ISO 690, Clause 15.2.6).

EXAMPLE 1

p.vind.tand.25a = HGV PVindob. Tandem 25 a = Trismegistos 26540. At: PVindob.Gr. Inv. Nr. 12424 + 24718 + 28384.
(Highly abbreviated format, using conventions familiar to papyrologists)

```
<bibitem type="booklet">
  <title>[Untitled]</title>
  <link>http://papyri.info/hgv/26540</link>
  <link>http://aquila.zaw.uni-heidelberg.de/hgv/26540</link>
  <link>https://www.trismegistos.org/text/26540</link>
  <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>
  <link>http://papyri.info/hgv/26540</link>
  <link>http://aquila.zaw.uni-heidelberg.de/hgv/26540</link>
  <link>https://www.trismegistos.org/text/26540</link>
  <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>
      <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 2

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="electronic resource">
  <title>Latest Weather Observations for Dumont D'Urville</title>
  <link>http://www.bom.gov.au/fwo/IDT60803/IDT60803.89642.json</link>
  <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: Dur
</bibitem>
```

21. ADDITIONAL GENERAL INFORMATION

21.1. Classification

- Source: ISO 690, Clause 14.2
- Serialisation: bibitem/classification

EXAMPLE

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>
      <surname>Giesler</surname>
      <forename>Patricia</forename>
    </person>
  </contributor>
  <contributor>
    <role type="publisher"/>
    <organization>
      <name>Veterans Affairs Canada</name>
    </organization>
  </contributor>
  <place>Charlottetown, P.E.I.</place>
  <classification type="Dewey">971.06 GIE 2003</classification>
</bibitem>
```

21.2. Price and availability

- Source: ISO 690, Clause 14.4
- Serialisation: bibitem/note

Price is marked up as a distinct element, which contains the currency code, represented in ISO 4217.

Availability information for a bibliographic item is treated as a note.

EXAMPLE

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>
    <role type="editor"/>
    <person>
      <name>
        <surname>Solomon</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>
<series>
  <title>Nevada Bureau of Mines and Geology Bulletin</title>
  <number>88</number>
</series>
<extent type="page">
  <referenceFrom>xiii</referenceFrom>
</extent>
<extent type="page">
  <referenceFrom>179</referenceFrom>
</extent>
</bibitem>
```

22. SPECIFIC CATEGORIES OF INFORMATION RESOURCE

22.1. Electronic information resources

- Source: ISO 690, Clause 15.2, ISO 690, Clause 15.3
- Serialisation: bibitem/note

System requirements are modelled as a note, prefixed with “System requirements:” (ISO 690, Clause 15.2.3). URLs should not be broken at the end of a line: that is a rendering requirement, not an information modelling requirement (ISO 690, Clause 15.2.6).

EXAMPLE

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="electronic resource">
  <title>Far Cry 5</title>
  <date type="published"><on>2018</on></date>
  <date type="accessed"><on>2018-05-10</on></date>
  <contributor>
    <role type="author"/>
    <organization>
      <name>Ubisoft</name>
    </person>
  </organization>
  <contributor>
    <role type="publisher"/>
    <organization>
      <name>Ubisoft</name>
    </organization>
  </contributor>
  <medium>
    <form>computer game</form>
  </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); NVIDI
</bibitem>
```

22.2. Cartographic material

- Source: ISO 690, Clause 15.5
- Serialisation: bibitem/note, bibitem/contributor/role

The projection, prime meridian, orientation, and reference systems (such as grids and navigational lattices) are given as notes (ISO 690, Clause 15.5.1). The spectral characteristics of the sensor, details of the satellite systems, and the amount of cloud cover are also given as notes (ISO 690, Clause 15.5.7). Details of the creator's role are given in bibitem/contributor/role (ISO 690, Clause 15.5.2).

EXAMPLE

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>
  <link>https://daac.ornl.gov/VEGETATION/guides/Siberian_Biomass_Wildfire.html</link>
  <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>
      </role>
    </contributor>
  </contributor>
```

```

</contributor>
<contributor>
  <role type="author">
    <person><name><completeName>Loranty, H.D.</completeName></name></person>
  </contributor>
<contributor>
  <role type="author">
    <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>
    <abbrev>ORNL DAAC</abbrev>
  </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>

```

22.3. Films, videos and broadcasts

- Source: ISO 690, Clause 15.6
- Serialisation: bibitem/note, bibitem/contributor/role, bibitem/series, bibitem/title, bibitem/extent

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” (ISO 690, Clause 15.6.2). 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 (ISO 690, Clause 15.6.1).

