

ISO/IEC JTC 1/SC 32 N 2488

Date: 2014-06-06

REPLACES: —

<p style="text-align: center;">ISO/IEC JTC 1/SC 32</p> <p style="text-align: center;">Data Management and Interchange</p> <p style="text-align: center;">Secretariat: United States of America (ANSI) Administered by Farance Inc. on behalf of ANSI</p>
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DOCUMENT TYPE	Summary of Voting/Table of Replies
TITLE	Summary of Voting on 32N2477 CD 24707 Information technology - Common Logic (CL) - A framework for a family of logic-based languages, Edition 2
SOURCE	SC32 Secretariat
PROJECT NUMBER	1.32.25.02.00.00
STATUS	The document did not obtain substantial support. WG2 is requested to address the comments and revise the draft text accordingly.
REFERENCES	
ACTION ID.	ACT
REQUESTED ACTION	
DUE DATE	
Number of Pages	11
LANGUAGE USED	English
DISTRIBUTION	P & L Members SC Chair WG Conveners and Secretaries

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ISO/IEC JTC 1/SC 32 N2488

Summary of Voting on Document SC 32 N 2477

Title: CD 24707 Information technology - Common Logic (CL) - A framework for a family of logic-based languages, Edition 2

Project: 1.32.25.02.00.00

“P” Member	Approval	Approval with Comments	Disapproval with Comments	Abstention with Comments
Canada			1	
Côte d’Ivoire				1
China	1			
Czech Republic				1
Egypt	1			
Finland				1
Germany				1
India				1
Japan			1	
Korea, Republic of	1			
Portugal				1
Russian Federation	1			
United Kingdom				1
United States			1	
Total “P”	4	0	3	7
“O” Member				
Austria				
Belgium				
France				1
Ghana				
Hungary				
Indonesia				
Italy				
Kazakhstan				
Norway				
Romania				
Poland				
Sweden				
Switzerland				
Total “O”				

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COMMENTS:

Canada

NO. See comments below:

Côte d'Ivoire

ABSTAIN. Lack of expertise and interest.

Czech Republic

ABSTAIN. Lack of expertise and interest.

Finland

ABSTAIN. Lack of expertise and interest.

Germany

ABSTAIN. Lack of expertise and interest.

India

ABSTAIN. Lack of expertise and interest.

Japan

NO. See comments below:

Portugal

ABSTAIN. Lack of expertise and interest.

United Kingdom

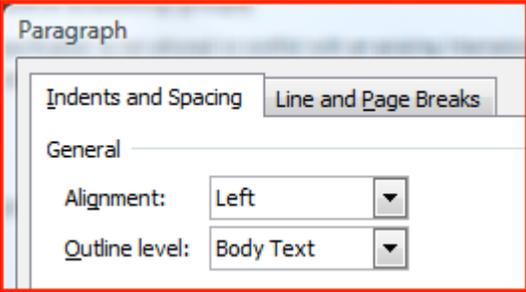
ABSTAIN. We support this project but have been unable to find the resources with sufficient expertise to review this Committee Draft. We anticipate being able to find a suitable resource, or resources, to provide input to a review of a future draft.

United States

NO. See comments below:

Template for comments and secretariat observations

Date: 2014-05-30 Document:32N2477 CD 24707 Project:

MB/NC ¹	Line number (e.g. 17)	Clause/ Subclause (e.g. 3.1)	Paragraph/ Figure/ Table/ (e.g. Table 1)	Type of comment ²	Comments	Proposed change	Observations of the secretariat
CA01	3	Cover page		Ed	The document still shows as WD, even though it is now CD. Also, the references to ISO should be ISO/IEC.	Make the corrections. We recommend use of the ISO template to simplify the generation of the correct text.	
CA02		All		Ed	The cover page has line numbers, but none of the other pages do.	The editor is requested to generate line numbers for the whole document.	
CA03		Table of Contents	Clause 3	Ed	<p>The term entries in clause 3 should not be listed in the Table of Contents.</p> <p>2→ Normative references..... 3→ Terms and definitions..... 4→ General principles.....</p> <p>vs.</p> <p>3 TERMS AND DEFINITIONS 3.1 atom 2 3.2 axiom 2</p>	<p>The ToC ntry can be suppressed by changing the Outline Level to 'Body Text'.</p> 	
CA04		Table of Contents	All	Ed	<p>Page numbers in the ToC should be consistently right-justified. This is done correctly for levels 1 and 3, but not for level 2.</p> <p>6 COMMON LOGIC ABSTRACT SYNTAX AND 6.1 Common Logic abstract syntax. 7 6.1.1 Abstract syntax categories</p>	Make the correction.	
CA05		Page headers	Various	Ed	Some pages are missing page headers.	Make the correction. Recommend using the ISO template.	
CA06		4.1 and 6.2	fun _i	Te	<p>The specification of fun_i in 4.1 differs from that in 6.2.</p> <p>From 4.1: A mapping from UR_i to functions from UD_i[*] to UD_i</p> <p>From 6.2:</p>	Make the specifications consistent.	

