

Subject: Disposition of Comments on Ballot on DIS 13886 - Language Independent  
Procedure Calling

Source: SC22/WG11

Date: September 1995

References: SC22/WG11 N399R - DIS 13886  
SC22/WG11 N417 - Summary of voting and comments (JTC1 N...., SC22 N....)

The ballot on DIS 13886 was held from 1995-05-18 till 1995-08-18; the ballot results are in document JTC1 N3...

*Summary of the ballot results:*

- JTC1 P-members approving DIS 13886: 17  
(Australia, Austria, Brazil, China, Czech Republic, Denmark, Egypt, Republic of Korea, Netherlands, New Zealand, Norway, Roumania, Slovenia, Sweden, Switzerland, United Kingdom and USA)
- JTC1 P-members not approving DIS 13886: 1  
(Japan)
- JTC1 P-members abstaining: 2  
(Germany, Italy)
- JTC1 O-members approving DIS 13886: 3  
(Ireland, Poland, Russian Federation)

Comments were received from Japan, the United Kingdom, the USA and ISO/CS.

The ballot comments were discussed at the JTC1/SC22/WG11 meeting, held in Gaithersburg (MD, USA) on September 25-27, 1995.

*Disposition of comments.*

*1. Comments from Japan*

Summary of the comment:

DIS 13886 specifies procedure calling in a very abstract manner, leaving much effort to each language group to produce a binding. As DIS 13886 is written in an abstract manner, it is difficult for the language groups to find out how this should be done. Therefore it is proposed to add an annex with examples.

Disposition of the comment:

The LIPC model is necessarily very abstract, in order that languages, with very different styles and approaches, can relate to LIPC in a way which imposes upon them a minimum of constraints and additional requirements and allows them to retain maximum flexibility when handling LIPC services in either client or server mode.

Because of the variety of approaches towards procedure calling in programming languages, (sample) bindings produced by WG11 would most likely be incomplete (or even incorrect): WG11 has simply not the necessary expertise (nor the resources) to produce full bindings, and considers

this (in line with earlier statements from SC22) to be the task of the various language WGs.

WG11 believes that Annex C of LIPC provides the right level of guidance for writers of language bindings: it explains the LIPC model in the light of topics that need to be addressed when producing a binding, but it does not go into details where hidden assumptions about the language-based model might start to occur, as this might confuse readers that are not familiar with such language specific details.

WG11 will be pleased to advise those planning informal or formal (draft standard) bindings to LIPC.

## 2. Comments from the United Kingdom

UK1 In 3.1.1 the word "symbol" is redundant and should be removed, since definition 3.1.25 does not use the term

DOC: Accepted

UK2 Definitions 3.1.17 and 3.1.18 are not sorted alphabetically and should appear after 3.1.22

DOC: Accepted

UK3 In 3.1.25 second sentence replace "to" by "the"

DOC: Accepted

UK4 In 3.1.28 (and perhaps elsewhere) replace "the LID standard" with "ISO/IEC 11404 Language-Independent Datatypes".

The second sentence should probably be a Note since it is not part of the definition.

DOC: Accepted

UK5 In 3.1.35 the second sentence effectively defines the term "procedure", with the phrase "within the text..." being a duplicate of the first paragraph of 3.1. This sentence should be replaced by a proper definition, preceding 3.1.20: "procedure: The procedure value."

DOC: Accepted

UK6 In 3.1.39 the term "responses" is unclear, although the intent is understood.

DOC: The intended paragraph is not 3.1.19 but 3.1.39.

No alternative wording available, leave as is.

UK7 In 4. The first sentence of the Note appears to give a definition for the normative term "information processing entity". This definition should be moved to section 3. However, the term gives rise to another problem, since in 4.1.1 and 4.1.2 conformance only refer to "language processor". The relationship between "information processing entity" and "language processor" needs to be clarified.

DOC: In 4. and 4.1: change "An information processing entity" by "A language processor"

In note: line 1: "The term "language processor" used in this clause may be extended to include ..." Replace "the concept of procedure calling" by "of procedure calling mechanism". Delete 2nd sentence.