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 (ISO 690, Clause 15.6.4).

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 (ISO 690, Clause 15.6.5).

EXAMPLE 1

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>

```



```
</contributor>
</bibitem>
```

EXAMPLE 2

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 3

Columbo, Season 7, Episode 5. The Conspirators. Teleplay by Howard Berk. NBC. 1978-05-13.

```
<bibitem type="audiovisual">
  <title>The Conspirators</title>
  <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>
```

EXAMPLE 4

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

```
<bibitem type="audiovisual">
  <title>Untitled</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>
    </bibitem>
  </relation>
</bibitem>
```

```

    <contributor>
      <role type="publisher"/>
      <organization><name>Sundlaugin</name></organization>
    </contributor>
    <place>Mosfellsbær, Iceland</place>
  </bibitem>
  <locality type="track">
    <referenceFrom>1</referenceFrom>
  </locality>
</relation>
</bibitem>

```

22.4. Graphic Works

- Source: ISO 690, Clause 15.7
- Serialisation: bibitem/contributor/role

The fuller description of a contributors role under bibitem/contributor/role allows for Latin role descriptions such as *pinxit* and *sculpsit* (ISO 690, Clause 15.7.1)

EXAMPLE

[*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>

```

22.5. Music

- Source: ISO 690, Clause 15.8
- 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.

EXAMPLE

ADAMS, John Coolidge. *Nixon in China*. Libretto by Alice GOODMAN. 1987.

```

<bibitem type="music">
  <title>Untitled</title>
  <date type="published"><on>1987</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>
</bibitem>

```

22.6. Patents

- Source: [ISO 690, Clause 15.9](#)
- Serialisation: `bibitem/contributor/role`

Patents are encoded similarly to contributions within a serial ([ISO 690, Clause 15.9](#)), 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

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>
</bibitem>
```

APPENDIX A (NORMATIVE) 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 [\[1\]](#) 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 provided in [\[2\]](#); refer to [\[3\]](#) for an introduction to the format.

```
grammar {

status =
  element status { LocalizedString }

language = element language { text }
## ISO-639

script = element script { text }
## ISO-15924: Latn

edition = element edition { text }

LocalizedString =
  attribute language { text }?,
  attribute script { text }?,
  text

FormattedString =
  attribute format { ( "text/plain" | "text/html" | "application/docbook+xml" |
    "application/tei+xml" | "text/x-asciidoc" | "text/markdown" | "application/x-isodoc+xml" | text ) }?,
  LocalizedStringOrXsAny

LocalizedStringOrXsAny =
  attribute language { text }?,
  attribute script { text }?,
  ( text | AnyElement )+

contributor =
  element contributor {
    role*,
    ContributorInfo
  }

role =
  element role {
    attribute type { ( "author" | "performer" | "publisher" | "editor" | "adapter" | "translator" | "distribut
    roledescription*
  }

ContributorInfo =
  ( person | organization )

roledescription =
  element description { FormattedString }

person =
  element person {
    fullname?, affiliation*, person-identifier*, contact*, uri?
  }

fullname =
  element name {
    (( prefix*, forename*, initial*, surname, addition* ) | completeName |
    prefix*, forename*, initial*, surname, addition*, completeName)),
    bnote*
  }
```

```

prefix = element prefix { LocalizedString }
initial = element initial { LocalizedString }
addition = element addition { LocalizedString }
surname = element surname { LocalizedString }
forename = element forename { LocalizedString }
completename = element completename { LocalizedString }

affiliation =
  element affiliation {
    affiliationname?, affiliationdescription*, organization
  }

affiliationname = element name { LocalizedString }

affiliationdescription = element description { FormattedString }

organization =
  element organization {
    orgname, subdivision?, abbreviation?, uri?, org-identifier*, contact*
  }

orgname = element name { LocalizedString }
subdivision = element subdivision { LocalizedString }

abbreviation =
  element abbreviation { LocalizedString }

uri =
  element uri { xsd:anyURI }

# TODO may change
contact =
  ( address | phone | email | uri )

phone = element phone { text }
email = element email { text }

address =
  element address {
    # iso191606 TODO
    street+, city, state?, country, postcode?
  }

street = element street { text }
city = element city { text }
state = element state { text }
country = element country { text }
postcode = element postcode { text }

person-identifier =
  element identifier {
    attribute type { ("isni" | "uri") },
    text
  }

org-identifier =
  element identifier {
    attribute type { ("orcid" | "uri") },
    text
  }

citation =
  element citation { CitationType }

CitationType =
  attribute bibitemid { xsd:IDREF },
  locality*, date?