1 **MB** = Member body / **NC** = National Committee (enter the ISO 3166 two-letter country code, e.g. CN for China; comments from the ISO/CS editing unit are identified by **)

2 **Type of comment:** **ge** = general **te** = technical **ed** = editorial

Template for comments and secretariat observations

Date: 2014-05-30	Document:32N2477 CD 24707	Project:
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MB/NC ¹	Line number (e.g. 17)	Clause/ Subclause (e.g. 3.1)	Paragraph/ Figure/ Table/ (e.g. Table 1)	Type of comment ²	Comments	Proposed change	Observations of the secretariat
					from UR _i to total functions from UR _i * into UR _i .		
CA07	643	7.1.1	2	Te	This clause is too vague. For example, it is insufficient to determine whether a language such as OWL is syntactically conformant to Common Logic. It also requires the operational notion of parsings rather than a declarative condition on the languages.	Explicitly specify syntactic conformance with respect to a mapping on expressions in the dialect	
CA08	659	7.1.2	2	Te	Is “exactly semantically conformant” equivalent to a bijection on the set of interpretations?	Clarify the statement of this clause and explicitly specify the semantic conditions on the interpretations	
CA09	670	7.1.2	6	Te	This clause is too vague. Does the notion of “semantic sub-dialect” allow partial semantic conformance, that is, languages in which there is not a bijection on the set of interpretations but for which the mapping on expressions preserves entailments?	Explicitly specify conditions for partial semantic conformance	
CA10		Annex B		Te	This Annex does not seem to conform to the abstract syntax	Rewrite the Annex to conform to abstract syntax or explicitly specify that Conceptual Graphs are a concrete syntax for a sub-dialect of Common Logic?	
CA11		Annex A		Te	Annex C (the XML syntax for Common Logic) refers to xsd datatypes, yet the CLIF syntax omits any reference to datatypes.	Add datatypes to the CLIF syntax	
CA12		Annex A		Te	Annex C (the XML syntax for Common Logic) refers to namespaces, yet the CLIF syntax omits any reference to namespaces	Add namespaces to CLIF syntax	
CA13		Annex C		Te	Should Equivalent be Bicond (as in the abstract syntax)?	Change Equivalent to Bicond	

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MB/NC ¹	Line number (e.g. 17)	Clause/ Subclause (e.g. 3.1)	Paragraph/ Figure/ Table/ (e.g. Table 1)	Type of comment ²	Comments	Proposed change	Observations of the secretariat
CA14		All		Ge	If any further problems are discovered before or during the Comment Resolution Meeting, and a consensus can be reached on a solution, then they should be corrected.	To be determined at the CRM as required.	

