

ISO/IEC JTC 1/SC 32 N 1743a

Date: 2008-05-19

REPLACES: —

ISO/IEC JTC 1/SC 32

Data Management and Interchange

Secretariat: United States of America (ANSI)
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DOCUMENT TYPE	Summary of Voting/Table of Replies
TITLE	Summary of Voting on 32N1680 FCD 19763-4 Information technology - Metamodel framework for interoperability (MFI) Part 4: Metamodel for model mapping
SOURCE	SC32 Secretariat
PROJECT NUMBER	1.32.22.01.04.00
STATUS	WG2 is requested to resolve the comments. The document did not obtain substantial support.
REFERENCES	
ACTION ID.	ACT
REQUESTED ACTION	
DUE DATE	
Number of Pages	13
LANGUAGE USED	English
DISTRIBUTION	P & L Members SC Chair WG Conveners and Secretaries

Dr. Timothy Schoechle, Secretary, ISO/IEC JTC 1/SC 32
Farance Inc *, 3066 Sixth Street, Boulder, CO, United States of America
Telephone: +1 303-443-5490; E-mail: Timothy@Schoechle.org
available from the JTC 1/SC 32 WebSite <http://www.jtc1sc32.org/>
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ISO/IEC JTC 1/SC 32 N1743a

Summary of Voting on Document SC 32 N 1680

Title: ISO/IEC FCD 19763-4 Information technology - Metamodel framework for interoperability (MFI) Part 4: Metamodel for model mapping

Project: 1.32.22.01.04.00

“P” Member	Approval	Approval with Comments	Disapproval with Comments	Abstention with Comments
Australia				
Belgium				
Brazil				
Canada			1	
China				
Czech Republic				
Egypt				
Finland				
Germany				
Japan	1			
Kazakhstan				
Korea, Republic of	1			
Portugal				
Sweden				
United Kingdom			1	
United States		1		
Total “P”	2	1	2	
“O” Member				
Austria				
Denmark				
France				
Italy				
Netherlands, The				
Norway				
Russian Federation				
Switzerland				
Total “O”				

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COMMENTS:

Canada

No. See attached comments.

United Kingdom

No. See attached comments.

United States

Yes. See attached comments.

ISO

See attached comments.

Canadian Comments on SC32 N1680 FCD 19763-4

Template for comments and secretariat observations

Date: 2008-05-12

Document: ISO/IEC FCD 19763-4

Ray Gates v2.6 5/12/08 11:03 AM

Deleted: 08

1	2	(3)	4	5	(6)	(7)
MB ¹	Clause No./ Subclause No./ Annex (e.g. 3.1)	Paragraph/ Figure/Table/ Note (e.g. Table 1)	Type of comment ²	Comment (justification for change) by the MB	Proposed change by the MB	Secretariat observations on each comment submitted
CA 01	3.1.2	definition of 'pattern'	te	The definition is still unclear, even though it was revised in response to a CDN comment on CD2. The problematic text has not been changed. The definition is: "expression that describes the 'shape' of an object it will be matched against". What does the 'it refer to? Can we find a better term than 'shape'?	Clarify the definition. Possible resolution, though we are not sure this is what is meant: "expression that describes the 'shape' of an object to which other objects may be matched to determine similarity" Would 'structure' be better than 'shape'?	
CA 02	3.2.2	definition of mandatory	ed	The definition is taken from 11179-3:2003 and NOTE 1 refers to three obligation statuses. However, this standard uses only two. The corresponding note in the definition of OPTIONAL has already been changed.	In NOTE 1, change 'three' to 'two'.	
CA 03	3.2.10	definition of 'optiona'	ed	In Note 1, 'obligation' is misspelled.		
CA 04	4.1	Figure 1	te	Figure 1 uses terminology from MOF (e.g. M1 Layer, M2 Layer), but these are not explained.	Include definitions of MOF terms in clause 3.	
CA 05	4.3	Figure 2 and text	te	Figure 2 and text throughout this clause uses the abbreviations: - MM-M; M-V but these are not explained	Include explanations of these abbreviations in clause 3, and the first time they are used in clause 4.	
CA 06	4.4.2	MM-M Rule	te	Para. 2 refers to 'MOF Extents'. What are these? Where and how are they to be used? And under what criteria or conditions?	Include the term and definition in clause 3, and some explanation in this clause of how it is relevant here.	
CA 07	4.4.5	Figure 3	te	Figure 3 uses the terms: MM Level, M Level and V Level, but these terms are not defined.	Add the terms and their definitions to clause 3.	
CA 08	4.4.5	Figure 3	te	There is a legend of arrow symbols below Figure 3, but there is no explanation as to what they mean, nor do the symbols appear in the Figure.	Either explain these or remove them.	
CA 09	4.4.5	Figure 4	te	There is a legend of arrow symbols below Figure 4, but there is no explanation as to what they mean, nor do the symbols appear in the Figure.	Either explain these or remove them.	
CA 10	4.4.6	Figure 5	te	There is a legend of arrow symbols below Figure 5, but there is no explanation as to what they mean, nor do the symbols appear	Either explain these or remove them.	

