ISO/IEC JTC1/SC22
Languages
Secretariat: CANADA (SCC)

ISO/IEC JTC1/SC22
N 922

FEBRUARY 1991

TITLE: Draft Minutes of Meeting of WG11 - Binding Techniques held in Monterey Ca, USA, on 1991-01-22/24

SOURCE: Secretariat ISO/IEC JTC1/SC22

WORK ITEM: JTC1.22.14, .16, .17, .28

STATUS: New

CROSS REFERENCE: N 879

DOCUMENT TYPE: Minutes of WG Meeting

ACTION: For information to SC22 Member Bodies.

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DRAFT MINUTES OF MEETING SC22/WG11/N227

Committee: ISO/IEC JTC1/SC22/WG11

Place: Casa Munras Garden Hotel
700 Munras Avenue
Monterey, CA 93940

Date: January 22 - January 24, 1991

Attendees:

Mr. Ed Barkmeyer	NIST, USA
Mr. Jean Bourgain	AFNOR, France
Mr. Ken Edwards	IBM, US
Mr. Ed Greengrass	DoD, USA
Mr. Brian Meek	King's College London, UK
Mr. Don Nelson	Tandem, USA
Mr. Paul Rabin	OSF, USA
Mr. Craig Schaffert	DEC, USA
Mr. Joe Treat	Netwise, USA
Mr. Willem Wakker	ACE, The Netherlands — acting convenor
Mr. Dick Weaver	IBM, USA (visitor)

1. Agenda (WG11/N213)

The agenda was amended as follows:

— The correct reference to the CLIPCM document is WG11/N188R. This document includes the "Editors Notes".

— Point 7.b: remove reference to ISO/IEC WD 10967.

— Add to point 7.b: WG11/N211 — Comments to CLID WD#4 (Greengrass)

— Add to point 7.b: WG11/N216 — Null problems (Barkmeyer)

— Add to point 7.b: WG11/N219 — Relationship between CLID, CLIPCM and RPC (Treat/Hamilton).

— Add to point 8.b: WG11/N214 — Comments of LCAS from Czechoslovakia (SC22/N868)

— Add to point 10: WG11/N217 — TCOS Programming Language Independent Specification Methods.

— Add point 10: WG11/N194R — Language-Independent Standards.

The agenda was accepted as amended.

2. Minutes of Previous Meeting (WG11/N207)

No changes were made to the minutes; the minutes were approved.

3. Convenor Report

ANSI will write a letter to SC22 secretariat indicating that ANSI is willing to relinquish the WG11 convenorship and secretariat. A SC22 letter ballot to appoint the WG11 convenor will follow shortly.

A letter from Mr. Ken Meyer (British Gas, UK) is received with the announcement that he is appointed to be the WG4 (COBOL) liaison to WG11.

4. National Activity Reports

4.1 BSI IST/5/11

Two panel meetings were held since the previous WG11 meeting. A formal report is appended to these minutes.

4.2 ANSI X3T2

One meeting was held since the previous WG11 meeting. The main topic at this meeting was the US position on the letter ballot on CLID.

4.3 AFNOR/CG 97/CN 22/GE 11

The AFNOR report is in document WG11/N220.

5. Work Item 22.14 - Language Bindings Guidelines

Document WG11/N215 is the updated version of the PDTR 10182 after the September 1990 meeting of WG11. The document was approved with minor editorial changes.

Brain Meek will send Don Nelson an annotated version of DTR 10176 (Guidelines for the Preparation of Programming Language Standards) from which Don Nelson can extract some guidance on style issues that arise when adapting PDTR 10182 to the ITTF style requirements (font size, section numbering). The thus updated version of PDTR 10182 will be send to ITTF for a first round of comments (target date: end March 1991). A version with this comments incorporated will be presented to SC22 secretariat for DTR ballot.

Milestones for the Language bindings Guidelines project:

5.3 91-12 TR published

6. Work Item 22.16 - Common Procedure Calling Mechanism

This work item was discussed extensively during a meeting with attendees from X3T2 and X3T5.5 (RPC). The main topic was the relation between CLIPCM, CLID and RPC.

