

ISO

International Organization for Standardization

ISO/IEC JTC1/SC32
Data Management and Interchange
WG2 Metadata

Secretariat: USA (ANSI)

Subject: Common Logic Change Proposal

Source: German Expert Contribution

Title: Additional comments on ISO24707-common **logic CD from Germany**

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References:

[ISO24707 CD] ISO/JTC 1/SC 32N2477 Committee Draft ISO/IEC CD 24707 by Michael Gruninger (ed.)

1 Introduction

1.1 This proposal adds the following comments:

DE1	115	3.18		Technical	This clause is too vague. It remains unclear whether segregated dialects are dialects that specify a syntactic category of non-discourse names (like function symbols in FOL) or whether it also covers dialect that allow out-of-discourse statements.	Explicitly specify which reading is intended	
DE2	121	3.20		Technical	The semantics of CL is not sorted. The notion of sorts does not seem to play any significant role in the standard. Nor do the related notions of "sorted logic" and "type".	Either (a) remove 3.20 or (b) show in some informative annex how a sorted logic is conformant with CL or (c) change the semantics of CL in a way that it allows for sorts	
DE3	126	3.21		Technical	See comment DE2	See comment DE2	
DE4	141	3.24		Technical	See comment DE2	See comment DE2	
DE5	202	5		Technical	The requirements and design overview do not mention the intended relationship to other ontology languages, in particular OWL2. Is OWL2 intended to be a CL dialect? Since interoperability between ontologies is a major concern, this should be addressed.	Add a subsection that specifies the intended relationships to other ontology languages, in particular OWL2.	
DE6	291	6.1.1.12		Technical	Many FOL dialects do not use both an existential and an universal quantifier, since one can be defined with the help of the other (and negation). Thus, it is overly strict and technically not necessary to require all fully compliant CL dialects to involve both quantifiers.	Delete " Every Common Logic dialect shall distinguish the <i>universal</i> and the <i>existential</i> types of quantified sentence. "	
DE7	296	6.1.1.13		Editorial	As in DE6, there is no technical reason to enforce the use of exactly these Boolean operators. In	Delete "Every Common Logic dialect shall distinguish five types of Boolean sentences:	

					particular, since XOR is a widely used operator, which is not on the list.	<i>conjunctions</i> and <i>disjunctions</i> , which have any number of components, <i>implications</i> and <i>biconditionals</i> , which have exactly two components, and <i>negations</i> , which have exactly one component.”	
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2 Discussion

Please add add the above list of comments to the list of comments for the last CD..

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