July, 1987

TITLE: Secretariat Report to the Second Plenary Meeting of
ISO/TC97/SC22-Washington, DC, USA, 1987-09-08/11

SOURCE: Secretariat ISO/TC97/SC22

WORK ITEM: All SC22 projects

STATUS: New

CROSS REFERENCE: N/A

DOCUMENT TYPE: Secretariat Report

ACTION: For review and comment as appropriate by SC22 Member Bodies.
SC22 SECRETARIAT REPORT

Title of Subcommittee: Languages

Area of Work:
1. Standardization of languages in the field of information processing systems and applications excluding specialized languages that have been explicitly assigned to the programme of work of another subcommittee or technical committee.

2. In the area of information processing, standardization of cross-language facilities.

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Participation:

'P' Members: Austria, Belgium, Canada, China, Czechoslovakia, Finland, France, Germany F.R., Hungary, Italy, Japan, Netherlands, Norway, Sweden, Turkey, United Kingdom, United States, USSR.

'O' Members: Australia, Bulgaria, Iceland, Ireland, Pakistan, Poland, Romania, Spain, Switzerland.
Internal Liaisons:
ISO/TC8/SC-5 - Computer Applications in Shipbuilding
ISO/TC68 - Banking
ISO/TC97/SC2 - Character Sets and Coding
ISO/TC97/SC7 - Software Development and System Documentation
ISO/TC97/SC15 - Labelling and File Structure
ISO/TC97/SC21 - Information Retrieval Transfer and Management for Open Systems Interconnection
ISO/TC97/SC18 - Text Preparation and Interchange
ISO/TC184/SC3 - Programming Languages

External Liaisons
- Category A:
  CCE - Commission of the European Communities
  CCITT - International Telegraph and Telephone Consultative Committee
  CIRP - International Institution for Production Engineering Research
  ECMA - European Computer Manufacturers Association
  EWICS - European Workshop on Industrial Computer Systems
  IFIP - International Federation for Information Processing
  ITU - International Telecommunications Union.

Last Meeting:
Plenary - 1985-11-5/8, Paris, France
AG Meeting - 1986-11-11/13 Vienna Austria

Next Meeting:
Heads of Delegations and Convenors - 1987-09-07
Plenary - 1987-09-8/11 Washington DC
HODC-1987-09-07 Washington DC
WORKING GROUP 2

PASCAL

Terms of Reference:
Standardization of: Programming Language - PASCAL
Programming Language - Extended PASCAL

Convenor: Dr. Brian Wichmann
National Physical Laboratory
Division of Information Technology and Computing
Teddington
Middlesex TW11 6LW
United Kingdom
Telephone: 01 629-9000

Secretariat: BSI

Work Item Assigned:
97.22.19 - Specification for the Computer Programming Language - Extended PASCAL

Liaison:

Status:
- ISO 7185 was published on 1983-12-15.
- A proposal to register document 97/22/N262 - First Working Draft on Programming Language Extended PASCAL was approved by SC22 on 1987-02-13. The summary of voting contained in doc. 97/22N299 was circulated to SC22 in February 1987.
- The comments contained in 97/22N299 were submitted to WG2 in view of resolving the negative votes.

Last Meeting: 1987-06-8/12 - Andover, Massachusetts

Next Meeting:
WORKING GROUP 3

APL

Terms of Reference: Standardization of Programming Language - APL

Convenor: Dr. L. Dickey
Dept. of Pure Mathematics
University of Waterloo
Waterloo, Ontario, Canada
N2L 3G1
Telephone: (519)885-1211 EXT 3727

Secretariat: SCC

Work Item Assigned: 97.22.9 (1978): Programming Language APL

Liaison:

Status: The ISO/DIS8485 letter ballot was circulated to TC97 Member Bodies with a closing date of 1987-04-23. The summary of voting on DIS 8485 was circulated to SC22 Member Bodies as document 97/22N334.

Comments received on the ballot were forwarded to SC22/WG3.

The final DIS text will be forward to ISO/GS before 1987-08-28 for processing as an International Standard.