Template for comments and secretariat observations

Date: 2008-05-12 Document: ISO/IEC FCD 19763-4

Ray Gates v2.6 5/12/08 11:03 AM
Deleted: 08

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				in the Figure.		
CA 11	4.4.6	Figure 6	te	There is a legend of arrow symbols below Figure 6, but there is no explanation as to what they mean, nor do the symbols appear in the Figure.	Either explain these or remove them.	
				END		

Template for comments and secretariat observations

Date: 25 April 2008

Document: ISO/IEC FCD 19763-4:2008

1	2	(3)	4	5	(6)	(7)
MB ¹	Clause No./ Subclause No./ Annex (e.g. 3.1)	Paragraph/ Figure/Table/ Note (e.g. Table 1)	Type of comment ²	Comment (justification for change) by the MB	Proposed change by the MB	Secretariat observations on each comment submitted
GB 01	Introduction	Line 3	ed	Incorrect spelling	"endeavor" should be "endeavour"	
GB 02	2		te	There are still some concerns with the normative references included in this clause. According to ISO/IEC Directives this clause should include everything that is referenced in such a way that you need, in principle anyway, to consult it in order to implement or apply this standard. Although all the documents listed in this clause are cited in the in the body of the document, some are only cited informatively. Many of the citations use an incorrect format, for example, using "UML" instead of "ISO/IEC 19501".	Review the list of normative references in this clause and then cite them correctly in the body of the document.	
GB 03	3		te	It would be useful to have a definition for "computation".	Add a definition for "computation".	
GB 04	3.1.1; 3.1.5; 3.1.6		ed	These three definitions are circular (ie they all rely on each other).	Provide 'non-circular' definitions.	
GB 05	3.1.4		te	Is 'model' used in the same way as in the title of the standard? It is unclear.	Enhance the definition.	
GB 06	3.1.5		ed	"relation" and "relationship" are shown as synonyms in this definition but (1) they normally have distinct meanings in the data/database community and (2) they are used inconsistently in the body of the document.	Use "relationship" consistently throughout the document.	
GB 07	3.2.10	NOTE 1	ed	Spelling error.	"bligation" should be "obligation".	
GB 08	3.3		ed	Numbering error - numbering changes from "3.3.n" to "3.2.n" after "3.3.8"	Amend.	
GB 09	3.3		te	Not every abbreviation used in the body of the standard is included in this clause.	Include all abbreviations.	
GB 10	4.1	Figure 1	te	The layer concept needs explanation.	Add explanation.	
GB 11	4.2	Line 7	ed	"The MFI Model Mapping is shown as a series of UML Class diagrams , ..."	Revise wording.	

1 **MB** = Member body (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

NOTE Columns 1, 2, 4, 5 are compulsory.

