

ISO/TC97/SC22

# **N331**

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:

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

Chairman:

Mr. R. Kearney

Vice President, Systems Bell Canada Enterprises Suite 6900, P.O. Box 188 100 King Street West Toronto, Ontario, Canada

M5X 1A6

Telephone: (416)364-4062

Electronic Mail - ENVOY 100: I.D. - R. Kearney

Facsimile: (416)362-0973

Secretariat:

SCC (Mr. Joseph Côté) Treasury Board Canada 140 O'Connor Street

10th Floor

Ottawa, Ontario, Canada

K1A OR5

Telephone: (613)957-2496

Telex: 053-3336

Electronic Mail: ENVOY 100: I.D. - Côté. JL

Facsimile: (613)996-2690

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.

'0' Members:

Australia, Bulgaria, Iceland, Ireland,

Pakistan, Poland, Romania, Spain, Switzerland.

Internal Liaisons:	ISO/TC8/SC-	·5 <b>-</b>	Computer Applications in	
			Shipbuilding	
	ISO/TC68	-	Banking	
	ISO/TC97/SC		Character Sets and Coding	
	ISO/TC97/SC	:7 –	Software Development and System Documentation	
e d	ISO/TC97/SC	:15 -	Labelling and File Structure	
	ISO/TC97/SC	21 –	Information Retrieval Transfer and Management for	
	TCO /mon7 /co	10	Open Systems Interconnection	
	ISO/TC97/SC	18 -	Text Preparation and	
	//-		Interchange	
	ISO/TC184/S	C3 -	Programming Languages	
External Liaisons				
- Category A:	CCE -		Commission of the European	
4	CCITT -	Inte	International Telegraph and Telephone Consultative Committee	
	CIRP -	Inte	rnational Institution for	
			uction Engineering Research	
	ECMA -		pean Computer Manufacturers	
	EWICS -		pean Workshop on Industrial uter Systems	
	IFIP -		rnational Federation for	
			rmation Processing	
GRI	ITU -	Inte Unio	rnational Telecommunications n.	
Tank Washing				
Last Meeting:	Plenary - 1985-11-5/8, Paris, France			
	AG Meeting	AG Meeting - 1986-11-11/13 Vienna Austria		

Heads of Delegations and Convenors - 1987-09-07 Plenary - 1987-09-8/11 Washington DC

HODC-1987-09-07 Washington DC

#### 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 DLW United Kingdom

Telephone: 01 629-9000

Secretariat:

BSI

Work Item Assigned:

97.22.8 (1978): ISO/DIS 7185 - Specification for the Computer Programming Language PASCAL.

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 - F

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

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/CS

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.

#### 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

97.22.1.3 (1985) - Language Extensions for

COBOL - ISO 1989.

Liaison:

ANSC X3J4 (COBOL) ISO 1989 COBOL

Status:

- ISO 1989-1985 was published in December 1985.
- 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.

#### **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.

#### 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.

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

## 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

Cripertino, 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

97.22.16: Specification for a Model for Common

Language - Independent Procedure Calling

Mechanisms.

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.

# 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.

Last Meeting:

1987-04-22/21 - London, U.K.

Next Meeting:

1987-09-02/04 - Washington, D.C., USA.

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.

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

## OTHER PROJECTS

97.22.3
11.22.3

(1967) - Hardware Representation of ALGOL - Basic Symbols (Revision of ISO/TR 1672-1977).

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.

97.22.5

(1971): Programming Language PL/I (Revision of

ISO 6160-1979)

97.22.6

(1977): Programming Language PL/I - General

Purpose Subset.

Project Editor:

Dr. J. Klensin

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.

97.22.13

(1984) - Guidelines for the Preparation of Programming Language Standards.

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:

- 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.
- 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.
- 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.