SEPTEMBER 1992

TITLE: Minutes of the Fifth Plenary of SC22, Ellivuori Finland, 1992-08-24/28

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ACTION: For information to SC22 Member Bodies.
1. OPENING OF THE MEETING:

Dr. Hannu Jaakkola, Professor of Information Technology at the Tampere University of Technology officially opened the Fifth Plenary of JTC1/SC22 at 10:06 on August 24, 1992. He welcomed SC22 delegates to Finland. Dr. Jaakkola then provided information on accommodation and general information regarding the facilities and the programme for the week.

2. CHAIRMAN’S REMARKS:

Mr. R. Follett briefly outlined his plan of work for this meeting. It was noted that a few Ad Hoc groups would be created during this meeting to address specific issues of interest to SC22 at this time.

The chairman then indicated that further remarks would be made in his report, under item 7.1 of the agenda.

3. ROLL CALL OF DELEGATES:

The list of delegates in attendance at the Fifth Plenary of JTC1/SC22 is contained in document SC22 N1225.

4. APPOINTMENT OF DRAFTING COMMITTEE:

The following delegates were appointed to the drafting committee:

- Mr. S. Jameson - USA
- Mr. B. Meek - UK
- Dr. G. Warren - Canada (Chairman)
- Mr. C. Bourstin - France
- Mr. K. Simonsen - Denmark.

At this point, Mr. H. Havusto representing the Standards Organization of Finland (SFS), and Mr. J. Sorvari representing the Information Technology Center of Finland (TIEKE) were introduced.
On behalf of SFS, Mr. Havusto welcomed all delegates to Finland. He briefly explained the standards development process in Finland and wished SC22 much success during this meeting.

Mr. Sorvari indicated that he was representing Finland Information Technology Steering Committee & Standards Development Committee. Mr. Sorvari said that as a member of a standards development committee, he understood very well the difficult task of developing standards, especially for SC22, a committee with a wide area of work. He wished delegates much success during the week and hoped the delegates would have some time to enjoy Finland.

In closing, on behalf of TIEKE, he thanked Dr. Jaakkola for organizing the hosting of the Fifth Plenary of SC22 in Ellivouri.

5. ADOPTION OF THE AGENDA:

The revised agenda for the meeting, contained in document N1119R, was adopted with the addition of relevant document numbers.

6. REPORT OF THE SECRETARIAT:

Mr. J. Côté, Secretariat of SC22, referred delegates to the SC22 updated programme of work contained in document N1212. He requested all Convenors to provide him with corrections and updates for their respective projects by the end of the week. He also noted that N1212 was available in machine-readable form to facilitate updating.

7. ACTIVITY REPORTS:

7.1 Report from the Chairman:

Mr. Follett indicated that he had recently attended an information session offered by the JTC1 Secretariat to US members holding international positions. He went on to discuss the revised JTC1 Directives, contained in document SC22 N1130. He commented on attendance at Working Group meetings, indicating that WG meeting were open to Member Body-approved delegates only. He then went on to discuss category C liaison. The convenor of WG15 (J. Isaak) asked for SC22 guidance regarding this type of liaison arrangement.

At this point, the convenor of WG14 (P.J. Plauger) indicated that WGs need a way to identify principle experts at WG meetings.

At this point, there was a lengthy discussion of the revised JTC1 Directives and a number of concerns were raised.
7.2 National Reports:

The following national activity reports were presented:

- Canada - N1221
- Denmark - N1227
- France - N1190
- Finland - N1231
- Germany - N1224
- Japan - N1222
- Netherlands - N1230
- New Zealand - N1199
- UK - N1206
- USA - N1184

During the national activity reports presentations, the following points were made:

1. Canada invited SC22 to meet in Canada around the mid 90's
2. Denmark will host meetings of WG17 in Oct/92 and WG20 in April/93.
3. France confirmed the hosting of the Sixth Plenary of SC22 in Paris.
4. SC22 noted M. Francois Genyu's retirement and expressed its sincere appreciation of his many contributions to the development of Language standards.
5. Germany expressed a concern about the absence of Users from the language standards development process and suggested that SC22 consider ways of changing this.
6. New Zealand expressed a concern about time taken for SC22 documents to reach their office (anywhere from 4 to 14 weeks).
7. UK expressed a concern about the proliferation of language standards.

7.3 Liaison Report:

There were no liaison organization in attendance and no liaison report was received by the Secretariat.

7.4 Report of Liaison Officers:

7.4.1 Liaison Officer to SC2:

Mr. J. Van Wingen presented his liaison report which is contained in N1232.