date = element date { ( xsd:gYear | xsd:date ) }

```

```

locality =
  element locality {
    # attribute type { ( "section" / "clause" / "part" / "paragraph" / "chapter" / "page" / "whole" / "table"
    attribute type { LocalityType },
    referenceFrom, referenceTo?
  }

LocalityType = xsd:string { pattern = "section|clause|part|paragraph|chapter|page|whole|table|annex|figure|not

referenceFrom = element referenceFrom { text }
referenceTo = element referenceTo { text }

bibitem =
  element bibitem {
    attribute id { xsd:ID },
    BibliographicItem
  }

bibitem_no_id =
  element bibitem {
    BibliographicItem
  }

BibItemType |=
  ( "article" | "book" | "booklet" | "conference" | "manual" | "journal"
    "proceedings" | "presentation" | "thesis" | "techreport" |
    "standard" | "unpublished" | "map" | "electronic resource" |
    "audiovisual" | "map" | "film" | "video" | "broadcast" |
    "graphic work" | "music" | "patent" )

BibliographicItem =
  attribute type { BibItemType }?,
  (btitle+ | formattedref), bsource*, docidentifier*, bdate*, contributor*,
  edition?, biblionote*, language*, script*,
  abstract?, status?, copyright?, docrelation*, series*, medium?, bplace*,
  extent*, accesslocation*, bclassification, size?, scale?

btitle = element title { TypedTitleString }
bsource = element link { TypedUri }
formattedref = element formattedref { FormattedString }
link = element link { TypedUri }

TypedTitleString =
  attribute type { TitleType }?,
  FormattedString

TitleType = ( "alternative" | "original" | "unofficial" | "subtitle" | "main" )

TypedUri =
  attribute type { text }?,
  xsd:anyURI

DateType =
  attribute text { text }?,
  ( xsd:gYear | xsd:date )?

bdate = element date {
  attribute type { ( "published" | "accessed" | "created" | "implemented" | "obsoleted" | "confirmed" | "updat
    ( bfrom, bto? ) | bon?
}

bfrom = element from { DateType }
bto = element to { DateType }
bon = element on { DateType }

docidentifier = element docidentifier {
  attribute type { text }?,

```

```

    text
  }
  bclassification = element classification {
    attribute type { text }?,
    text
  }

  bplace = element place { text }
  medium = element medium {
    form?, size?, scale?
  }
  form = element form { text }
  size = element size { text }
  scale = element scale { text }
  accesslocation = element accesslocation { text }

  extent = element extent { BibItemLocality }

  series = element series {
    attribute type { "main" | "alt" }?,
    ( btitle | formattedref ),
    bplace, seriesorganization,
    abbreviation?,
    seriesfrom?, seriesto?,
    seriesnumber?, seriespartnumber?
  }

  seriesorganization = element organization { text }
  seriesfrom = element from { xsd:dateTime | xsd:gYear }
  seriesto = element to { xsd:dateTime | xsd:gYear }
  seriesnumber = element number { text }
  seriespartnumber = element partnumber { text }

  biblionote = element note { FormattedString }
  abstract = element abstract { FormattedString }

  copyright =
    element copyright {
      from, to?, owner
    }

  from = element from { xsd:gYear }
  to = element to { xsd:gYear }

  owner =
    element owner { ContributorInfo }

  docrelation =
    element relation {
      attribute type {
        ( "obsoletes" | "updates" | "updatedBy" | "complements" | "derivedFrom" | "translatedFrom" |
          "adoptedFrom" | "equivalent" | "identical" | "nonequivalent" | "includedIn" | "includes" ) },
      element bibitem { BibliographicItem },
      locality*
    }