Apart from the WG11 attendees, the following people participated in this meeting:

Mr. Wayne Davison	RLG	X3T5.5, JTC1/SC22/WG6
Mr. John Day	Motorola	X3T5.5 ULA
Mr. Steve Griesmer	AT&T	X3T5.5 RPC
Mr. Mark Hamilton	Netwise	X3T5.5 RPC
Mr. Barry Holroyd	Sun Microsystems	X3T5.5 RPC
Mr. Wayne Hutchinson	NCR	X3T5.5 RPC
Mr. Hoyt L. Kesterson, II	Bull	X3T5, SC21/WG4
Mr. Steve Lee	Amoco	X3T5.5 RPC
Ms. Jody Read	Hewlett-Packard	X3T5.5 RPC
Mr. Chi Kong Shue	OSF	X3T5.5 RPC
Mr. Scott Stein	Bull	
Ms. Shaula Yemini	IBM	X3T5.5 RPC

A 2nd WD on RPC is available (WG11/N218) but it is not clear if the original schedule (CD registration after the SC21 May 1991 meeting in Arles, France) can be maintained.
For CLIPCM, a revised version was available (WG11/N188R). The revised version includes the changes that were agreed on during the September 1990 WG11 meeting (mainly in the conformance section).

It was agreed that the IDN used by CLIPCM, the syntax used in CLIP and the IDN used by RPC should all be aligned (be basically the same). An ad-hoc group (Chi Kong Shue and

Craig Schaffert) was established to investigate all related issues, and to propose solutions on these issues together with Mark Hamilton and Ed Barkmeyer. The result of this effort will be discussed at the next X3T5 meeting (1st week of March). It will then be forwarded to SC21 via the US tag.
WG11 should discuss the results during the combined meeting with SC21/WG6 in Arles.

It was agreed that changes in the syntax for the CLID document may not (at least not in WD#5) change the content of CLID.

The scope for the CLIPCM document was described as "IDN and its semantics, plus a model for procedure calling". For the latter, a SC21/WG6 document on this issue would be studied.
A revised version of the CLIPCM document should be available shortly after the Arles meeting. This document should be sent to SC22 for review and comment.

The relation between ASN.1 and RPC (CLID/CLIPCM) was discussed as well. The conclusion was that (1) RPC will/should provide a mapping from its datatypes to the ASN.1 datatypes, and (2) that as much as possible identical syntax and semantics should be used.

On the conformance issue, Craig Schaffert argued that only inward mappings of datatypes are required. He agreed to put his arguments in writing so that they can be discussed at the next meeting.

Issues from document WG11/N219 (Relationship of CLID, CLIPCM and RPC) were highlighted by Mark Hamilton. Some were considered to be useful and easy to implement (Annotations, N219 page 13), others were less obvious and need more study (Late Bindings, N219 page 10).

Milestones for the CLIPCM project:

2.8 91-09 WD approved for registration as CD

7. Work Item 22.17 - Language-Independent Data Types

The summary of voting on SC22/N842 (CLID WD#4) is in document SC22/N906; this document was handed out during the meeting. The summary shows 8 YES votes without comments, 1 YES vote with comments (France) and 1 NO vote with comments (USA). The USA and France argued that the document (in the form on which the ballot was held) is not suitable for progression to the DIS phase. The UK and the Netherlands argued that the document should be 'on the street' as quickly as possible in order to attract comments from a wider audience.

The detailed comments from France and the USA were discussed. It was decided not to try to solve the problems around the Null datatype and the Undefined datatype, and leave comments referring to these problems (comments 38 to 45 from France and comments 2, 3 and 6 from the USA) unanswered. Text on the resolution of all other comments will be produced by the project editor in document WG11/N223.