A proposal for a NWI on Extended APL was approved by SC22 Member Bodies (document 97/22 N315). It was forwarded to TC97 for confirmation in March 1987.

Last Meeting: Dallas, USA, 1987-05-05/07.

Next Meeting: 
WORKING GROUP 4

COBOL

Terms of Reference: Coordinate the contents of the draft revised International Standard on COBOL (97/5 N427, Resolution 12).

(Secretariat's Note: Coordination of content on ANSI X3.23, AFNOR NFZ 65-210 and ISO 1989).

Convenor:
Ms. Mabel Vickers
National Bureau of Standards
Building 225 - Room A265
Washington, D.C. 20234
Telephone: (301)975-3277
Telex: 89-8493

Secretariat: ANSI

Work Item Assigned:
97.22.1.1 (1972) - Review of Programming Language COBOL - ISO 1989

Liaison: ANSC X3J4 (COBOL) ISO 1989 COBOL

Status:
- A proposal to remove project 97.22.01 - Addenda for COBOL Database Facility was approved by SC22 in Dec. 1986 (document 97/22 N263).
- A first working draft of Addendum 1 - Intrinsic Functions to ISO 1989-1985 with a letter ballot for its registration as a Proposed Draft Addendum (PDAM) was circulated to SC22 as document 97/22 N301.
- SC22/WG4 requested the authority to develop a second addendum to ISO 1989-1985 in March 1987. A Letter Ballot to this effect was circulated to SC22 as document 97/22 N302.

Last Meeting: 1985-02-13/14, Vienna.

Next Meeting:
WORKING GROUP 5

FORTRAN

Terms of Reference: Coordinate the content of the revisions of the International Standard for FORTRAN.

(Secretariat's Note: Coordination of content of ANSI X3.9-1978, AFNOR NFZ 65-110 and ISO 1539).

Convenor: Ms. Jeanne Martin
Lawrence Livermore National Laboratory
L - 300
Livermore, California 94550
Telephone: 415-422-3753

Secretariat: ANSI

Work Item Assigned: 97.22.2 (1972) - Programming Language FORTRAN
(Revision of ISO 1539-1980).

Liaison:

Status:
- ISO 1539 (Programming Language - FORTRAN) was published in 1980. Document 97/5 N697 - USA Contributions on Proposed Changes to FORTRAN, ANSI X3.9-1978 (ISO 1539-1980) - was circulated to SC5 in March 1982, with an errata document, 97/5 N702, following in May 1982 and a report on the progress of the revision of ISO 1539 was circulated to SC5 as 97/5 N748.
- Revision expected in 1987. No draft available (SC5 N748).

Last Meeting: 1986-08-18/22 - Halifax, Canada

Next Meeting: 1987-08-03/07 - Liverpool, UK.
WORKING GROUP 8

BASIC

Terms of Reference: To review the results of voting and to prepare further drafts, as necessary (of proposals for Minimal BASIC) (97/5 N427, Resolution 8).

Standardization of Programming Language BASIC (97/5 N674, Resolution 14).

Convenor: Mr. B. Leroy
Bull
68 Route de Versailles
78430 Louveciennes
France

Secretariat: AFNOR

Work Item Assigned: 97.22.7 (1976): ISO 6373 - Minimal BASIC
97.22.11 (1981): BASIC

Liaison: ANSC X3J2 (BASIC)
ECMA/TC21 (BASIC)
EWICS TC2 (BASIC)

Status: 97.22.8 - Minimal Basic - ISO 6373 was published on 1984-03-15.

- It is expected that the ANSI Standard X3-113-1987 will be submitted to SC22 for registration as a DP.

- It is also expected that a proposal to prepare an addendum to the ANSI standard will be submitted to SC22.

Last Meeting: 1987-01-22/23 - Florida, USA.

Next Meeting:
WORKING GROUP 9
ADA

Terms of Reference: Standardization of Programming Language ADA.

