

# Status report on **ISO 21127** update

56th joint meeting of the CIDOC CRM SIG,  
49th FRBR/LRMoo SIG and ISO/TC46/SC4/WG9  
10 May 2023

# Updating [ISO 21127](#)

- **Goal**
  - Update ISO 21127 to more current community version, reflecting the work that has gone into the standard since it was last updated
- **Timeline**
  - 24-month schedule
  - Anticipated deadline: May 2024
- **Facilitators**
  - ISO TC46/SC4 - Technical Interoperability
  - Process being managed by Philippe Michon and Erin Canning with help and support of ISO TC46/SC4 Committee Manager

Current: [CIDOC CRM v 5.0.4](#) ; Proposed future: modified [CIDOC CRM v 7.1.2](#)

## High-level summary of changes:

### 1. Ontology

- a. Added new classes and properties
- b. Deprecated overspecialized concepts

	v 5.0.4	v 7.1.2	Added	Deprecated
Classes	86	81	8	13
Properties	137	160	37	15

### 2. Documentation

- a. Representation of classes and properties in **first order logic notation**
- b. Scope notes reviewed; **citations & references** added to examples
- c. Expanded introductory materials: **additional explanatory text** clarifying the standard

### 3. Modifications

- a. Corrections; tracked with [Small Edits Form](#) and applied to 7.2.2 so captured for ongoing work

# ISO Process (<https://www.iso.org/standard/85100.html>)

00 Preliminary	10 Proposal	20 Preparatory	30 Committee	40 Enquiry	50 Approval	60 Publication
				DIS Registered	Final text sent	Published!
✓	✓	✓	✓	DIS ballot: 12 weeks	Proofs sent	
				Respond to feedback	Confirmation	

**We're here!**  
**(May. 2023)**

**ISO ballot results received on March 17th**

# DIS Ballot Results

- ISO members who voted: 18 countries
  - All of them voted in favor of the ISO 21127 (100%)
- ISO members who abstained: 11 countries
- No changes to be made to the document in terms of content
- Editorial adjustments needed to comply with certain ISO rules
  - Review CIDOC CRM terminology to adapt concept names and definitions to ISO guidelines
  - Review the use of reserved terms like "may", "can", "should", and "shall"
  - Use impersonal tone (avoid "I", "we", and "you")
  - Adapt some diagrams to make them more readable according to their publishing rules
  - Ensure that all the text of the introductory parts is in a subsection (remove hanging paragraphs)
  - Reuse ISO bibliographic reference style
- Review deadline: June 17th

## Outstanding issue 1 of 2: Definition for “query containment”

### Current definition:

“query X contains another query Y if, for each possible population of a database, the answer set to query X contains also the answer set to query Y.

Note 1 to entry: If query X and Y were classes, then X would be superclass of Y.”

**Issue:** The definition shall be written in such a form that it can replace the term in its context.

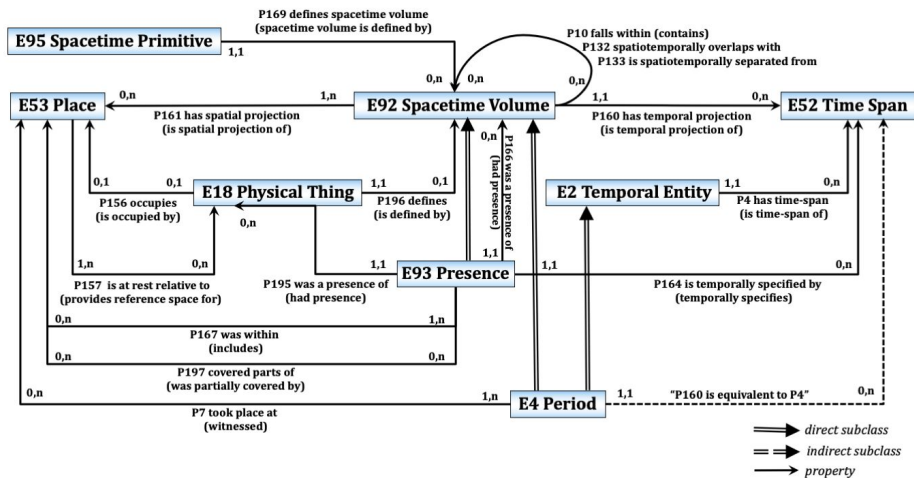
### Options:

- A. modify the definition
- B. integrate this term into the definition entry for “query” (“request for information from an information system expressed so that the response can be calculated automatically”)
- C. remove this entry/definition (note: we refer only once to the term "query containment")

