



ISO / IEC JTC1 / SC22
Programming languages, their environments and system software interfaces
Secretariat: CANADA (SCC)

ISO/IEC JTC1/SC22
N 1327

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JTC1 Plenary of March/93

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ISO/IEC JTC1/SC22
Programming Languages, their Environments and Systems Software Interfaces
Secretariat: CANADA (SCC)

Subcommittee 22 Chairman's Report
to the JTC 1 Plenary Meeting
23-26 March 1993

The last plenary of Subcommittee 22 was held in Ellivuori, Finland on 24-28 August 1992. The management report of that plenary is contained in document JTC 1 N 2183. That report covered all of the significant current issues in SC 22. This report will not repeat that information but will update the status of certain of those issues.

As reported in N 2183, the progress of the Lisp project in Working Group 16 had been unsatisfactory but WG16 promised a working draft by the end of 1992. I am pleased to report that a working draft is now being circulated and SC 22 is in the process of determining whether this draft is suitable for CD registration.

We reported that the Modula-2 project was back on track. WG 13 has completed work on the committee draft and a second CD ballot is now being circulated in SC 22.

Second CD ballots are underway at this time for Common Language Independent Data Types (CLIDT) and for Language Independent Arithmetic Part 1, Integer and Floating Point, both in WG 11. WG 11 has also forwarded a working draft of Common Language Independent Procedure Calling (CLIPC) and SC 22 is determining whether to forward it for CD registration. In developing the CLIPC document, there has been extensive liaison with SC 21 regarding its Remote Procedure Call project (CD 11578).

A more extensive report will be made after the next SC 22 plenary on 20-24 September 1993 in Paris, France.

SC22 Secretariat's Report to the JTC1 Plenary

PART I:

ADMINISTRATIVE

- 1.1 Title of SC SC22, Programming languages, their environments and system software interfaces
- 1.2 Chairman Robert Follett (USA) (10/91 N1071)
- 1.3 Secretariat Canada, Standards Council of Canada
2. Area of Work Standardization of programming languages, their environments and systems software interfaces such as:
- specification techniques; and
- common facilities and interfaces.

Excluded: specialized languages or environments assigned to the program of work of another Subcommittee or Technical Committee.

3. Membership

"P" Members

Austria, Belgium, Brazil, Bulgaria, Canada, China, Czechoslovakia, Denmark, Finland, France, Germany, Greece, Iran, Italy, Japan, Netherlands, New Zealand, Romania, Sweden, Switzerland, UK, USA, USSR

"O" Members

Argentina, Australia, Cuba, Hungary, Iceland, India, Korea, Poland, Portugal, Singapore, Turkey, Thailand, Yugoslavia

ISO Liaisons

JTC1/SC1, SC2, SC7, SC18, SC21, SC24, SC26, SC27

External Category A Liaisons

CCE, ITU, ECMA

4. Working Groups

- 4.1 WG2
Convenor
ToR
Pascal
D. Joslin (UK) (1990 - N823)
Development of ISO standards for
Programming Language Pascal and Extended
Pascal
- 4.2 WG3
Convenor
ToR
APL
L. Dickey (Canada) (1991 - N1053)
Development of ISO standards for
Programming Language APL and Extended APL
- 4.3 WG4
Convenor
ToR
COBOL
A. Wallace (USA) (1991 - N1053)
Coordinate the development of ISO
standards for Programming Language COBOL
Coordinate the development of draft
amendments for language extensions to ISO
1989
Coordinate the development of draft
amendment for a database facility for ISO
1989
- 4.4 WG5
Convenor
ToR
Fortran
J. Martin (USA) (1991 - N1053)
Coordinate the revision of ISO 1539 -
Programming Language Fortran
- 4.5 WG8
Convenor
ToR
Basic
T. Kurtz (USA) (1991 - N1053)
Development of ISO standards for
Programming Language Basic and Full Basic
- 4.6 WG9
Convenor
ToR
Ada
R. Mathis (USA) (1989 - N729)
Development of ISO standards for
Programming Language Ada
- 4.7 WG11
Convenor
ToR
Binding Techniques
W. Wakker (Netherlands) (1990 - N965)
Study binding issues between programming
languages and the abstract facilities with
which they interface or interact
Serve as the SC22 focal point for
consolidating SC22 comments on SC21
bindings