Template for comments and secretariat observations

Date: 25 April 2008

Document: ISO/IEC FCD 19763-4:2008

1	2	(3)	4	5	(6)	(7)
MB ¹	Clause No./ Subclause No./ Annex (e.g. 3.1)	Paragraph/ Figure/Table/ Note (e.g. Table 1)	Type of comment ²	Comment (justification for change) by the MB	Proposed change by the MB	Secretariat observations on each comment submitted
GB 12	4.2	Attribute specification	te	This shows that datatypes are to be specified for all attributes. Clause 4.1 states that the model described in this standard is a conceptual and abstract model. Datatypes are a physical concept and should not be included in a conceptual or abstract model.	Remove datatypes throughout the whole document.	
GB 13	4.3	Line 1	ed	"Figure 2 illustrates a package of MFI model Mapping."	Amend to read " Figure 2 illustrates the package of Model Mapping within the Metamodel Framework for Interoperability."	
GB 14	4.3	Line 4 et seq	te	Abbreviations such as "MM-M" need explanation. In fact, as these are names of classes in a conceptual model abbreviations should not be used at all and the names should be fully spelt out.	Spell out names.	
GB 15	4.3	Figure 2	te	If this figure is an accurate depiction of the concepts in the standard, it would appear that the concepts are unlikely to support accurate and realistic mapping between models. There are at least two concerns. (1) This implies that when mapping models there is always a one-to-one mapping between 'model instances', whereas in reality mapping is usually many-to-many. (2) As shown in the Figure it would be possible to mismatch "Model Instances" and "Model Concepts". These are serious errors that require the complete revision of the body of the document.	Revise the Figure and the remainder of Clause 4.	
GB 16	4.4.1	Line 1	ed	Spelling error.	"abstract" should be "abstract".	
GB 17	4.4.1	Superclass	ed	"Administered item (from MFI-Core)"	Remove "(from MFI-Core)" - since "Administered item" is defined in 3.2.1, the qualification is not needed here.	
GB 18	4.4.1	Line 11	te	"The identifier of sets of transformations rules" This description does not appear correct for an attribute called "Name" (singular) in a class called "LevelPair Rule" (also singular).	Revise.	

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NOTE Columns 1, 2, 4, 5 are compulsory.

Template for comments and secretariat observations

Date: 25 April 2008

Document: ISO/IEC FCD 19763-4:2008

1	2	(3)	4	5	(6)	(7)
MB ¹	Clause No./ Subclause No./ Annex (e.g. 3.1)	Paragraph/ Figure/Table/ Note (e.g. Table 1)	Type of comment ²	Comment (justification for change) by the MB	Proposed change by the MB	Secretariat observations on each comment submitted
GB 19	4.4.1	Table 1	te	Clause 4.1 states that the model described in this standard is a conceptual and abstract model. Codes are a physical concept and should not be included in a conceptual or abstract model.	Remove the code column.	
GB 20	4.4.1	Table 1	te	Is this set of valid values fixed for all time, or called it expand? It looks as if it is fixed, but it should probably be allowed to expand.	Clarify the status of this set.	
GB 21	4.4.1	Table 2	te	Clause 4.1 states that the model described in this standard is a conceptual and abstract model. Codes are a physical concept and should not be included in a conceptual or abstract model.	Remove the code column.	
GB 22	4.4.1	Table 2	ed	Table cell contents are incorrectly justified.	Use 'left justified' for all table cells other the heading rows.	
GB 23	4.4.1	Table 3, equivalence	ed	"... return the true/false".	Amend to read "... return true or false".	
GB 24	4.4.1	Attributes	te	"ruleDefinition" This name does not match the proposed contents, which are a reference to a rule.	Change the name so that it is more appropriate.	
GB 25	4.4.2	Attributes	te	These are all inherited from the superclass and should not be redefined here.	Delete attributes.	
GB 26	4.4.2	Attributes	te	Statements such as "upperRuleType shall be the code of 'Relationship'" are constraints and should be listed in that section.	Move all such constraints to the appropriate constraints section.	
GB 27	4.4.2	Constraints	te	"targetUpper may be in MM level and targetLower shall be in M level" - the use of "may' is inappropriate in a constraint specification.	Amend "may" to "shall".	
GB 28	4.4.3	Attributes	te	These are all inherited from the superclass and should not be redefined here.	Delete attributes.	
GB 29	4.4.3	Attributes	te	Statements such as "lowerRuleType shall be the code of 'Computation'" are constraints and should be listed in that section.	Move all such constraints to the appropriate constraints section.	

