



FACULTY  
OF INFORMATICS  
Masaryk University

# Typesetting Bibliographies Compliant with the Standard ISO 690 in LaTeX

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1. ISO 690 Standard
2. The package `biblatex-iso690`
3. Examples
4. Summary

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# ISO 690 Standard

- Information and documentation – Guidelines for bibliographic references and citations to information resources
- Published by International Organization for Standardization (ISO)
- One of the most frequent guidelines for citations and references

# ISO 690 Editions

## *History*

ISO 690:1987 + ISO 690-2:1997

ISO 690:2010

ČSN ISO 690:2011, STN ISO 690:2012, DIN ISO 690:2013, etc.

# Terminology

*Defined in the most recent edition of ISO 690:2010*

**citation** indication within the text or other form of content of a relevant reference

**reference** data describing a resource or part thereof, sufficiently precise and detailed to identify it and to enable it to be located

# Terminology by example

*Defined in the most recent edition of ISO 690:2010*

„[...] aj netriviálne deduktívne hry môžu byť vyriešené softvérovým nástrojom [1], čo vedie k záveru [...]“

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- [1] KLIMOŠ, Miroslav; KUČERA, Antonín. Cobra: A Tool for Solving General Deductive Games. In: *Proceedings of 20th International Conference on Logic for Programming, Artificial Intelligence and Reasoning (LPAR 2015)* [online]. Heidelberg: Springer, 2015, pp. 31–47 [visited on 2016-06-15]. LNCS, no. 9450. ISBN 978-3-662-48899-7. Available from DOI:  
[10.1007/978-3-662-48899-7\\_3](https://doi.org/10.1007/978-3-662-48899-7_3).

# What did change in the ISO 690 standard

*Throughout the editions*

- New kinds of information resources
  - cartographic materials
  - audiovisual works
  - etc.
- Explicitly stated, that this International Standard does not prescribe a particular style of reference or citation + consistency principle etc.
- Some terms missing, eg. *chapter*
- More detailed description of the principles for creating bibliography entries
  - changed or added

## Order of elements

*The usual order of elements in a reference*

**name(s) of creator(s)** if available

**date** in case of the *author-date* is being applied

**title** of the resource

**medium designation** if necessary

**edition** required if the item is not a first edition

**place** the most prominent

**publisher** the most prominent

# Order of elements

*The usual order of elements in a reference*

**date** in case of the *author-date* is being applied it  
is not repeated unless a fuller date is  
necessary

**series** title and number

**enumeration** within the item

**standard identifier(s)** ISBN, ISSN, DOI,...

**availability** access or location information

**additional information** pertinent for the item

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# Already existing solutions

*Or what was missing...*

czechiso.bst

\*.csl-based

OPmac-bib plainTeX

BibLaTeX

# Original implementation of biblatex-iso690

By Michal Hoftich

- created in 2011
- by Michal Hoftich
- build on top of the BibLaTeX package
- influenced by the Czech national interpretations
- <https://github.com/michal-h21/biblatex-iso690>

# Original implementation of biblatex-iso690<sup>1</sup>

By Michal Hoftich

## State of the art

- adhered to out-of-date editions of the standard
- incorrect order of elements
- (redundant/missing) punctuation
- missing some types of resources
- missing some required elements
- missing creator secondary responsibility
- obsolete and deprecated code

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<sup>1</sup><https://github.com/michal-h21/biblatex-iso690>

# Reimplementation

*Of the package biblatex-iso690*

Macros, commands and definitions

- printing out the elements in the correct order
- parsing and formatting of the bibliography fields
- multilingual references
- further adjustable

From the user perspective

- more entry types and fields
- more localisation strings
- more package options

# Printing out the elements in the correct order

*Original and up-to-date version comparison*

... Title [online]. **Series number.** Place: Publisher, 2016 [visited on 2016-11-08], pp. 31–47. **Series title.** Url: <path>. ISBN



... Title [online]. Place: Publisher, 2016, pp. 31–47 [visited on 2016-11-08]. **Series title, series number.** ISBN. Available from <url>

## Parsing and formatting of the bibliography fields

```
\DeclareFieldFormat{howpublished}{\mkbibbrackets{#1}}
\DeclareFieldFormat[online]{howpublished}{%
  \iffieldundef{howpublished}
    {\mkbibbrackets{online}}
    {\mkbibbrackets{#1}}
}
```

# Multilingual references

## Main document language

- language in which the document is written
- babel package
  - `\usepackage [dutch,english]{babel}`
  - `\usepackage [main=english,dutch]{babel}`
- polyglossia package
  - `\usepackage {polyglossia}`
  - `\setmainlanguage {english}`

## Bibliography entry language

- language of the cited information resource itself
- .bib file: `langid = {english}`

# Multilingual references

Main document language

- availability and access
- date of citation
- creator roles
- conjunctions

Bibliography entry language

- volume
- edition
- numeration

## More entry types and fields

Entry field	Entry type	Description
supervisor	thesis	advisor of the final qualification work
classification	patent	patent classification