- 4.8 WG13
 Convenor
 ToR
 Modula 2
 M. Woodman (UK) (1991 - N1053)
 Coordinate the content of an ISO standard
 for Modula 2
- 4.9 WG14
 Convenor
 ToR
 C
 P.J. Plauger (USA) (1991 - N1053)
 Coordinate the content of an ISO standard
 for C
- 4.10 WG15
 Convenor
 ToR
 POSIX
 J. Isaak (USA) (1991 - N1053)
 Coordinate the content of ISO standards
 on the Portable Operating System Interface
- 4.11 WG16
 Convenor
 ToR
 Lisp
 C. Queinnec (France) (1991 - N1053)
 Coordinate the content of an ISO standard
 for Lisp
- 4.12 WG17
 Convenor
 ToR
 Prolog
 R. Scowen (UK) (1991 - N1053)
 Coordinate the content of an ISO standard
 for Prolog
- 4.13 WG18
 Convenor
 ToR
 FIMS
 D. Frantz (USA) (1991 - N1053)
 Coordinate the content of an ISO standard
 for Forms Interface Management System
- 4.14 WG19
 Convenor
 ToR
 VDM
 D. Andrews (UK) (1989 - N729)
 Coordinate the content of an ISO standard
 for Vienna Development Method -
 Specification Language
- 4.15 WG20
 Convenor
 ToR
 Internationalization
 R. Weaver (USA) (1991 - N942)
 Identify elements relevant to the work of
 SC22 that may be affected by differences
 in language, culture, customs and habits;
 for these elements, develop standards that
 enable applications to be portable across
 differing cultural practices;
 develop a Technical Report that describes
 a framework for nations to provide those
 elements

4.16 WG21	C++
Convenor	S. Carter (USA) (1991 - N1012)
ToR	Coordinate the development of an ISO standard for programming language C++

Part II:

MEETINGS

1.1 Last Plenary	Ellivuori, Finland 1992-08-24/28
1.2 Documents	Resolutions - N1242 Minutes - N1241 Agenda - N1119R Secretariat Report (Proj document) - N1327

2. WGs do not meet in conjunction with Plenary meeting

3.1 Future Plenary	Paris, France 1993-09-20/24
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3.2 Future WG mtgs

WG2 - Pascal	93-04-19/23	Munich, Germany
WG4 - Cobol	93-02-22/26	Orlando, USA
WG5 - Fortran	93-07-05/09	Berchtesgaden, Germany
WG11 - Bindings	93-04-26/30	Boston, USA
WG13 - Modula 2	93-06	Canada
WG14 - C	93-07-19/21	London, UK
WG15 - POSIX	93-05-10/14	Heidelberg, Germany
WG17 - Prolog	1993	Bristol, England
	1993	Germany
WG19 - VDM	93-04-26/28	Odense, Denmark
WG21 - C++	93-03-07/12	Portland, USA
SC22 Ad Hoc (Character Sets)	93-04-21/23	Copenhagen, Denmark
SC22 Plenary (tentative)	1994	The Netherlands
"	1995	UK or USA

PART III:

PERSONNEL

1. Secretariat

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2. Chairman

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**3. Working Groups
WG2:**

Pascal

Secretariat:

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WG3:

APL

Secretariat:

SCC

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WG4: **COBOL**

Secretariat: ANSI

Convenor: Wallace, A. (94 Plenary)
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 San Jose Ca.
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WG5: **FORTRAN**

Secretariat ANSI
 Convenor: Martin J. (94 Plenary)
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WG8: **BASIC**

Secretariat ANSI

Convenor: Kurtz, T. (94 Plenary)
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WG9: **Ada**

Secretariat: ANSI

Convenor: Mathis R. (93 Plenary)
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 Columbus Ohio
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WG11: **Binding Techniques for Languages**

Secretariat: NNI

Convenor: Wakker, W. (93 Plenary)
ACE Associated Computer Experts
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WG13: **Modula 2**

Secretariat: BSI

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WG14: **C**

Secretariat: ANSI

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WG15: **POSIX**

Secretariat: ANSI

Convenor: Isaak J. (94 Plenary)
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WG16: Lisp

Secretariat: AFNOR

Convenor: Queinnec C. (94 Plenary)
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WG17: Prolog

Secretariat: BSI

Convenor: Scowen R. (94 Plenary)
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WG18: Forms Interface Management System (FIMS)

Secretariat: ANSI

Convenor: Frantz D. (94 Plenary)
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WG19: Vienna Development Method- Syntactic Language

Secretariat: BSI

Convenor: Andrews D. (93 Plenary)
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WG20: **Internationalization**

Secretariat: **ANSI**

Convenor: **Weaver R. (94 Plenary)**
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WG21: **C++**

Secretariat: **ANSI**

Convenor: **Carter S. (94 Plenary)**
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NOTE: Date in bracket represents date at which Convenor appointment ends - Date due for Convenor's re-appointment.