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MB/NC ¹	Line number (e.g. 17)	Clause/ Subclause (e.g. 3.1)	Paragraph/ Figure/ Table/ (e.g. Table 1)	Type of comment ²	Comments	Proposed change	Observations of the secretariat
JP-01		4.1	V	ed	This is obsolete, and now λ .		
JP-02		6.1.2.1	Smrk	ed/te	"denumerable" should be "countable" to be consistent with "a countable set V". If they are different, their difference needs to be clearly stated.		
JP-03		6.1.2.2		te	The definitions of Func, Term and TSeq do not look like recursive or constructive but look like just circular, and are not used anywhere.	Remove these definitions and simply introduce FuncT, which is used at Table1.	
JP-04		6.1.2.3		ed	Id, Disj, Cond, BiCond, UQuant are not used anywhere.	Remove them or add them at Table1.	
JP-05		6.1.2.4		te	The meaning "recursive" is unclear since Statemant, Name and Text seem disjoint.		
JP-06		6.2	Table1 E	ed	VUSeqmark is better to be λ because it is introduced at 6.1.2.1.		
JP-07		6.2	Table1 FuncT	te	FuncT needs to be defined at 6.1.2.2.		
JP-08		6.2	Table1 EQuant	ed	EQuant(N1,...Nn, S) should be EQuant(N, S) to be consistent with its definition at 6.1.2.3.		
JP-09		6.2	Table1 EQuant	ed	ArgC(E)=ArgC(Ei) \cup {UiNi} should be ArgC(E)=ArgC(S) \cup N .		
JP-10		6.2	Table1 txt	ed	U's are missing.		
JP-11		6.2	Table1 title	te	ArgC(E)= \emptyset may be ArgC(E)= ArgC(G).		
JP-12		6.3	3	ed	VN should be λ N.		
JP-13		A.3	Table A.1	te	It needs to be updated.		

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Template for comments and secretariat observations

Date: 2014-05-19

Document:

Project: ISO 24707

MB/ NC	Line number (e.g. 17)	Clause/ Subclause (e.g. 3.1)	Paragraph/ Figure/ Table/ (e.g. Table 1)	Type of comment ²	Comments	Proposed change	Observations of the secretariat
US1	316	3.27	1	Technical	IRIs should be used exclusively	Drop this term, and replace all occurrences of URI with IRI	
US2	276	3.18	1	Technical	The notion of “segregated dialect” doesn't appear to play the same role in the revision as it did in the original Standard.	Revisit the notion of segregated dialect and occurrences of this term in the Standard.	
US3	279	3.19	1	Technical	The definition of “sentence” does not appear to be consistent with the abstract syntax and semantics, because other expressions, such as statements and texts, are also interpreted to true or false, but are not sentences.	Rewrite this definition to be consistent with the abstract syntax and semantics	
US4	281	3.20	1	Technical	This definition of sort is not consistent with conventional definitions in the field of logic, which are less about quantification and more about signatures of predicates and functions. The definition does not account for the different kinds of sorted logic, e.g. many-sorted logic vs. order-sorted logic. The term “sort” is not used in the abstract syntax or semantics. It is only used positively in Annex B. When “sort” (or “sortal”, which usually means something else) is used negatively, e.g. 6.1.4, para 4, it really doesn't say much of anything.	Move all discussion of sorts to Annex B. Delete these terms from the Terminology section.	
US5	213	3		Technical	In general, it appears that the terminology section is out-of-sync with the revised abstract syntax and semantics	Revise this section thoroughly, omitting terms that are no longer relevant, and adding new terms that need to be defined.	
US6	475	6		Technical	The UML diagrams that were present in the original CL Standard are missing.	Generate new UML diagrams and insert in this section, after the abstract syntax.	
US7	438	6.1.1.12	1	Technical	The kinds of quantifiers mentioned do not include variable numerical quantifiers, i.e. “there are exactly N things in the domain of discourse such that ...” While specific numerical quantifiers, e.g. there is exactly N=1 ...” can be considered syntactic sugar for a compound statement built up from the traditional universals and existentials, the case with variable N is not. It is needed to	Consider adding variable numerical quantifiers to the abstract syntax and semantics, provided it doesn't break them.	

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Template for comments and secretariat observations