7.4.2 Liaison Officer to SC7:

Mr. J. Côté reported that until now, no SC7 project was relevant to SC22. However, he noted that a few new project proposals being considered by SC7 would require technical cooperation with SC22. He offered to distribute, to SC22 WG convenors, the SC7 programme of work and the proposed projects of interest to SC22.
7.4.3 Liaison Officer to SC15:

Document N1174 was tabled for discussion.

7.4.4 Liaison Officer to SC14:

It was noted that Mr. Appel had reported that this liaison was not required and should be terminated.

7.4.5 Liaison Officer to SC18:

N/A

7.4.6 Liaison Officer to SC21:

Document N1178- SC21 proposal for a Study Period on Application Programmatic Interfaces, was tabled for discussion. The convenor of WG15 - POSIX noted that the SC21 proposal overlapped with the current work of SC22/WG15. It was agreed that a resolution addressing this issue should be drafted.

7.4.7 Liaison Officer to SC21/WG3:

Mr. Korn (Denmark) was not in attendance and no report was received.

7.4.8 Liaison Officer to JTC1/SWG- EDI:

Mr. Appel was not in attendance and no report was received. It was noted that this liaison was no longer required.

7.5 Report from Ad Hoc Group on Interpretation:

Mr. J. Hill (USA) indicated that the report from this group, contained in N1159, had been prepared as per the SC22 instructions given at the Fourth Plenary of SC22. He thanked all contributors for their participation in this Ad Hoc Group.

8. WORKING GROUP REPORTS:

8.1 WG2 - Pascal

The report of activity, prepared by Mr. Joslin, convenor of WG2, was presented by Mr. Meek from the UK.
8.2 WG3 - APL

The convenor of WG3, Dr. Dickey, was not in attendance and no report was submitted.

8.3 WG4 - COBOL

The report of activity, contained in N1223, was presented by Ms. Wallace, convenor of WG4. In her report, she asked for guidance from WG11 - Binding Techniques, on language-independent file-sharing and record-locking. She also asked for guidance from SC22 regarding DIS 10646. Finally, she asked for SC22’s permission for WG4 to continue its relationship with X/Open COBOL, similar to "C" category liaison until C liaison is officially approved.

It was also reported that ITTF had not yet published the COBOL Addendum on Intrinsic Functions.

8.4 WG5 - Fortran

The report of activity, contained in N1214, was presented by Mr. R. Hendrickson, on behalf of the convenor, Mrs. J. Martin.

It was noted that a Russian translation of the Fortran standard had been offered and WG5 had suggested SC22 initiate action to have it published by ISO/IEC ITTF.

8.5 WG8 - Basic

The activity report, contained in N1188, was presented by Dr. T. Kurtz, convenor of WG8. The convenor suggested that WG8 should be disbanded after the publication of the Amendment to the Full Basic standard.

8.6 WG9 - Ada

The report of activity, contained in document Ell-01, prepared by Dr. Mathis, convenor of WG9, was presented by Mr. D. Emery.

8.7 WG11 - Binding Techniques

The report of activity, contained in N1187, was presented by the convenor of WG11, Mr. W. Wakker. He suggested that SC22 consider the development of a guide on writing language-independent specifications.

8.8 WG13 - Modula 2

The report of activity, contained in N1208, was presented by Mr. K. Pronk on behalf of the convenor of WG13, Mr. M. Woodman.
It was noted that WG13 was requesting SC22's endorsement of the revised schedule for development of the Modula 2 standard.
Mr. Pronk also requested SC22's authorization to proceed with the scheduled meeting of WG13 (Sept 21/25, 1992) eventhough the meeting had been called without sufficient notice. SC22 agreed to this request.

8.9 WG14 - C

The report of activity, contained in N1173, was presented by the convener of WG14, Mr. P.J. Plauger.
In his report, the convener noted that a guideline for producing Interpretations of the standard was critical and should be developed by SC22, even if only on an interim basis.
At this point, the French contribution contained in N1226 was tabled.
Denmark's concerns about the development of the Normative Addendum for programming language C were also discussed.

8.10 WG15 - POSIX

The report of activity, contained in N1215, was presented by the convener of WG15, Mr. J. Isaac. He referred delegates to documents N1217 (re. Internationalization efforts) and N1216 (Action requested of SC22). Mr. Isaac then indicated that WG15 was seeking input from SC22 Member Bodies on Language-independent specification. Finally, he indicated that WG15 had recommended that SC22 authorize CD registration of document N1180. The UK pointed out that they would not support CD registration, at this time, as their comment on the NWI ballot had not been considered.