It was decided to produce WD#5 of the CLID document, with all resolved issues incorporated and with the Null/Undefined problem, with the possible alternative solutions as perceived by the project editor, extensively documented in the Open Issues list. This document should be available in early March and be sent to SC22 for registration as CD.
At the next WG11 meetings (Arles, Vienna) the Null/Undefined problem should be resolved, and a 2nd CD be produced. This should lead to a DIS registration after the first meeting in 1992.

The project editor, Ed Barkmeyer, announced that he might not be able to continue his activity as project editor after the September 1991 meeting, as his employer feels that the

project is 'dragging' too long, and urged WG11 agree on a DIS at the September meeting. Jean Bourgain underlined the need for a realistic planning for the document.

Milestones for the CLID project:

2.8	91-01	WD approved for registration as CD
3.0	91-03	CD registered
3.1	91-03	CD study initiated
3.8	92-05	CD approved for registration as DIS

8. Work Item 22.28 - Language Compatible Arithmetic Standard

The summary of voting on SC22/N796 (LCAS Version 2.2a) is in document SC22/N851 (WG11/N210). The summary shows 7 YES votes without comments and 2 YES votes with comments (France and the Netherlands). After closing of the ballot 2 other comments were received: SC22/N868 (WG11/N214) from Czechoslovakia and SC22/N887 from the UK.

The project editors have prepared LCAS version 3.0 (WG11/N212) in which the comments from France and the Netherlands are incorporated. The responses to the comments are in WG11/N222.
During the meeting the comments from France and the Netherlands were discussed and the responses approved. The comments from Czechoslovakia and the UK were discussed and responses formulated.
The project editors will produce WG11/N222R which will include responses to all the comments, and LCAS version 3.1. The latter document (which also will be improved in respect to style requirements from ITTF) will be available in March 1991. It is the intention to have this document registered as DIS.

Jean Bourgain explained the AFNOR position on conformance to LCAS, which is that it should be possible to have partial conformance for those languages that do not support (or implementations/environments that do not need) all the datatypes and/or operations that are required for conformance. A similar problem arises with CLID.
AFNOR will write a position paper on this issue to SC22.

[Note from convenor: after the meeting and after contact with SC22 secretariat, it appears the version 3.0 was not yet registered as CD, and that version 3.1 first should be registered as CD, whereafter a 3 months letter ballot will be conducted amongst a wider audience than the previous ballot. When no serious problems arise from this letter ballot, the document can be registered as DIS by September 1991.]

The summary of voting and comments on the letter ballots for the approval of new work items for Language Compatible Mathematical Procedure Standard (SC22/N819) and Language Compatible Complex Arithmetic and Procedure Standard (SC22/N818), in documents SC22/N884 and SC22/N883 respectively, show both 10 YES votes without comment and 1 YES vote with comment (from France). France commented on both proposals that the same terminology as for LCAS should be used for the new work items, and that the new documents should be integrated to LCAS (either as parts or as amendments).
This was considered to be a good proposal, and the convenor was asked to investigate the possibilities with SC22 secretariat.

At this moment a letter ballot is conducted in JTC1 on the proposals (JTC1 documents N1115 and N1116) with closing date March 27th, 1991.

The US delegation announced that Mary Payne will be the project editor for both new projects. As for LCAS, she will be assisted by Martha Jaffe, Brian Wichmann and Craig Schaffert.
WG11 gratefully accepts this offer and thanks the project editors.

On the issue of the fast-track procedure for DIS 10858 (ANSI/IEEE 854-1987) a (hand written) paper with the US position was discussed. The conclusions of this paper are that the fast-track procedure is not the right means to achieve a revision of an older standard (IEC 559:1982), that IEC 559 needs to be revised, that this work should be assigned to a suitable hardware oriented subcommittee and that there should be a liaison between this development activity and the work on LCAS in WG11. The answer on the fast-track procedure should therefore be negative.
Brian Meek indicated that the UK will take a similar position.
WG11 decided that it agrees with the above conclusions, and individual members were asked to make sure that their member bodies take the same approach.

Milestones for the LCAS project:

3.8 91-09 CD approved for registration as DIS

9. Cross language issues

The following issues were discussed.

