



ISO/TC97/SC22  
Languages  
Secretariat: CANADA (SCC)

ISO/TC97/SC22

# N405

OCTOBER 1987

**TITLE:** Minutes of the Second Plenary Meeting  
of ISO/TC97/SC22 held on 1987-09-08/11,  
Washington, DC

**SOURCE:** Secretariat ISO/TC97/SC22

**WORK ITEM:** N/A

**STATUS:** New

**CROSS REFERENCE:** 97/22 N330

**DOCUMENT TYPE:** Minutes of Meeting

**ACTION:** For information to SC22 Member Bodies.

1. Opening of the Meeting:

Mr. R. Kearney, Chairman of ISO/TC97/SC22, opened the meeting at 10:05 and introduced Mr. Smoot of CBEMA. Mr. Smoot went on to indicate that the work of this committee had always been well supported and that the addition of projects such as LISP, Prolog and Modula 2 were prime example of the dynamic area of work of ISO/TC97/SC22. He urged us to continue our work and thereby helping JTC1 meet its ultimate goal of standardization.

In closing, he invited delegates and their spouses to a dinner in their honour on Tuesday, September 8 and wished SC22 a productive meeting.

2. Roll Call of Delegates

The Secretariat asked the heads of delegation to introduce his/her delegation. The attendance list is contained in document 97/22 N402.

3. Chairman's Remarks

The Chairman indicated that a busy schedule was ahead of us and noted that very useful work had been done at the Heads of Delegation/Convenors meeting. Mr. Kearney went on to express his appreciation to Working Group convenors for the progress made during the last year.

4. Adoption of the Agenda

The following changes were made to the agenda:

- Item 9, renumbered 11
- Item 10, renumbered 12
- Item 11, renumbered 9

Addition of 9.8 - CHILL  
9.9 - VDM  
9.10 - ML  
9.11 - FORTH  
9.12 - SIMULA

The agenda was adopted with the above changes.

5. Appointment of the Drafting Committee

The following delegates were appointed to the Drafting Committee:

Chairman - A. Bickle - Canada  
- J. Kolind - Denmark  
- R. Scowen - U.K.  
- Q. Tran - France  
- P. Schwartz - USA  
- J. Côté - Secretariat

6. Report of the Secretariat

The Secretariat referred delegates to document 97/22N331 and asked that errors or omissions be brought to his attention.

6.1 SC22 Project Information

The Secretariat referred delegates to document 97/22N332 and asked convenors to provide him with update information on a regular basis.

7. Report on Status of Proposal for an ISO/EC Joint TC (JTCl) on Information Technology

As there were no representative of TC97, the Chairman simply noted that the first Plenary meeting of JTCl was scheduled for November 16/20 in Tokyo.

## Activity Reports

### 7.1 National Reports

The following activity reports were presented:

Austria	-	97/22 N396
Canada	-	97/22 N383
China	-	97/22 N390
Denmark	-	97/22 N394
Finland	-	97/22 N397
France	-	97/22 N382
Germany FR	-	97/22 N389
Japan	-	97/22 N374
Netherlands	-	97/22 N392
Sweden	-	97/22 N388
UK	-	97/22 N380
USA	-	97/22 N375

### 7.2. Heads of Delegation/Convenors (HOD/C) Meeting Report

Mr. R. Follett, chair of the Drafting Committee of the Heads of Delegation/Convenors meeting briefly outlined the recommendations resulting from the HOD/C meeting. Mr. Kearney then indicated that four Ad Hoc Groups had been created and reviewed the purpose and the scope of each.

### 7.3 Liaison Report - External to ISO/TC97

It was noted that no external organizations were represented at the meeting.

8. Working Group Reports

8.1 WG2 - Pascal

Mr. R. Scowen presented the report of activities of this group, document 97/22 N398, on behalf of Mr. Wichmann convenor of SC22/WG2.

8.2 WG3 - APL

Dr. L. Dickey, convenor of this group, presented the report of activities of this group, document 97/22 N384.

Dr. Dickey reported that the final DIS text of the APL standard had not yet been sent to the ISO/CS because of some difficulties in incorporating editorial changes. Dr. Dickey asked for advice on how to make these changes without having to re-type the complete text. It was noted that Dr. Dickey would discuss this matter with Mr. Brannon of ISO/CS.

8.3 WG4 - Cobol

Ms. M. Vickers, convenor of WG4, presented the report of activities of this group, document 97/22 N378.

She indicated that SC22 had approved a subdivision of project 97.22.01 to include the following:

97.22.01.04 - Second Addendum to ISO 1989-1985 Cobol, Corrections. She also indicated that a second request from WG4: that ANSI be asked to provide the working document for this addendum had not been voted on by SC22 Member Bodies. Therefore, she asked that a resolution to this effect be considered.