Convenor: Ms. V. Castor
Ada Joint Program Office
Room C-107
1211 S-Fern Street
Arlington, Va.
USA 22202
Telephone: (202)697-3749

Secretariat: ANSI

Work Item Assigned: 97.22.10 (1981): ADA Programming Language

Liaison: ADA Board; ADA Tec; AVO

Status: ISO 8652-1987 - Programming Language Ada was published in March 1987.

Last Meeting: 1987-05-29 Stockholm

Next Meeting:
WORKING GROUP 11
BINDING TECHNIQUES FOR PROGRAMMING LANGUAGES

Terms of Reference:  
- to study binding issues between programming languages and the abstract facilities with which they interface or interact;
- to serve as the SC22 focal point for consolidating SC22 comments on SC21 bindings.

Convenor:  (Interim)  Mr. D. Nelson  
Tandem Computers Inc.  
10555 Ridgeview Court  
Cupertino, CA  
USA 95014  
Telephone: (408)996-6340

Secretariat:  Open

Work Item Assigned:  
97.22.14 (1984): Binding Techniques for Programming Languages
97.22.17: Specification of a Set of Common Language - Independent Data Types

Status:  
- Projects 97.22.16 and 97.22.17 were assigned to SC22 for development on 1986.02.07 (docs. 97/22 N187 & N188).
- A first Working Draft on Guidelines for language Bindings was circulated to SC22 Member Bodies for comment in November 1986 (document 97/22 N261).

Last Meeting:  1987-05-05/07 - Middlesex, UK.

Next Meeting:
WORKING GROUP 12

LANGUAGE CONFORMITY AND VALIDATION

Terms of Reference:
- to study the issues concerning conformity and validation for programming language standards;
- to develop guidelines in conformity and/or validation matters for use by working groups preparing programming language standards;
- to report to SC22 issues resolved or unresolved in the work of the group.

Convenor: Dr. J. Sidi
BNI
B.P. 105 F-78153
Le Chesnay, Cedex
France
Telephone: 1 395 52535

Secretariat:
AFNOR

Work Item Assigned:
97.22.15.01: Conformity Requirement and Testing
97.22.15.02: Test Methods for languages Processors - Guidelines for their Development and Acceptability.

Liaison:

Status:
- A first Working Draft on Guidelines for the preparation of Conformity Clauses in Programming Languages was circulated to SC22 with a Letter Ballot on a proposal to register this working draft as a Proposed Draft Technical Report (type 3) (document 97/22 N326, N342).
A letter ballot on a proposal to register document 97/22 N275 as a DP or as a DTR was circulated to SC22 in December 1986. The summary of voting was contained in 97/22 N322. The comments contained in N322 were submitted to SC22/WG12 for review.

In accordance with document 97/22 N322, a revised version of document 97/22 N275 was prepared by SC22/WG12, document 97/22 N333, and forwarded to the TC 97 Secretariat for processing as a Draft Technical Report (type 3). It was registered as DTR9547 and circulated to TC97 Member Bodies along with a letter ballot. Simultaneously, it was circulated to SC22 Member Bodies as document 97/22N339.

Next Meeting: 1987-09-02/04 - Washington, D.C., USA.
WORKING GROUP 13
Modula 2

Terms of Reference: - to coordinate the content of an International Standard for Modula 2.

Convenor: Dr. R. Henry
Computer Science Group
Nottingham Park
Nottingham, U.K.
NG7 2RD
Telephone: 060-250-6101 Ext. 2855

Secretariat: BSI

Work Item Assigned: 97.22.18 - Programming Language Modula 2.

Status: - Following the approval of this work item by TC97 and its assignment to SC22, in accordance with Resolution 48 in 97/22 N169, BSI was invited to nominate a convenor and provide secretariat support to WG13.

- The first meeting of WG13 was held in Nottingham, U.K. in April 1987.

Last Meeting: 1987-04-01/03 - Nottingham, U.K.

Next Meeting:
WORKING GROUP 14

C

Terms of Reference: - To coordinate the content of an International Standard for C.