1. WG11/N217 - POSIX Language Independent specifications
   The document was discussed with one of the authors (Paul Rabin), and some background information was given. No special actions resulted from this discussion.
2. WG11/N194R - Language-Independent Standards (Meek and others)
   The revised version now contains contributions from Paul Barnetson (language binding guidelines) and Willem Wakker (POSIX). It is sent with CLID WD#4 (SC22/N842), LCAS Version 2.2a (SC22/N796) and the Guidelines (SC22/N754) to the secretariats of SC1, SC2, SC18, SC21, SC24, SC26, SC27, and the JTC1 member bodies.
   Brian Meek will update the document with respect to the current status of the various documents, but no major update is planned before September 1991. Comments on the document should be sent to the authors of the parts or to Brian Meek.

10. Future meetings

— Second meeting 1991.

Date: May 27th - May 28th, 1991
Place: Arles (France)

This meeting will be combined with SC21/WG6, and the main issues will be CLID and CLIPCM in relation to RPC.

— Third meeting 1991.

Date: September 17th - September 20th, 1991
Place: Vienna (Austria)

This meeting is one week before the SC22 meeting in Vienna.
There will be a combined meeting with SC22/WG2 (Pascal) on Wednesday, September 18th (afternoon).
It is proposed to have part of the WG11 meeting devoted to RPC issues together with people from the SC21/WG6 RPC rapporteurgroup.

— First meeting 1992.

Date: April 20th - April 24th, 1992 (tentatively)

Place: Washington DC (USA)

This will be a combined meeting with X3T2.

Documents identified since last mailing

WG11 Nbr	Other Nbrs	Date	Author	Title
	SC22/N883	9012xx	SC22	Summary of voting on LCCAPS
	SC22/N884	9012xx	SC22	Summary of voting on LCMPS
	SC22/N887	9012xx	SC22	UK comment on N796 LCAS
215		9012xx	Nelson	Updated version PDTR 10182
216		910109	Barkmeyer	NULL Problems
	SC22/N906	910117		Summary of voting on N842 CLID
217		910118	IEEE/TCOS	P.L. Independent Spec. Methods D#3
218	WG6/N953	901109	SC21/WG6	2nd WD RPC
219	T2: 91-035	910107	Netwise	Relationship of CLIDT, CLIPCM and RPC
220			AFNOR	AFNOR activity report
221		910111	Yellin	Comments on CLID WD#4
222		910118		Proj editor reponses on comments on LCAS
223			Barkmeyer	Proj editor reponses on comments on CLID
224		9102xx	Greengrass	Further Comments on Null/Undefined
225		910130	Wichmann	Comments on ASN.1 for real data values
226	WG4/N91001	910108	WG4	Liaison statement form SC22/WG4
227		9102xx	Wakker	Minutes WG11 Meeting January 1991
228		9102xx	Greengrass	Response to Netwise Proposals (N219)

BSI national activity report

The UK panel has met once since the last WG11 meeting and has continued to communicate by correspondence, especially electronic. Dave Robinson (RPC) attended part of the December meeting and much discussion was related the RPC project. The UK panel were to canvass views in the UK programming language community, especially over the question of IDN. The panel also has contacts with the UK IRDS group and a presentation will be given to IST/5 (the UK equivalent of SC22) in March.

On CLID it was felt that List should be dropped from Annex A and Array substituted, this discussion being particularly in relation to Brian Meek's initial draft comparative table which distinguished the Annex A types. The question of NULL was also discussed but it was clear that it might be difficult to achieve consensus.

The UK programming language committee has recommended a UK YES vote on the LCAS extensions but current UK policy might dictate the substitution of a NO vote (on the basis that the programme of work is too heavy) or perhaps a YES but without participation. If the extension projects are approved and assigned to WG11 this may make little difference in practice unless UK involvement in WG11 on other projects is curtailed, since the UK panel will still get the documents and will have the chance to comment on them.

On the proposed DIS 10858 (fast-track of IEEE 854), UK will vote NO on the basis that it appears to be in conflict with other standards.