Project Editors:

Project	Name	Address	Tel. No.
22.01.06	A. Wallace	IBM D48/D327 San Jose Ca. USA 95161-9023 fax #	(408) 463-4344 (408) 463-3114
22.02.02	L. Schonfelder	University of Liverpool Computer Laboratory Chadwick Tower P.O. Box 147 Liverpool L69 3BX UK	
22.05	J. Klensin	MIT Room N52-457 77 Massachusetts Ave Cambridge Massachusetts USA 02139	(617) 253-1355
22.06	J. Klensin		(617) 864-3247
22.08	B. Wichmann	National Physical Laboratory Div of Info Tech. & Comp Teddington Middlesex TW11 DLW UK	+44-01-977 3222
22.10.01	C. Anderson/ S. Taft	USA	(904) 882-8264
22.10.02	K. Dritz	USA	
22.11	T. Kurtz	True BASIC 12 Commerce Avenue West Lebanon NH USA 03784	(603) 298-8517
22.13	B. Meek	King's College London Computer Center Strand London W2C 2LS UK	+44-1-937-5411

22.16	K. Edwards	IBM Corp. - D48/D333 555 Bailey Ave. P.O. Box 49023 San Jose Ca. USA 95161 (408) 463-3095
22.17	E. Barkmeyer	NIST Bldg 220 Room A127 Gaithersburg, Md USA 20899 (301) 975-3528
22.18	R. Henry	Computer Science Group Nottingham Park Nottingham NG7 2RD UK +44-06-02-506101 Ext 2855
22.19	B. Wichmann	National Physical Laboratory Div of Info Tech. & Comp Teddington Middlesex TW11 DLW UK +44-01-977 3222
22.20.02	D. Jones	Knowledge Software 62 Fernhill Road Farnborough Hants GU14 9RZ UK
22.21	H. Jespersen	447 Lakeview Way Redwood City California USA 94062 (415) 364-3410 fax # (415) 364-4498
22.22.01	R. Scowen	National Physical Laboratory Teddington Middlesex TW11 OLW UK +44-81-943-6956 fax # +44-81-977-7091
22.32	J. Shopiro	AT & T (908) 580-4229 184 Liberty Corner Rd Room 4N-C05 Warren NJ USA 07059-0908 fax # 908 580-5631

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(415) 364-4498

PART IV: PROGRAMME OF WORK (Feb/93)

Project/Ass. date	Title	Ref No	W	Proj Editor	WD	CD	DIS	IS	Note
22.01.03 07/87	Addendum 1 to ISO 1989- Intrinsic Functions	AD 1/1989:1985	04	Convenor				11/91	published
22.01.04 07/87	Correction Addendum to ISO 1989	ISO 1989:1985/ DAM 2	04	W. Klein USA		06/92	11/92 01/93	09/93	N1292 Disp of emts from CD ballot
22.01.05 01/89	Addendum to ISO 1989 - FIMS interface	proj withdrawn	04		10/93				N1163 emry ballot for withdrawal
22.01.06 01/89	Addendum to ISO 1989 - MOCS support		04	A. Wallace	01/93				
22.01.07 01/89	Revision of ISO 1989:1985		04	D. Nelson - USA	06/94	08/94	06/96	06/97	
22.02.01 8/85	Revision of ISO 1539:1980	IS 1539:1991	05	Convenor					Published
22.02.02	Addendum to ISO 1539 - Variable Length Character String Module	CD1539:1991 Amnd 1	05	L.Schonfelder UK	11/91	10/92	06/93	02/94	CD emry of Vote N1326
22.05 8/85	Prog Language PL/I	IS 6160:1987		J. Klemsin - USA					Published.
22.06 8/85	Revision of ISO 6522:1985 PL/I General Purpose Subset	IS 6522:1992		J. Klemsin - USA				09/91 11/92	Published 92/11.
22.08 8/85	Prog Language Pascal	IS 7185:1990	02	B. Wichmann - UK					Published.
22.09 8/85	Prog Language APL	IS 8485:1989	03	Convenor					Published.
22.10.01 8/85	Revision of Ada ISO 8652:1983		09	C. Anderson/S. Taft	09/93				
22.10.02 08/88	Ada Numeric Packages	DIS 11430	09	K. Dritz - USA			09/92		N1146 emry DIS
22.10.03 08/88	Ada Primitive Functions	CD 11729	09	Convenor		10/91	09/92		N1104 emry CD vote
22.10.04 08/88	Ada Complex Functions		09	Convenor					
22.10.05 08/88	Ada Matrix Functions		09	Convenor					
22.11 8/85	Prog Language Full Basis	IS 10279:1991	08	T. Kurtz - USA				09/91	Published.
22.13 8/85	Technical Info Bulletin 1	X3.113:1987	08						N1189
22.14 8/85	Guidelines for the Preparation of Prog Language Standards Binding Techniques for Prog Languages	TR 10176:1991		B. Meek - UK				04/91	Published.
22.15.01 08/85	Conformity Requirements & Testing	DTR 10182	11	D. Nelson - USA			03/92	12/92	N1194 emry JTCl voting
22.15.02 08/85	Test Methods for Prog Language Processors	TR 10034:1990		N/A					Published.
22.16 04/85	Lang-Independent Procedure Calling Mechanism	TR 9547:1988		N/A					Published.
		N1289	11	K. Edwards - USA	05/92 12/92	11/92			CD reg ballot