- UK8 The diagram in 5.1 is somewhat unclear, since the notation used is not described. Also the terms "shared attribute" and "endpoint specific attributes" do not appear to be described or referenced.
- DOC: Remove the "Endpoint Specific Attributes" (twice) plus arrows, and "Shared Attributes" and arrow. Make the top thing into a dashed circle, remove IDN.
- UK9 In 5.2.2 the terms "units" in the first sentence appears to add nothing, is not defined and should be removed. (This comment appeared in our response to the previous CD ballot.)
- DOC: Accepted
- UK10 In 6.13.1 in the first bulleted item replace "then" with "the".
- DOC: Accepted
- UK11 Sentences 3 and 4 of the first paragraph of 7. seem to be related to conformance and should appear in 4.
- DOC: Clause 4 already requires the requirements of clause 7 to be satisfied. The text in sentences 3 and 4 do not add additional requirements to clause 4. As assistance to the reader, the text is left in clause 7 but as a note.  
Text for the note is rephrased.
- UK12 In 7.4 should "octet-literal" and "procedure-literal" be added to the "value-expression" list?
- DOC: The octet-type is a derived type, the octet-literal can therefore be deduced; "procedure-literal" should be "procedure-reference" and will be added.
- UK13 In 7.5.1.1 reference is made to the semantic interpretation being elsewhere (in LID). It is unclear whether DIS 11404 is the normative reference for the whole of 7. or whether LIPC is. If the definition in LIPC is the normative definition, for LIPC, then the text from LID should be incorporated directly and not referenced. If not then 7. should be described as non-normative, the text being included for assistance to the reader, and a reference to LID being normative added.
- DOC: Accepted in principle.  
Add a new paragraph to 7.5 as first paragraph with text: "Paragraphs in this clause which refer for a formal interpretation to DIS 11404 are included for completeness and assistance to the reader, and are considered to be informative parts of this International Standard."
- UK14 In C.4 it is not clear that the statement in paragraph 2 is true, since this implies that the subsequently called procedure executes to some extent within the context of the original client procedure. It is conceivable that the called procedure executes in a totally separate context, or a context of the originally called procedure.
- DOC: Accepted. Text is revised.
- UK15 In D.1 The first sentence should be stronger: "The interface concepts in LIPC and RPC are similar." The second sentence implies that there might be other things provided by each. If there are none then it should say so.
- DOC: First part: accepted. Second part: strike 2nd sentence.
- UK16 In D.1.1 this should state if there are other attributes in either.
- DOC: Rejected: it is not necessary to have a complete description of communalities or differences.

UK17 In D. there are several Editor's notes which should be removed.  
DOC: Accepted.

UK18 Add the example to D.6.3.  
DOC: Accepted.

UK19 In D.6.5 remove the "!!define finite!!" We believe this does not need to be defined.  
DOC: Accepted.

### 3. Comments from the US

Item: MF-0.1  
Reference: (global)  
Qualifier: Q  
Rationale: what happens when this becomes an IS?  
Proposal: delete "draft" in "this draft international standard"  
DOC: Accepted

Item: MF-0.2  
Reference: (global)  
Qualifier: Q  
Rationale: follow printing conventions  
Proposal: change " to “ when used as opening double quote delimiter  
change ' to ‘ when used as opening single quote delimiter  
DOC: Accepted

Item: MF-1  
Reference: Foreword, paragraph 3, line 3  
Qualifier: E  
Rationale: grammar  
Proposal: change "organization" to "organizations"  
DOC: Accepted: this is in paragraph 1 line 3.

Item: MF-2  
Reference: Introduction, paragraph 4, line 7; 2., third bullet item  
Qualifier: Q  
Rationale: has 11404 attained IS status?  
Proposal: change referenced text to reflect DIS or IS status consistently  
DOC: Accepted.

Item: MF-3  
Reference: 4., Note, line 3  
Qualifier: E  
Rationale: typo  
Proposal: change "Standardmay" to "Standard may"  
DOC: Sentence was removed by UK7.

Item: MF-4  
Reference: 5.1, note 2, lines 5 and 6  
Qualifier: E  
Rationale: Languages tend to treat character alphabets as "generic", but characters used

in ASN.1 are chosen from specific alphabets; if both client & server were operating in, say, a full EBCDIC environment, none of the predefined ASN.1 character types could be used, and another type (bit, octet, external) would be needed - the specific ASN.1 type should not be named in the text

Proposal: change "an ASN.1 'char' form" to "an appropriate ASN.1 value";  
change "The ASN.1 'char'" to "The ASN.1 value"

DOC: Accepted

Item: MF-5  
Reference: 5.2, note 5, last paragraph, line 2  
Qualifier: E  
Rationale: grammar  
Proposal: change "potential" to "potentially"  
DOC: Accepted

Item: MF-6  
Reference: 5.2.1.2, note 2, lines 1 & 2  
Qualifier: E  
Rationale: typos  
Proposal: change "Send" to "Sent", and "whishes" to "wishes"  
DOC: Accepted

Item: MF-7  
Reference: 5.2.1.2, note 3, line 1  
Qualifier: E  
Rationale: grammar  
Proposal: change "the use of" to "the use by"  
DOC: Accepted

Item: MF-8  
Reference: 5.2.5, line 1  
Qualifier: Q  
Rationale: clarify; is server procedure intended here?  
Proposal: change "within the procedure" to "within the server procedure"  
DOC: Accepted.

Item: MF-9  
Reference: 5.3.1, line 2  
Qualifier: E  
Rationale: use of "termination" in both usual & special sense is confusing  
Proposal: change "execution, or termination" to "execution, or ending"  
DOC: Accepted, use "completion" in stead of "ending"

Item: MF-10  
Reference: 5.3.1.1, line 1  
Qualifier: E  
Rationale: avoid use of "terminat\_\_\_\_" unless used in special sense  
Proposal: change "terminating normally" to "completing normally"  
DOC: Accepted; wording related to MF-9, MF-11 and MF-12.

Item: MF-11  
Reference: 5.3.1.2, line 1  
Qualifier: E

Rationale: avoid use of "terminat\_\_\_" unless used in special sense  
Proposal: change "terminating abnormally" to "completing abnormally"  
DOC: Accepted; wording related to MF-9, MF-10 and MF-12.

Item: MF-12  
Reference: 5.3.1.4, last bullet item  
Qualifier: E  
Rationale: limit use of "termination" to special sense where possible  
Proposal: change "termination" to "completion"  
DOC: Accepted; wording related to MF-9, MF-10 and MF-11.