8.11 WG16 - Lisp

The report of activity, contained in N1198, was presented by Mr. C. Bourstin, on behalf of the convener, Mr. Queinnec.
It was noted that WG16 had requested SC22 to extend the deadline, for Working Draft submission for project JTC1.22.23, to the end of 1992.

8.12 WG17 - Prolog

The report of activity, contained in N1183, was presented by the convener, Mr. R. Scowen. The convener requested SC22 to consider the three late votes on N1133, received from SC22 Member Bodies and to authorize CD registration of N1133, or a revised version, on Prolog General Core.

8.13 WG18 - FIMS

The convener of WG18, Dr. D. Frantz, reported on the activities of the working group.
It was noted that the final version of the FIMS standard, currently in preparation, will be submitted to the SC22 Secretariat for DIS processing.
A proposal for subdivision of project JTC1.22.27, contained in N1154, was discussed. Dr. Frantz outlined the purpose and scope of the new projects.
8.14 WG19 - VDM

The report of activity, contained in N1207, was presented by Mr. B. Meek, on behalf of the convener, Dr. D. Andrews.

It was noted that WG19 had proposed a subdivision for project JTC1.22.29.

At this point, Mr. J Dawes (UK) provided additional information on the proposed project subdivision. Following some discussion, it was agreed that the UK, on behalf of the convener of WG19, should prepare a brief description of the new project, for consideration by SC22 MBs.

8.15 WG20 - Internationalization

The report of activity, contained in N1233, was presented by Ms. A. Wallace, on behalf of the convener, Mr. R. Weaver.

It was noted that WG20 would be submitting to SC22, three new project proposals. A discussion followed on whether these should be addressed as a project subdivision or formal NWI proposals.

The Netherlands expressed a concern about the current Terms of Reference (TOR) for WG20 and suggested that the TOR for WG20 be re-written to more precisely define WG20’s area of responsibility. The Netherlands also suggested that because of the current TOR for WG20, the new project proposals should be processed as formal NWIs.

New Zealand indicated that it was their belief that JTC1 wanted WG20 to form the initial focus for all internationalization standards activity. It was also indicated that although some of the work to be identified in WG20’s Internationalization report may be outside the scope of WG20 and of SC22, it would still be within the scope of JTC1’s request to SC22. Mr. Hopper (NZ) went on to point out that if JTC1 is not careful, SCs could possibly have different approaches to internationalization instead of a common one. This should be avoided.

Denmark also noted that the Technical Report, being developed by WG20, will identify the requirements. The standards will not necessarily be developed by SC22, rather, the information will be communicated to the appropriate SC.

8.16 WG21 - C++

The report of activity, contained in N1218, was presented by the convener, Mr. S. Carter.

Denmark indicated that, to this point, WG21 and the USA X3J16 committees have been holding joint meetings and that this method of operation was very good. Denmark proposed that SC22 formally endorse this method of operation by means of a Resolution. SC22 Member Bodies felt that recording of this matter in the minutes of this plenary meeting was adequate.
9. Project Editor Report

9.1 PL/I

Dr. J. Klensin was not in attendance and no report was submitted.

10. AD HOC MEETING

SC22 identified five issues requiring ad hoc group discussion, as follows:

- Language-independence issues
- Internationalization
- MUMPS - Ballot resolution
- Interpretation
- Character-related issues

The first session of the fifth plenary meeting adjourned at 19:08 hrs, on 1992-08-24.

The fifth plenary meeting of SC22 re-convened at 15:25hrs on 1992-08-25.

10.1 Report from AD HOC Groups:

The chairman of the Ad Hoc Group on Language-independent issues, Mr. W. Wakker (Netherlands) reported on the progress made during the first session of this group. He indicated that the group agreed to use N1186 as a base document for the development of a draft policy for SC22 on cross-language issues. The group aims to complete this document in time for consideration by SC22 at its 1993 Plenary meeting.

The chairman of the Ad Hoc Group on Interpretation, Mr. J. Hill (USA) reported on the progress made by this group. He indicated that the group had considered N1185 and required more time to complete its base document. The base document will be available later, during this plenary session.

The second session of the fifth plenary meeting adjourned at 17:15 hrs, on 1992-08-25.

The fifth plenary meeting of SC22 re-convened at 16:00hrs on 1992-08-26.

10.2 Report from AD HOC Groups:

The chairman of the Ad Hoc Group on Internationalization, Mr. A Walker (UK) reported on the progress made by this group. He indicated that the Ad Hoc Group were given two issues to address:
1. produce response to JTC1 on Internationalization activities, as per Resolution xxx of the Madrid JTC1 Plenary;
2. review the Danish proposal to subdivide project JTC1.22.30.
Mr. Walker reported that the Ad Hoc Group did not have time to address the second issue. The Ad Hoc Group report is contained in document Ell-14.