#### 8.4 WG5 - Fortran

Ms. J. Martin, convenor of WG5, presented the report of activities of this group, document 97/22 N385.

She indicated that the final Working Draft of Fortran had been submitted to the SC22 Secretariat for DP registration and that the same document would be submitted to the ANSI Public Comment period in October.

#### 8.5 PL/I

Dr. J. Klensin, project editor for the PL/I projects presented the report of activities in this area, document 97/22 N377.

He indicated that the PL/I standard, ISO 6160 had been reaffirmed and explained the alternatives for further processing of the revision of the PL/I General Purpose Subset Standard - ISO 6522. Following a discussion of these alternative, it was agreed that the name of ISO 6522 be changed to "PL/I General Purpose" and that the final Working Draft be registered as a Draft Proposal.

#### 8.6 WG8 - Basic

Mr. T. Holka presented a brief report of activities of this group, document 97/22 N401, on behalf of Mr. Leroy who could not attend this meeting.

He explained the alternatives for further processing of the Basic standard and, with Mr. Kurtz, outlined the differences between the ANSI and the ECMA Basic standard.

In closing, Mr. Holka reminded SC22 of the resignation of Mr. Leroy and it was noted that the US Member Body had nominated Mr. T. Kurtz as his replacement.

Following a lengthy discussion of the alternatives available, agreement on the method of proceeding was agreed and a resolution prepared.

#### 8.7 Ada

Ms. B. Fleming, on behalf of Ms. Castor, convenor of WG9, presented the report of activities of this group, document 97/22 N391.

She indicated that there was an error in the international Ada standard and it was noted that the ISO endorsement notice should make reference to 'ANSI-MIL 1815A' standard rather than 'ANSI-1815A'.

Ms. Fleming went on to outline the content of the three NWI proposals, contained in 97/22 N353, N354, N355 and, following a discussion of these proposals, it was agreed that they be forwarded to TC97 for confirmation and assignment to SC22.

#### 8.8 WG11 - Binding Techniques

Mr. D. Nelson, interim convenor of WG11, presented the report of activities of this group, document 97/22 N386.

In reporting on the status of projects under development in WG11, he indicated that while good progress was being made, he felt that liaison was a definite problem which should be addressed.

Although some Member Bodies felt that WG11 needed more members, Mr. Nelson indicated that current members were very active and that work was proceeding well.

#### 8.9 WG12 - Conformity and Validation

Dr. Sidi, convenor of WG12, presented to report of activities of this working group, document 97/22 N387.

She reported that WG12 had reviewed Member Body comments received on the DTR 9547 letter ballot and that the revised version should be published as a Technical Report. She also reported that document 97/22/12 N133 Rev. 1 should be registered as a Proposed Draft Technical Report. Finally she indicated that WG12 requested that Part 2 of project 97.22.15.01 - "Guidelines for the preparation of programming language processor specifications which facilitate testing" be deleted from its programme of work.

#### 8.10 WG13 - Modula 2

Mr. M. Meek, on behalf of Mr. R. Henry, convenor of WG13, presented the report of activities of this group, document 97/22 N376.

#### 8.11 WG14 - C

Mr. P.J. Plauser, interim convenor of WG14, presented the report of activities of this group, document 97/22 N399.

He reported that the final Working Draft had been submitted to the SC22 Secretariat for DP registration and explained how WG14, through the ANSI Working Group, would consider Member Body comments received during the recent letter ballot.

At this point, the Head of Delegation from France indicated that he was very pleased by the effort of WG14 to incorporate Member Body comments in the ANSI standard.



Finally, it was noted that following the resignation of Mr. S. Hersee, the USA Member Body had nominated Mr. P.J. Plauger as his replacement.

9. Other Projects and New Work Item Proposals

9.1 Status of Project 97.22.13 - Guidelines for the Preparation of Programming Language Standards

Mr. B. Meek, project editor, reported on the status of project 97.22.13. His report is contained in document 97/22 N381.

He indicated that work was proceeding well on this project and that two documents will soon be submitted to SC22:

1. Response to Member Body comments.
2. Proposed changes to the text of the Guidelines document.

It was also noted that the revised version of the Guidelines document would be registered as a Proposed Draft Technical Report and circulated to SC22 Member Bodies for comments and vote.

9.2 Status of NWI Proposal - Extended APL

The Secretariat reported that the NWI proposal had been approved by TC97 and that SC22/WG3 would be asked to proceed with the development of this project.