Convenor: Mr. S. Hersee
Lattice
22 W-600 Butterfield Road
Glen Ellyn, Illinois
USA 60136
Telephone: (312)858-7950

Secretariat: ANSI

Work Item Assigned: 97.22.20 - Programming Language C

Status:
- Following the approval of this work item and its assignment to SC22, SC22 established WG14 and Mr. Hersee was appointed convenor (Resolution 46 in 97/22 N169).

- A first working draft (doc. 97/22 N260) on Programming Language C (Draft Proposed American Standard) was circulated to SC22 in November 1986 with a letter ballot on its registration as a Draft Proposal. The summary of voting contained in 97/22 N298 was circulated to SC22 in February 1987.

- The comments contained in N298 have been submitted to WG14 for review and recommendation on further processing.

Last Meeting: 1987-06-08/12 - Paris

Next Meeting:
OTHER PROJECTS

97.22.3

97.22.4
(1977) - Programming Language - ALGOL 60 (Revision of ISO/R 1538).

Status:
- ISO/TR1672-1977 was withdrawn in December 1986.
- ISO 1538-1984 - Programming Language - ALGOL 60 was published in 1984.
- A proposal to disband WG6 was circulated to SC22 as document 97/22 N286. The summary of voting was circulated as document 97/22 N320.
- As indicated in document 97/22 N320, SC22 Secretariat has proceeded with the disbandment of its Working Group 6.


Project Editor:
Dr. J. Klenstin
Massachusetts Institute of Technology
Room 4-209
77 Massachusetts Ave.
Cambridge, Massachusetts
USA 02139
Telephone: (617)253-1355

Status:
- As indicated in document 97/22 N328, SC22 Member Bodies recommended that ISO 6160-1979 (ANSI X3.53-1976) be reaffirmed.
- ISO Central Secretariat was informed, in May 1987, of this recommendation.
- A letter ballot on a proposal to register document 97/22 N290 - Draft Revision of ISO 6522 (ANSI X3.74 - 198X) PL/I General Purpose Subset as a DP was circulated to SC22 on 1987-01-16. The summary of voting was contained in document 97/22 N327. The comments received on this letter ballot have been forwarded to the project editor for consideration in view of resolving the negative votes.

Project Editor: Mr. B. Meek
King's College London (KQC)
Computer Centre (Strand Campus)
Strand, London
WC2R 2LS
U.K. 01-937-5411 ext 432
Telephone: 01-836-5454

Status:
- The final version of Guidelines for the Preparation of Programming Language Standards was circulated to SC22 as document 97/22 N248. A letter ballot on its future (DP or DTR) was circulated to SC22 as document 97/22 N285.

- The summary of voting on N285 was contained in document 97/22 N321.

- As indicated in N321, and in accordance with the SC22AG Recommendation 7 in 97/22 N276, Mr. Meek was asked to assume responsibility for reviewing the comments and for preparing a revised version.

- The revised version of 97/22 N248 will be circulated to SC22 Member Bodies as a Proposed Draft Technical Report (type 3). Mr. Meek expects to have a revised version available by the end of September 1987.
NEW WORK ITEM PROPOSALS

LISP: As indicated in document 97/22 N317, the proposal contained in 97/22 N279 has been forwarded to TC97 for confirmation.

Prolog: As indicated in document 97/22 N316, the proposal contained in 97/22 N278 has been forwarded to TC97 for confirmation.

Extended APL: As indicated in 97/22 N315, the proposal contained in 97/22 N274 has been forwarded to TC97 for confirmation.

POSIX: The proposal contained in document 97/22 N268 (TC97 N1773) has been approved by TC97. Its assignment to SC22 is expected.

New Working Groups:

1. If LISP is approved by TC97 and assigned to SC22, SC22 will establish a new working group and invite France to nominate a convenor and provide secretarial support.

2. If Prolog is approved by TC97 and assigned to SC22, SC22 will establish a new working group and invite the UK to nominate a convenor and provide secretarial support.

3. When POSIX is assigned to SC22, SC22 will establish a new working group and invite the USA to nominate a convenor and provide secretarial support.