  AnyElement = element * { ( text | AnyElement ) }
}

```

APPENDIX B
(NORMATIVE)
CITATION MODEL

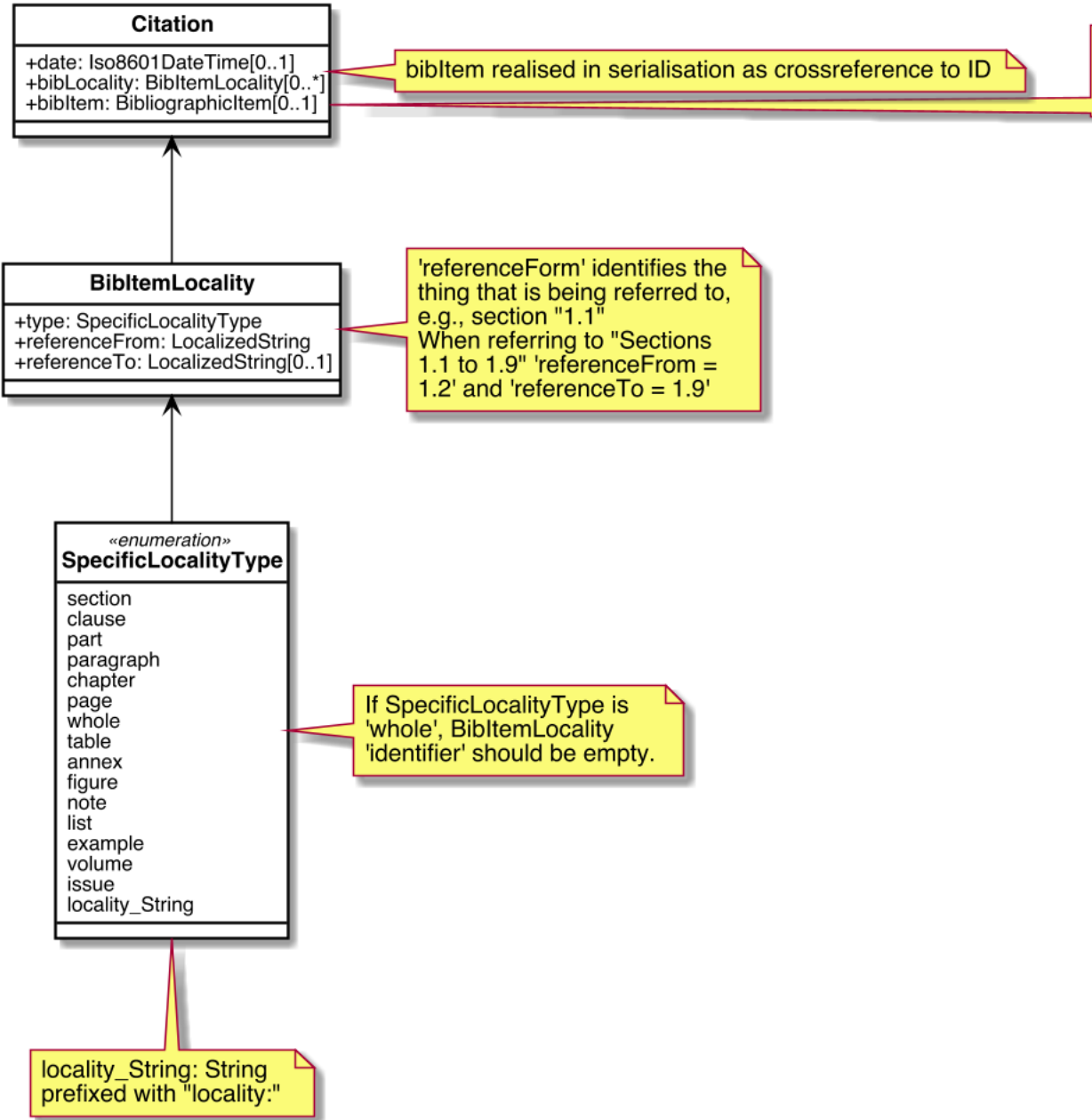


Figure B.1 – Reference Model, ISO 690 Citations

APPENDIX C
(NORMATIVE)
MAPPING TO BIBTEX

C.1. Categories of information resource

From Clause 10.

Table C.1

ISO 690	BibTeX
bibitem@type	

C.2. Creator

From Clause 11.

Table C.2

ISO 690	BibTeX
bibitem/contributor	
bibitem/contributor@role	
bibitem/contributor/description	
bibitem/contributor/person	
bibitem/contributor/person/name	
bibitem/contributor/person/name/completeName	
bibitem/contributor/person/name/forename	
bibitem/contributor/person/name/initials	
bibitem/contributor/person/name/surname	
bibitem/contributor/person/name/addition	
bibitem/contributor/person/name/prefix	
bibitem/contributor/person/name/note	
bibitem/contributor/person/uri	
bibitem/contributor/person/affiliation	
bibitem/contributor/person/affiliation/name	
bibitem/contributor/person/affiliation/description	
bibitem/contributor/person/affiliation/organization	
bibitem/contributor/person/identifier	

ISO 690	BibTeX
<code>bibitem/contributor/person/identifier@type</code>	
<code>bibitem/contributor/person/contact</code>	
<code>bibitem/contributor/organization</code>	
<code>bibitem/contributor/organization/name</code>	
<code>bibitem/contributor/organization/subdivision</code>	
<code>bibitem/contributor/organization/uri</code>	
<code>bibitem/contributor/organization/identifier</code>	
<code>bibitem/contributor/organization/identifier@type</code>	
<code>bibitem/contributor/organization/contact</code>	
<code>bibitem/contributor/organization/abbreviation</code>	

C.3. Title

From [Clause 12](#).

Table C.3

ISO 690	BibTeX
<code>bibitem/title</code>	
<code>bibitem/title@type</code>	
<code>bibitem/title@format</code>	
<code>bibitem/title@language</code>	
<code>bibitem/title@script</code>	

C.4. Document relations

From [Clause 13](#).

Table C.4

ISO 690	BibTeX
<code>bibitem/relation</code>	
<code>bibitem/relation@type</code>	
<code>bibitem/relation/bibitem</code>	
<code>bibitem/relation/bibLocality</code>	

ISO 690	BibTeX
bibitem/extent	

C.5. Medium

From Clause 14.

Table C.5

ISO 690	BibTeX
bibitem/medium/form	
bibitem/medium/size	
bibitem/medium/scale	

C.6. Edition

From Clause 15.

Table C.6

ISO 690	BibTeX
bibitem/edition	
bibitem/date	