Table: Added fields for the bibliography entries

## More localisation strings

String	English	Czech	Slovak
at	at	v	v
bysupervisor	supervised by	vedoucí práce	vedúci práce
urlalso	available also from	dostupné také z	dostupné tiež z

Table: More localisation strings

## More package options for formatting the output

- `spacecolon=[true|false]`
  - Place : Publisher
  - Place: Publisher
- `pagetotal=[true|false]`
  - Place : Publisher, 2008 [60 p.]
  - Place : Publisher, 2008
- `shortnumeration=[true|false]`
  - ... 2011, **32**(3), 289–301 [visited on 2016-05-14] ...
  - ... 2011, vol. 32, no. 3, pp. 289–301 [visited on 2016-05-14] ...
- `thesisinfoinnotes=[true|false]`
  - ... Available from: <...>. BP. MU, FI, Brno. Supervisor Petr SOJKA
  - ... BP. MU, FI, Brno. Supervisor Petr SOJKA. Available from: <...>

## Redefining in a document preamble

- `\renewcommand \multinamedelim {\addcomma \space }`
  - SURNAME, Name, SURNAME, Name
- `\let \lastnameformat =\textsc`
- etc.

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## MWE of biblatex-iso690

```
\documentclass{...}
\usepackage[style=iso-authoryear]{biblatex}
\addbibresource{bibliography-database.bib}
...
\begin{document}
\parencite{...}
\parencite*{...}
...
\printbibliography
\end{document}
```

# Sample

## *Different citation methods and missing fields*

### **author-year: author and editor**

„[...] citation of this work (*Smith*, 2016) [...]“

*SMITH, John, 2016. Masterpiece. Ed. DOE, Jane.* Place: Publisher

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### **author-year: editor only**

„[...] citation of this work (*Doe*, 2016) [...]“

*DOE, Jane (ed.), 2016. Masterpiece.* Place: Publisher

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### **numeric style**

„[...] citation of this work [1] [...]“

*SMITH, John. Masterpiece. Ed. DOE, Jane. Place: Publisher, 2016*

## More samples

*Saving Private Ryan* [DVD]. Directed by SPIELBERG, Steven.  
Paramount, 1998

```
@misc{Ryan1998,
  title = {Saving Private Ryan},
  howpublished = {DVD},
  editora = {Steven Spielberg},
  editoratype = {Directed by},
  publisher = {Paramount},
  date = {1998}
}
```

TIMM, Ruediger et al. *Libre Office* [software]. The Document Foundation, 2000–2016. Version 5.2.3 [visited on 2016-11-08]. Available from: <https://www.libreoffice.org/download/libreoffice-fresh>.

System requirements: Linux kernel version 2.6.18 or higher,...  
256Mb RAM (512Mb RAM recommended),...

```
@misc{LibreOfficeLatest,
  author = {Ruediger Timm and others},
  title = {Libre Office},
  howpublished = {software},
  publisher = {The Document Foundation},
  date = {2000/2016},
  version = {5.2.3},
  url = {https://www.libreoffice.org/download/libreoffice-fresh},
  note = {System requirements: Linux kernel version 2.6.18 or higher...}
}
```

CLAD METALS LLC CANONSBURG, PA 15317 (US). *Method of making a copper core five-ply composite and cooking vessel.* Inventor: GROLL, W.A. EP 1 094 937 B1. European patent. Available also from: <https://encrypted.google.com/patents/EP1094937B1>

```
@patent{Groll2008,  
  author = {Clad Metals LLC Canonsburg, PA 15317 (US)},  
  title = {Method of making a copper core five-ply composite and...},  
  editora = {Groll, W.A.},  
  editoratype = {Inventor:},  
  publisher = {Google Patents},  
  classification = {EP 1 094 937 B1},  
  type = {patenteu},  
  url = {https://encrypted.google.com/patents/EP1094937B1}  
}
```

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# Summary

- ✓ full reimplementation of the biblatex-iso690 package
- ✓ compliant with the latest edition of the standard ISO 690
- ✓ Czech and English documentation
  - use case examples
  - hints and caveats
- ✓ first public release
  - integrated into the theses document class fithesis<sup>1</sup>
  - published on CTAN<sup>2</sup>
    - » part of TeX Live 2016

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<sup>1</sup><https://www.ctan.org/pkg/fithesis>

<sup>2</sup><https://www.ctan.org/pkg/biblatex-iso690>

## Summary

- ✓ Slovak localisation for the biblatex<sup>3</sup> package
- ✓ pull requests by the community (e.g. translations)
- ✓ 51 stars of the project in the GitHub repository
- ✓ 17 forks of the project in the GitHub repository

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<sup>3</sup><https://www.ctan.org/pkg/biblatex>



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# Thanks for your attention!

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## Q&A

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