Project/Ass. date	Title	Ref No	WG	Proj Editor	WD	CD	DIS	IS	Note
22.17 04/85	Lang-Independent Datatypes		2nd CD 11404		E. Barkmeyer USA			2nd 01/93	N1305 CD ballot
22.18.01 04/86	Prog Language Modula 2		2nd CD 10314		R. Henry - UK			01/93	N1303 CD ballot
22.18.02 01/92	Object-oriented Modula 2				Convenor		03/93	10/93	06/94 03/95
22.18.03 01/92	Modula 2 binding to POSIX				Convenor		05/93	10/93	06/94 03/95
22.18.04 01/92	Modula 2 extensions for systems programming				Convenor		07/93	02/94	10/94 07/95
22.18.05 01/92	Support for commercial programming in Modula 2				Convenor		07/93	02/94	10/94 07/95
22.18.06 01/92	Further support for concurrent programming in Modula 2				Convenor		07/93	02/94	10/94 07/95
22.19 04/86	Prog Language Extended Pascal				B. Wichmann - UK				04/91 Published.
22.20.01 04/86	Prog Language C				Convenor				Published.
22.20.02 10/89	Addendum on C Integrity		IS 9899:1990		D. Jones - UK		10/92	01/93	10/93
22.21.01.01 07/87	POSIX System Interface		IS 9945-1:1990		H. Jepsen - USA		12/92		Pub./Rev. in prog.
22.21.01.02	Addendum to ISO 9945-1: Realtime & Extensions		CD9945-1:1990 Amd 1		H. Jepsen - USA			07/92	N1314 Disp of coms read on CD
22.21.01.03.01	Addendum to ISO 9945-1: Dist Services - Transparent File Service				H. Jepsen - USA		04/92		
09/91	Addendum to ISO 9945-1: Dist Services - Remote Procedure Call				H. Jepsen - USA				No further action expected
22.21.01.03.02 10/89	Addendum to ISO 9945-1: Dist Services - Protocol Independent Interface				H. Jepsen - USA		09/92		
22.21.01.03.03	Addendum to ISO 9945-1: Dist Services - Name Space & Directory Services				H. Jepsen - USA		06/92		
09/91	POSIX Shell & Utilities								
22.21.02.01 10/89	Addendum to ISO 9945-2: User Portability Extensions		DIS 9945-2		H. Jepsen - USA			12/91	12/92
22.21.02.02 09/91	POSIX System Administration		DIS9945-2 (N1077)		H. Jepsen - USA			12/91	12/92
22.21.03.01 10/89	POSIX System Administration - Batch Services				H. Jepsen - USA			12/92	Merged with other projects
22.21.03.02 10/89	POSIX C Binding								
22.21.04.01 10/89	POSIX Ada Binding				H. Jepsen - USA		12/92		

Project/Ass. date	Title	Ref No	WG	Proj Editor	WD	CD	DIS	IS	Note
22.21.04.02	10/89								
22.21.04.03	10/89								
22.21.04.03	10/89								
22.22.01	09/87								
22.22.02	09/91								
22.23	09/87								
22.24.01	09/87								
22.25									
06/88									
22.26									
06/88									
22.27									
08/88									
22.28									
04/90									
22.29									
03/90									
22.30									
04/90									
22.31	06/90								
22.32	04/91								
22.33	04/91								
04/91									
22.34	04/91								
04/91									
22.35	06/91								
06/91									
22.36	12/91								
12/91									
22.37	03/92								
03/92									
22.38	03/92								
03/92									
22.39									
03/92									
22.21.04.02	10/89								
22.21.04.03	10/89								
22.22.01	09/87								
22.22.02	09/91								
22.23	09/87								
22.24.01	09/87								
22.25									
06/88									
22.26									
06/88									
22.27									
08/88									
22.28									
04/90									
22.29									
03/90									
22.30									
04/90									
22.31	06/90								
22.32	04/91								
22.33	04/91								
04/91									
22.34	04/91								
04/91									
22.35	06/91								
06/91									
22.36	12/91								
12/91									
22.37	03/92								
03/92									
22.38	03/92								
03/92									
22.39									
03/92									

Project/Ass. date	Title	Ref No	WCG	Proj Editor	WD	CD	DIS	IS	Note
22.40
03/92
22.41
03/92
22.42
03/92
22.43
03/92
22.44
07/92
22.xx NWI proposal
22.xx NWI proposal
22.xx NWI proposal
22.xx NWI proposal

N1182 army JTCl vote
feature