bibitem/date@type	

C.7. Production

From Clause 16.

C.7.1. General

Table C.7

ISO 690	BibTeX
bibitem/place	
bibitem/contributor[role@type = "publisher"]	
bibitem/date	
bibitem/date	
bibitem/date/from	
bibitem/date/from@text	
bibitem/date/to	

ISO 690	BibTeX
<code>bibitem/date/to@text</code>	
<code>bibitem/date/on</code>	
<code>bibitem/date/on@text</code>	
<code>bibitem/copyright/date</code>	

C.8. Numeration and pagination

From [Clause 17](#).

Table C.8

ISO 690	BibTeX
<code>bibitem/extent</code>	
<code>bibitem/extent@type</code>	
<code>bibitem/extent/referenceFrom</code>	
<code>bibitem/extent/referenceTo</code>	

C.9. Series title and number

From [Clause 18](#).

Table C.9

ISO 690	BibTeX
<code>bibitem/series</code>	
<code>bibitem/series@type</code>	
<code>bibitem/series/title</code>	
<code>bibitem/series/place</code>	
<code>bibitem/series/organization</code>	
<code>bibitem/series/formattedTitle</code>	
<code>bibitem/series/abbrev</code>	
<code>bibitem/series/dateFrom</code>	
<code>bibitem/series/dateTo</code>	
<code>bibitem/series/number</code>	
<code>bibitem/series/partnumber</code>	

C.10. Identifiers

From Clause 19.

Table C.10

ISO 690	BibTeX
bibitem/docidentifier	
bibitem/seriesatype	

C.11. Location

From Clause 20.

Table C.11

ISO 690	BibTeX
bibitem/accessLocation	

C.12. Additional general information

From Clause 21.

C.12.1. Classification

Table C.12

ISO 690	BibTeX
bibitem/classification	

C.12.2. Price and availability

Table C.13

ISO 690	BibTeX
bibitem/note	

C.13. Specific categories of information resource

From Clause 22.

C.13.1. Electronic information resources

Table C.14

ISO 690	BibTeX
bibitem/note	

C.13.2. Cartographic material

Table C.15

ISO 690	BibTeX
<code>bibitem/note</code>	
<code>bibitem/contributor/role</code>	

C.13.3. Films, videos and broadcasts

`bibitem/title`,`bibitem/extent`

Table C.16

ISO 690	BibTeX
<code>bibitem/note</code>	
<code>bibitem/contributor/role</code>	
<code>bibitem/series</code>	
<code>bibitem/title</code>	
<code>bibitem/extent</code>	

C.13.4. Graphic Works

Table C.17

ISO 690	BibTeX
<code>bibitem/contributor/role</code>	

C.13.5. Music

Table C.18

ISO 690	BibTeX
<code>bibitem/contributor/role</code>	

C.13.6. Patents

Table C.19

ISO 690	BibTeX
<code>bibitem/contributor/role</code>	

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