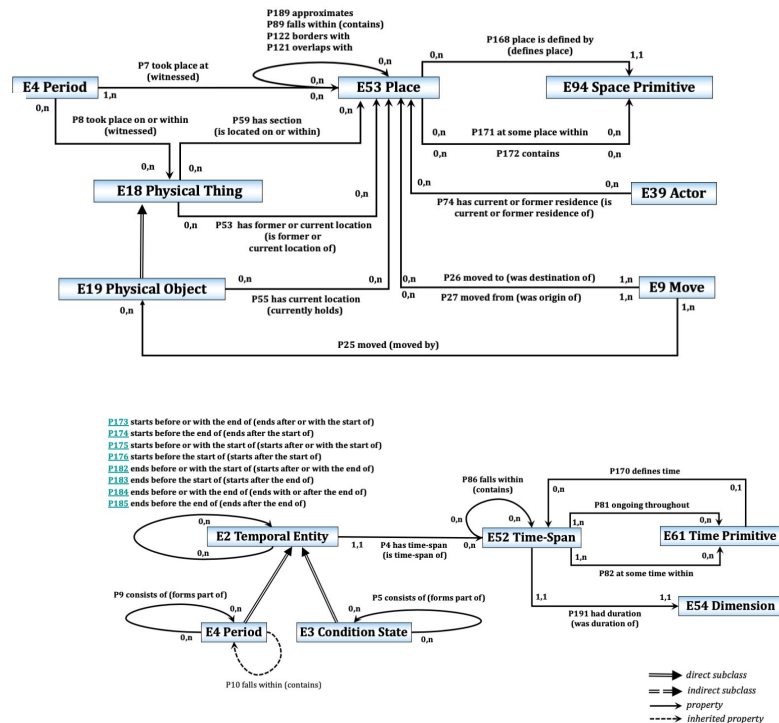
# Outstanding issue 2 of 2: Images do not adhere to format requirements

**Issue:** Text (both legends and in-diagram text) has to come out of images and into captions

**Examples:** Figure 4, Figure 5, Figure 6



- ⇒ direct subclass
- ⇒ indirect subclass
- property



- P173 starts before or with the end of (ends after or with the start of)
- P174 starts before the end of (ends after the start of)
- P175 starts before or with the start of (starts after or with the start of)
- P176 starts before the start of (starts after the start of)
- P182 ends before or with the start of (starts after or with the end of)
- P183 ends before the start of (starts after the end of)
- P184 ends before or with the end of (ends with or after the end of)
- P185 ends before the end of (ends after the end of)

- ⇒ direct subclass
- ⇒ indirect subclass
- property
- inherited property

## Outstanding issue 2 of 2: Images do not adhere to format requirements

**ISO's issue:** Having the text in the images does not follow their standard formatting requirements, and the in-image text is too small to be readable

**Our issue:** Moving all text out of images and to captions could compromise the readability of the diagram and the document as, for example, listing class and property names below images would take up a page

### **Discussion:**

- A. Can any of the images be removed from the ISO version of the document?
- B. Is there a balance of in-image text and label text that could be achieved (eg. *Pxx* in the image, and *Pxx with label* in the caption)?
- C. How would we feel about having the diagrams (including labels) be full pages in size?



# Bonus issue: integration of editorial changes into community document?

**Issue:** ISO has required various small language/formatting changes:

1. Specifying the clause number when referring to other sections, eg. "see section About Types below" → "see section About Types (8.3.1) below"
2. Formatting ordered lists
  - 2.1. The default order for a numbered list is: a), b), c) | 1), 2), 3) | i), ii), iii)
  - 2.2. Avoid having more than one numbered list in a clause/subclause
3. Adding additional numbered sections
  - 3.1. To break up the long clauses
  - 3.2. To remove the existence of hanging paragraphs
4. Change phrases like "In the following..." to have explicit references
5. Review use of "must", "may", "can", "should", and "shall" against ISO's instructions on the use of these terms
6. Use quotes instead of italics to emphasize terms
7. Refer to bibliography [number] instead of (Author, Date) for in-text citations

# Any questions, comments? Thank you!

- Erin Canning
  - DPhil student
  - University of Oxford
  - [erin.canning@eng.ox.ac.uk](mailto:erin.canning@eng.ox.ac.uk)
- Philippe Michon
  - Semantic Web Analyst
  - Canadian Heritage Information Network (CHIN)
  - [philippe.michon@pch.gc.ca](mailto:philippe.michon@pch.gc.ca)