The chairman of the Ad Hoc Group on Character-related issues, Mr. P. Nash (NZ) reported on the progress made by this group. He outlined the issues addressed by the Group and presented the results of the meeting. The report of the Ad Hoc Group meeting is contained in document Ell-15.

The chairman of the Ad Hoc Group on Language-independent issues, Mr. W. Wakker (Netherlands) reported on the progress made during the meeting of this Group. He indicated that the Ad Hoc Group had recommended that SC22 establish a longer term Ad Hoc Group with the terms of reference as described in document Ell-13. A resolution to this effect was prepared.

The chairman of the Ad Hoc Group on Interpretation, Mr. J. Hill (USA) reported on the progress made by this group. It was noted that the Interpretation Guideline document will also be applicable to "defect reports". The Ad Hoc Group report is contained in document Ell-xx.

The chairman of the Ad Hoc Group on MUMPS, Mr. T. Salander (USA) reported that the Ad Hoc Group had completed a Disposition of Comments report (N1234) addressing the comments received during the Fast-Track DIS processing. The Programming language MUMPS, along with the disposition of comments report will be forwarded to ITTF for publication.

11. ISSUES FOR DISCUSSION:

11.1 Vienna Agreement

The chairman referred delegates to document N1191 and indicated that their was no action required by SC22 at this time.

11.2 UK Contribution - Improving Language Standardization

The UK HOD referred delegates to document N1201. Mr. R. Scowen (UK) then proceeded to give a brief overview of the content of the document.
11.3 UK Contribution - Syntactic Metalanguages

Mr. R. Scowen (UK) presented an overview of document N1202. It was noted that this document had been submitted to SC22 in response to Resolution 165, passed at the fourth plenary of SC22. As a result of some discussion on this topic, SC22 agreed that a consultative letter ballot should be carried out in SC22, to determine if a standard on "Syntactic Metalanguage" is required, as per resolution 165. The UK requested that on the SC22 letter ballot, a third question be asked: "If a standard is required, would you favor fast track processing of the BSI standard BS6154 on Syntactic Metalanguage?".

11.4 Programming Language MUMPS

11.4.1 Resolution of comments

The Ad Hoc Group on MUMPS, chaired by Mr. T. Salander produced the disposition of comments report on Fast track DIS 11786 and it is contained in document N1234. This report was endorsed by SC22 for submission to ISO/IEC ITTF, along with the MUMPS standard for publication.

11.4.2 Revision of MUMPS

Mr. T. Salander (USA) informed SC22 that the MUMPS Development Committee is quite advanced in the revision of the MUMPS standard and that the committee believes the revision of the standard should be processed using the Fast track method. SC22 endorsed this method for the revision of the MUMPS standard.

11.5 New Work Areas

The chairman advised SC22 that no action was required of SC22 regarding the experimental application of New Work Areas as defined in the revised JTC1 Directives (N1130).

The third session of the fifth plenary meeting adjourned at 18:00 hrs, on 1992-08-26.

The fifth plenary meeting of SC22 re-convened at 10:00 hrs on 1992-08-27.

11.6 SC22 Liaison Requirements

It was noted that SC27 had submitted to SC22 a liaison statement contained in document N1149.

It was agreed that the SC22 Secretariat should communicate with the SC27 Secretariat to inform SC27 that SC22 will respond to their request, but not by September 1, 1992.

Concerning the SC22 liaison to SC21/WG3, it was noted that no report had been received
from our liaison representative for about two years and therefore it was suggested that this liaison was probably not required. It was also noted that liaison, at the WG level exists between SC22/WG11 and SC21/WG3 and SC22/WG20 and SC21/WG3. Concerning a technical liaison to ISO TC37, it was agreed that for now, SC22/WG20 will handle this for SC22.

11.7 Confirmation of WG Convenors

The Secretariat reported that no convenor needed to be confirmed at this time.

11.8 Nomination/Appointment of project editors

A number of new project editors were nominated and this is addressed in Resolution xxx.