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MB ¹	Clause No./ Subclause No./ Annex (e.g. 3.1)	Paragraph/ Figure/Table/ Note (e.g. Table 1)	Type of comment ²	Comment (justification for change) by the MB	Proposed change by the MB	Secretariat observations on each comment submitted
GB 30	4.4.4	Table 4	te	Clause 4.1 states that the model described in this standard is a conceptual and abstract model. Codes are a physical concept and should not be included in a conceptual or abstract model.	Remove the code column.	
GB 31	4.4.4	Table 4	te	Is this set of valid values fixed for all time, or called it expand? It looks as if it is fixed, but it should probably be allowed to expand.	Clarify the status of this set.	
GB 32	4.4.5	Attributes	te	"name" and "kind" are inherited from the superclass and should not be redefined here.	Delete "name" and "kind".	
GB 33	4.4.5	Attributes	te	"mm-m-map" is a reference and not an attribute.	Move "mm-m-map" to the references section.	
GB 34	4.4.5	Table 5	te	Clause 4.1 states that the model described in this standard is a conceptual and abstract model. Codes are a physical concept and should not be included in a conceptual or abstract model.	Remove the code column.	
GB 35	4.4.5	Table 5	te	Is this set of valid values fixed for all time, or called it expand? It looks as if it is fixed, but it should probably be allowed to expand.	Clarify the status of this set.	
GB 36	4.4.5	Figure 3	ed	It is very unclear what this figure is trying to show.	Add some descriptive text.	
GB 37	4.4.5	Figure 4	ed	It is very unclear what this figure is trying to show.	Add some descriptive text.	
GB 38	4.4.6	Attributes	te	"name" and "kind" are inherited from the superclass and should not be redefined here.	Delete "name" and "kind".	
GB 39	4.4.6	Attributes	te	"m-v-map" is a reference and not an attribute.	Move "m-v-map" to the references section.	
GB 40	4.4.6	Table 6	te	Clause 4.1 states that the model described in this standard is a conceptual and abstract model. Codes are a physical concept and should not be included in a conceptual or abstract model.	Remove the code column.	
GB 41	4.4.6	Table 6	te	Is this set of valid values fixed for all time, or called it expand? It looks as if it is fixed, but it should probably be allowed to expand.	Clarify the status of this set.	

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1	2	(3)	4	5	(6)	(7)
MB ¹	Clause No./ Subclause No./ Annex (e.g. 3.1)	Paragraph/ Figure/Table/ Note (e.g. Table 1)	Type of comment ²	Comment (justification for change) by the MB	Proposed change by the MB	Secretariat observations on each comment submitted
GB 42	4.4.6	Figure 5	ed	It is very unclear what this figure is trying to show.	Add some descriptive text.	
GB 43	4.4.6	Figure 6	ed	It is very unclear what this figure is trying to show.	Add some descriptive text.	
GB 44	5		ed	This clause begins with a hanging paragraph. There should be a level 2 heading immediately after "5 Conformance".	Add heading.	
GB 45	5	Second sentence	ed	The "must" should be "shall".	Amend.	
GB 46	5	Second sentence	te	It should be made clear how this requirement will be tested.	Add clarification.	
GB 47	Annex A		te	The heading is "Transformation Languages" yet in the body of the text they are often referred to as "Transformation Description Languages"	Use consistent terminology.	
GB 48	Annex A		ed	This Annex is very difficult to read and it is unclear what purpose it is trying to achieve. It needs substantial rewriting.	Rewrite complete Annex.	
GB 49	Annex A		te	"Simply stated, a model compiler is a program that reads a transformation definition written in one formal language - the source model - and translates it into an equivalent model in another metamodel - the target model." (1) It is unclear why the word "compiler" has been used. (2) The implication of this sentence is that a metamodel is a formal language. Whilst that is almost certainly correct, consistent terminology should be used.	Rewrite.	
GB 50	Annex B		ed	This Annex is very difficult to read and it is unclear what purpose it is trying to achieve. It needs substantial rewriting, including the addition of text to explain Figure B1.	Rewrite complete Annex.	