9.3 Status of NWI Proposal - Programming Language Prolog

The Secretariat reported that the NWI proposal had been approved by TC97 and that SC22 should create a new Working Group to develop this standard.

9.4 Status of NWI Proposal - Programming Language LISP

The Secretariat reported that the NWI proposal had been approved by TC97 and that SC22 should establish a new Working Group to develop this standard.

9.5 Status of NWI Proposal - POSIX

The Secretariat referred delegates to documents 97/22 N349, N351, N360 and N363. It was noted that the project had been modified by TC97. It was agreed that this project be discussed by Ad Hoc Group A. Mr. J. Isaak gave an interesting presentation outlining the IEEE process for developing standards (voting, comment period, etc.).

9.6 NWI Proposal - Forms Interface Management System

Following an interesting presentation by Mr. D. Frantz outlining the proposed project, SC22 agreed that the NWI proposal be submitted to TC97 for confirmation. It was also agreed that, should this project be approved, the new Working Group would be instructed to establish close technical liaison with appropriate SC18 and SC21 working groups.

9.7 Review of Formal Semantics Subgroup Report

This item was referred to Ad Hoc Group C for discussion.

9.8 CHILL

The Secretariat reported that SC22 Member Body comments received on CHILL had been forwarded to CCITT, via the ISO/CS, for consideration.

9.9 VDM

Mr. B. Meek reported that, in accordance with the Principles of Operation for SC22 (doc. 97/22 N168R), he had informed the SC22 Secretariat, of the UK project on VDM. He indicated that a NWI proposal would soon be forwarded to SC22 for consultative ballot and that, regardless of the outcome, the UK would welcome participation from international delegates.

9.10 ML

Mr. B. Meek inquired about the possibility of ML becoming an International Standard and whether SC22 Member Bodies would support such a project. No interest was shown.

9.11 Forth

Mr. R. Follett reported on the USA activities in this area and indicated that there was no plan to submit a NWI proposal to SC22.

9.12 Simula

Mr. B. Cedheim reported that Sweden was considering submitting a NWI proposal in this area. In the course of a discussion, it was agreed that SC22 should suggest that Sweden submit its National Standard on Simula to ISO/CS for processing according to the 'fast track' procedure.

10. Report of Liaison Officers

10.1 Report of Liaison Officer to TC97/SC21

It was noted that Ms. H. Wood had resigned and that a replacement should be identified. The USA Member Body offered to investigate the possibility of finding a replacement.

10.2 Report of Liaison Officer to TC97/SC18

Mr. Holka reported that SC18 had recently included in its Programme of Work, the standardization of Spread Sheets.

Mr. Holka also suggested that, if the FIMS new work item is approved, SC22 should establish close technical liaison with the appropriate SC18 working groups.

It was suggested and agreed that SC22 inform SC18 of its interest in this area.

10.3 Report of Liaison Officer to TC97/SC14

Mr. D. Nelson indicated that WG11 had not established a liaison with SC14, but that he would do so in the near future.

10.4 Report of Liaison Officer to TC97/SC15

No report was presented.

10.5 Report of Liaison Officer to TC97/SC2

Mr. Holka made an interesting presentation on the content of his report, document 97/22 N357. The slides used during his presentation are contained in document 97/22 N410. Following his presentation, it was agreed that the subject of Character Handling/Multi-Byte issues for programming languages be referred to Ad Hoc Group D for further discussion.



10.6 Report of Liaison Officer to TC97/SC7

Mr. J. Côté indicated that there were no issues to be reported on.

10.7 Liaison to TC97/SC24

Mr. J. Kolind (Denmark) volunteered to become the SC22 liaison officer to TC97/SC24.

The first session of the Plenary meeting was adjourned at 10:55 Wednesday, September 9, 1987 for the Ad Hoc Groups meeting and the ISO/CS tutorial on preparation of standards.

The Plenary Meeting re-convened on Thursday, September 10, 1987 at 9:00 a.m.

Report of Ad Hoc Groups

Ad Hoc Group A

Mr. F. Genuys, convenor of this group, reported on the issues discussed by Ad Hoc Group A:

1. Maintenance of Language Standards

Mr. Genuys reported that this issue had not been fully covered and that SC22 should seek further advice from ISO/TC97.

2. POSIX, OSCRL, SSI and Related Matters

Mr. Genuys reported on the discussion of this issue and noted that a draft resolution had been prepared. Resolution 90 refers.

3. Terms of Reference - WGI5 - POSIX

Mr. Genuys reported on the discussion of this issue and indicated that draft resolutions had been prepared. Resolution 66 and 67 refer.