11.9 Status of possible NWIs

a) Programming language Forth

Following some discussion of this NWI proposal, it was agreed that a SC22 consultative letter ballot be carried out with N1175, or its revised version if one is prepared by the USA.

b) Extended Pascal bindings to LIA

SC22 agreed that the proposal contained in N1172 (WG2 to provide revised title and schedule) should be submitted to JTC1 for approval.

c) Z Notation

Following some discussion of the proposal contained in N1179R, SC22 agreed that the proposal should be submitted to JTC1 for approval. The UK will provide additional information to the SC22 Secretariat, for distribution to SC22 Member Bodies.

d) Object-Oriented Extensions to Pascal

Following some discussion of document N1203, SC22 agreed that the NWI proposal should be revised, changing the title and the schedule for the project, and submitted to the SC22 Secretariat for submission to JTC1 for approval.
e) Denmark’s proposal to subdivide project JTC1.22.30 & Proposal contained in document E11 -10

As a result of discussion of this proposal, SC22 agreed that the proposal should be submitted to WG20 for further clarification. SC22 also agreed, in principle, that project JTC1.22.30 should produce two document - a Technical Report describing a Framework for Internationalization and a standard as per the original project description.

f) Proposal to revise ISO/IEC TR10176

Following a brief discussion of this proposal, SC22 agreed that a revision of TR10176, incorporating Internationalization aspects should be initiated. SC22 further agreed that this revision should be undertaken by WG20 and that the Internationalization aspects should be contained in a separate section of the Technical Report.

11.10 Meeting Fees

The chairman indicated that this point was for information to SC22 only. The SC22 Secretariat was instructed to distribute to SC22 Member Bodies, a copy of document JTC1 N1942.

11.11 5-year periodical review of standards

SC22 agreed that the following standards should be re-affirmed and a Resolution instructing the SC22 Secretariat to initiate appropriate action was passed:

(ISO 8652:1987 Prog Language Ada)  
(ISO 6160:1987 Prog Language PLI)  

11.12 Policy for language-independent standards

As this issue had been addressed by an Ad Hoc Group, it did not require further discussion.

Due to illness, Mr. Follett chairman of SC22 was excused from the meeting. Mr Côté chaired the meeting for the remainder of the session.

11.13 ECMA presentation on PCTE

Mr. J. Dawes (UK) gave an interesting presentation on "Portable Common Tool Environment". It was noted that ECMA intends to submit the ECMA PCTE standards to ISO/IEC for Fast Track processing.
The fourth session of the fifth plenary meeting adjourned at 18:15 hrs, on 1992-08-27.

The fifth plenary meeting re-convened at 09:00 hrs, on 1992-08-28.

The Secretariat informed SC22 delegates that Mr. Follett had returned home due to illness. He then asked if any Member Bodies would object to Mr. R. Scowen (UK) chairing the remainder of the meeting. As there were no objection, Mr. Scowen took the chair.

12. SC22 ADMINISTRATIVE ISSUES

12.1 Mechanization Plan

The Secretariat informed SC22 delegates that it was his intention to seek SC22 MBs support for an eventual transfer from hard copy to diskette distribution of SC22 documents. He added that he would circulate a letter ballot on this issue to MBs. Of the MBs in attendance at the Plenary session, none objected to this idea.

12.2 SC22 Voting

Mr. Scowen reminded SC22 MBs of their obligation to vote and return letter ballots.

12.3 Endorsement of SC22 Revised Programme of Work

A Resolution endorsing the SC22 updated programme of work was approved.

12.4 Review of Five-Year Meeting Schedule

Future meetings of SC22 are scheduled as follows:

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<thead>
<tr>
<th>Year</th>
<th>Location</th>
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<tbody>
<tr>
<td>1993</td>
<td>France (confirmed)</td>
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<td>1994</td>
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<td>1997</td>
<td>Canada</td>
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12.5 Acknowledgement of experts/editors in ISO standards development

The Secretariat reported that he was asked by the ISO/IEC ITTF to prepare a list of project editors, responsible for the preparation of SC22 standards and published over the last year. These editors will receive a certificate from ISO recognizing their work. WG convenors were asked to provide the Secretariat a list of editors in this category.
13. OTHER BUSINESS

At this point, Denmark provided a clarification of their concern about the Addendum to ISO/IEC 9899 Programming language C. It was noted that Denmark will provide a corrected version of document N1229. The convenor of WG14 also indicated that he would provide a revised version of his convenor’s report.

14. APPROVAL OF RESOLUTIONS AND STATEMENT OF RESULTS

Resolutions 111 to 177 were adopted as indicated in document Nxxx. Japan indicated that their abstention on Resolution P was based on the fact that Pascal is not widely used in Japan. It was also indicated that Japan would likely vote "No" on the NWI proposal.

15. ADJOURNMENT

Their being no further business for discussion, the Fifth Plenary meeting of ISO/IEC JTC1/SC22 was adjourned at 10:05 hrs, August 28, 1992.

Respectfully submitted,

J. L. Côté
Secretariat, ISO/IEC JTC1/SC22