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Date: 25 April 2008

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1	2	(3)	4	5	(6)	(7)
MB ¹	Clause No./ Subclause No./ Annex (e.g. 3.1)	Paragraph/ Figure/Table/ Note (e.g. Table 1)	Type of com- ment ²	Comment (justification for change) by the MB	Proposed change by the MB	Secretariat observations on each comment submitted
GB 51	Annex C		ed	This Annex is very difficult to read and it is unclear what purpose it is trying to achieve. It needs substantial rewriting, including the addition of text to explain Figures C1 to C8.	Rewrite complete Annex.	

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NOTE Columns 1, 2, 4, 5 are compulsory.

Comments on CD1 Text For: ISO/IEC CD XXXXX-xx Information technology — xx					Date: YYYY-MM-DD	Document: SC32/Nxxxx
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0	1	2	(3)	4	5	(6)	(7)
#	NB ¹	Clause No./ Subclause No./ Annex	Paragraph/ Figure/Table/ Note #	Comment type ²	Comment (justification for change) by the NB	Proposed change by the NB	Secretariat observations on each comment submitted

		Clause 3		ed	The clause numbering has an error. Some abbreviations are numbered 3.2.x, after the clause starts at 3.3. This is from 3.2.9 – 3.2.26.	Renumber to 3.3.x	
		Clause 3.3		ed	Is the bold face the correct style for the expansion of the abbreviations?	Check ISO directive.	
	US	Clause 4.2	1	ed	The words “conforming MOF standards” in the following sentence is ambiguous. “The MFI Model Mapping registry model is specified using Administered Items as defined in the Metadata Registry (MDR), and conforming Meta Object Facility (MOF) standards.” Do you mean to exclude standards that are not conforming to MOF? Or something else?	Reword to clarify.	

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² Type of comment: ge = general te = technical ed = editorial NOTE Columns 1, 2, 4, 5 are compulsory. ISO electronic balloting commenting template (enhanced 2002-08)

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MB ¹	Clause No./ Subclause No./ Annex (e.g. 3.1)	Paragraph/ Figure/Table/ Note (e.g. Table 1)	Type of comment ²	Comment (justification for change) by the MB	Proposed change by the MB	Secretariat observations on each comment submitted
ISO	2		ed	Documents listed in Clause 2 shall be referenced "normatively" elsewhere in the document, ie in a way that makes them indispensable to the application of the document.	Redraft document to refer to the following documents in a normative manner or move them to the Bibliography: ISO/IEC 19763-2 ISO/IEC 11179-3:2003 ISO/IEC 19501:2005 ISO/IEC 19502:2005 ISO/IEC 19503: 2005 ISO/IEC 20944 (which part?) NB Ensure that ISO/IEC 19763-2 and ISO/IEC 20944 have progressed to at least FDIS stage if they are to be used as normative references, since it is only then that they become publicly available documents.	
** ISO	2		ed	Incorrect title given for ISO/IEC 11179-3.	Change last element of Part 3 title to "Registry metamodel and basic attributes"	
** ISO	Introduction, 4, 4.2, 5.1 & 5.2		ed	Document incorrectly references itself as "this standard".	Except in the introductory paragraphs to Clauses 2 & 3, reference the document throughout as "this part of ISO/IEC 19763". Reference the whole series as "ISO/IEC 19763" and other parts as "ISO/IEC 19763-n".	
* ISO *	3.3		ed	Abbreviated terms are not numbered in International Standards. Caps not necessary and used inconsistently.	Redraft as follows: BIE business information entity CC core component etc.	
** ISO	5		ed	Clause 2 is the conformance clause in International Standards.	Insert this clause after the Scope and renumber subsequent clauses.	

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