MB/ NC ¹	Line number (e.g. 17)	Clause/ Subclause (e.g. 3.1)	Paragraph/ Figure/ Table/ (e.g. Table 1)	Type of comment ²	Comments	Proposed change	Observations of the secretariat
					express queries such as SQL's COUNT.		
US8	465	6.1.1.20	1	Technical	The description of a comment is too vague to be able to determine what the requirements are in order to conform to this abstract syntax. Is it necessary for a syntax to allow comments to be attached to every well-formed expression in order for it to be in full conformance with this abstract syntax?	Either make this definition more precise or handle the issue of conformance in detail in the Conformance conditions section. The treatment of comments needs to recognize the two different approaches to comments of the primary syntaxes (CLIF and XCL). The former has wrapping comments, while the latter has embedded comments.	
US9		6.2	Table 2, E20	Technical	The equation defining the semantics is vague. In particular, it is not clear whether G represents a text in the sense of the abstract syntax, or in the sense of a character sequence in a particular dialect.	Add language clarifying that G represents a text in the sense of the abstract syntax. This will allow titlings to be translated to other syntaxes without changing their meaning.	
US10	593-5	6.2	Para 7	Technical	The definition of S-variant is missing two important conditions – that if a name n is in S, then its interpretation must be in the domain of discourse D. Similarly a sequence marker s in S must be in D*.	Add these conditions to the definition of S-variant	
US11	1939-40	Annex C	C.1	Technical	There is no mention of how XCL should be interpreted when it is mixed with elements of other namespaces (e.g. embedded in XHTML)	Clarify the semantics for the case of a XML document with XCL mixed with elements of foreign namespaces Case 1. The root element is in a foreign-namespace and several XCL texts are embedded within the foreign-namespace markup: Consider it as a corpus, where each XCL text is a member of the corpus. Case 2. Elements and attributes from foreign namespaces occur within XCL elements: The embedded elements and attributes should be treated in the way comments are (although they would not actually be XCL comments), having no semantic effect, although they could have pragmatic effects.	
US12		Annex C	C.2	Editorial	There is no table of correspondence between the	Documentation (Relax NG # or ## comments) should be added within the schema to make clear	

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					XML elements and the abstract syntax.	the correspondence between each Relax NG grammar definition and the corresponding abstract syntactic category.	
US13	2019-26	Annex C	C.3	Technical	The XCL schema describes a type element (## Constrained Names in Quantifiers) which can be used to constrain quantified names. However, this is not described in the abstract syntax. It doesn't need to be, since this is syntactic sugar. But it is necessary to describe the transformation from quantifiers with constrained names to quantifiers without constrained names so that the semantics is made clear.	Describe this transformation in Annex C, section C.3.	
US14	483	6.1.2.2		Editorial	In this section "functional term" is used, and elsewhere (A.2.3.3) "complex (application) term" is used.	One or the other should be chosen and used throughout.	
US15	561	6.2	Para 2, sent 1	Editorial	There is a superfluous lambda following l	An interpretation l of a Common Logic ...	
US16	1947-51	Annex C	C.2	Technical	The "Corpus" element doesn't belong in the schema, as it is not a syntactic category. However, it would be good to have the option of putting several texts into a single file, in order to separate the physical structure from the logical structure of knowledge stores.	<p>Introduce a more neutral element, such as <cl:Document> that could be used as a root element for wrapping several texts.</p> <p>In particular, replace:</p> <pre>start = clRoot clRoot = Corpus clText clStatement clSentence ## Corpora Corpus = element Corpus { Corpus.type } Corpus.type = clCommon, clRoot*</pre> <p>with</p> <pre>start = clDocument clText clStatement clSentence clDocument = element Document {</pre>	

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						Document.type} Document.type = clCommon, clText*	
US17	2029	Annex C	C.2	Technical	The XCL schema has a Data element that accepts datatypes by reference (e.g. to XSD datatypes). However, there is no corresponding abstract syntax category. Therefore the claim made in C.4 – that there is an exact correspondence between the abstract syntax and the concrete XCL syntax is not true.	Consider adding datatypes to the abstract syntax, or remove the Data element from the XCL schema.	
US18		General		Technical	It would be useful to have official Common Logic MIME types for each dialect.		
US19	2012-18	Annex C	C.2	Editorial	The complex nature of the names in the XCL syntax, with options for IRIs through the @cri attribute, or markup through complex content, is not self-evident.	Add some examples in C.3 to illustrate the various ways names can be constructed in XCL.	
US20	2051	Annex C	C.2	Technical	The schema has a syntax (the @key attribute) for labeling expressions, but this is not part of the abstract syntax, and doesn't need to be. However, then it is not clear what the semantics of this attribute is.	Add an explanation to section C.3 that the expression label has no semantic effect.	
US21	2180	C.2	Relax NG Schema	Technical	For interoperability with XML tools, such as Xinclude, and to avoid changing semantics when a text is transmitted across the web, the xml:base attribute should be added to the Relax NG schema.	Modify clCommon = key.attrib?, Prefix*, Comment? To clCommon = key.attrib?, Prefix*, Comment?, base.attrib? And add base.attrib = attribute xml:base {xsd:anyURI}	

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