Ad Hoc Group B

Mr. R. Follett, convenor of this group, reported on the issues discussed by Ad Hoc Group B.

1. Synchronization of ISO/ANSI Activities

Mr. Follett reported that the group had prepared a paper and draft resolutions on this issue. Doc. 97/22 N404 and Resolutions 82 and 92 refer.

2. Terms of Reference - WG16, WG17

Mr. R. Follett reported that the group had prepared draft terms of reference for WG16-LISP and WG17 - Prolog. Resolutions 69 and 70 refer.

3. PL/I

Mr. R. Follett reported that the group had briefly discussed this issue but since Dr. Klensin was expected to attend the second version of the Plenary meeting, it was agreed that a draft resolution not be prepared until after Dr. Klensin's report.

Ad Hoc Group C

Mr. B. Meek, convenor of this group, reported on the issues discussed by Ad Hoc Group C:

1. Preparation of SC22 Position on  
Functional Description Techniques (FDT)

Mr. B. Meek summarized the points discussed by the group and indicated that the group recommended that document 97/22 N249 be forwarded, as a SC22 contribution, to the TC97 Special Working Group on FDT. The group also recommended that SC22 Member Bodies be invited to submit contributions on this subject to Mr. Meek. Resolution 80 refers.

2. Guidelines DTR (WG10)

Mr. B. Meek reported that Ad Hoc Group B recommended that the revised version of the Guidelines document, prepared by WG10 (now disbanded) be registered as a Proposed Draft Technical Report.

3. DTR Procedures.

The procedures for processing technical reports were discussed and it was agreed that there was no need for further action on this issue.

Ad Hoc Group D

Mr. J. van Wingen, convenor of the group, reported on the issue discussed by Ad Hoc Group D:

1. Character Handling/Multi-Byte Issues for Programming Languages

Mr. J. van Wingen reported that Ad Hoc Group D discussed this issue and how it affects programming languages standards. The group agreed that although a special working group in this area was, at this point, premature, SC22 language WGs should investigate the extent to which their respective work items could meet the requirements for character handling, including multi-byte character sets.

The Group also recommended that SC22 Member Bodies be invited to communicate to SC22 their requirements in this area. Resolutions 85 and 86 refer.

#### Report of ISO/CS Tutorial Session

Mr. K. Brannon of ISO Central Secretariat indicated that project editors and working group convenors were welcome to contact him to discuss any other issues which may not have been addressed during the tutorial session.

Mr. Kearney thanked Mr. Brannon for the tutorial session and the Ad Hoc Group convenors for ensuring that the groups completed their task.

### 13. SC22 Administrative Issues

#### 13.1 Voting

The SC22 Secretariat urged Member Bodies to respond to letter ballots in a timely manner. The Head of Delegation from France suggested that this issue be discussed with TC97 Secretariat.

#### 13.2 Working Group Membership

The SC22 Secretariat requested SC22 Member Bodies, who have not sent their list of members for SC22 working groups, to do so at their earliest convenience.

#### 13.3 Review of Procedure for NWI Proposals

Following a discussion of the procedures for submitting NWI proposals to TC97, it was agreed that a proposal should be discussed within SC22 before it is submitted to TC97 for approval. Resolution 84 refers.



13.4 Review of Five-Year Meeting Schedule

It was noted that the next SC22 AG meeting would be held in Tokyo, Japan. It was also agreed that the SC22 Secretariat should write to SC22 Member Bodies soliciting host for the next Plenary Meeting of SC22.

14. Requirements Concerning a Subsequent Meeting

The Head of Delegation from Japan confirmed the invitation to host the next SC22 AG meeting in Tokyo, Japan on October 17/19, 1988. SC22 accepted the offer from Japan's Head of Delegation and express its gratitude to the Japanese Member Body for accepting to host the next SC22 AG meeting.

15. Other Business

Since the Fortran copyright issue had been raised earlier, Mrs. C. Kachurik, from CBEMA, was asked to comment on this issue.

She indicated that the drafts of the Fortran standard were not copyrighted but that the ANSI Standard would be. She also asked SC22 Member Bodies to circulate draft documents to SC22 experts only and to advise others that copies of the documents are available at a cost of \$50 in the USA and \$65 overseas.

16. Approval of Resolutions and Statement of Results

All resolutions were approved as listed in document 97/22 N406.

17. Adjournment

ISO/TC97/SC22 thanked the organizations and individuals whose efforts resulted in the success of this Second Plenary Meeting.

The Second Plenary Meeting of ISO/TC97/SC22 was adjourned at  
12:10 hours, September 11, 1987.

Respectfully submitted,



J.L. Côté,  
Secretariat, ISO/TC97/SC22.