SC 22 Programme of Work

(Note: Bolded reference numbers in the third column indicate an active project.)

Project	Title	Ref. No.	WG	Proj. Editor	WD	CD	DIS	IS	Note
22.01.01	Programming language COBOL	IS 1989	04	A. Bennett USA					Published (2002)
22.01.07.01	Object finalization for programming language COBOL (Type 2 TR)	TR 19755	04	W. Takagi Japan					Published (2003)
22.01.08	Technical Report on Native COBOL Syntax for XML Support	**NP 24716**	04	D. Schricker USA					N3701 approved project
22.01.09	Technical Report on COBOL Collection Classes	**PDTR 24717**	04	R. Karlin USA					N3702 approved project N3724 is PDTR LB N 3743 is SOV for PDTR
22.02.01.01	Programming language Fortran, Part 1 Revision of ISO 1539-1:1997	IS 1539-1 **FCD 1539-1**	05	R. Maine USA	(08/00)	(02/02)			Published (1997) Revision approved by N2574 (Res. 97-3) COR 1 published (2001-06-01) COR 2 published (2002-06-15) N3501 is CD approval and reg. N3535 is SoV N3560 is DoC N3661 is FCD ballot N3722 SOV N37329 Disp of Comments Sent to ITTF
22.02.01.02	Floating Point Exception Handling TR (Type 2) - Second Edition	TR 15580	05	J. Reid UK					Published (2001)
22.02.01.04	Enhanced Data Type Facilities TR (Type 2) - Second Edition	TR 15581	05	M. Cohen UK					Published (2001)
22.02.01.05	Technical Report of Type 2 on Enhanced Module Facilities in Fortran	NP 19767	05	V. Snyder USA					NP approved per N3367 N3693 is PDTR ballot N3727 is SOV JTC 1 N 7440 is DTR LB

Project	Title	Ref. No.	WG	Proj. Editor	WD	CD	DIS	IS	Note
22.02.02	Fortran - Part 2: Varying length character strings	IS 1539-2	05	L. Schonfelder					Published (2000)
22.02.03	Fortran - Part 3: Conditional compilation	IS 1539-3	05	D. Nagle USA					Published (1999) Corrected and reprinted 2000-12-15
22.05	Programming Language PL/I	IS 6160		J. Klensin USA					Published (1979) Confirmed in 2000 (N3218)
22.06	General Purpose PL/I	IS 6522		J. Klensin USA					Published (1992) Confirmed in 2001 (N3305)
22.08	Programming Language Pascal	IS 7185		T. Hetherington UK					Published (1990) Confirmed in 2000 (N3218)
22.09.01	Programming Language APL	IS 8485	03	L. Dickey Canada					Published (1989)
22.09.02	Character Repertoire for APL	**PDAM 1 to IS 8485: 1989**	03	L. Dickey Canada					N3067 is PDAM reg ballot N3094 is SoV N3532 is FPDAM ballot N3575 is SoV
22.10.01	Ada	IS 8652	09	E. Ploedereder Germany					Published (1995) Confirmed in 2000 (N3218) COR 1 published (2001-06-01)
22.10.01.01	Amendments to ISO/IEC 8652:1995	**TBD**	09	P. Leroy France R. Brukardt Germany					Subdivision of project 1.22.10.01 approved per JTC 1 N6567.
22.10.04	Ada Complex Functions	IS 13813	09	D. Sando & K. Dritz USA					Published (1998) Confirmed in 2003 (N3659)

Project	Title	Ref. No.	WG	Proj. Editor	WD	CD	DIS	IS	Note
22.10.05	Generic Package of Complex Elementary Functions in Ada	IS 13814	09	J. Squire & K. Dritz USA					Published (1998) Confirmed in 2003 (N3659)
22.10.06	Technical Report, Guide for the use of the Ada Ravenscar Profile in High-Integrity Systems	**PDTR 24718**	9						NP and PDTR registered per N3706.
22.11	Programming Language Full Basic Technical Info Bulletin 1	IS 10279		T. Kurtz USA					Published (1991) Confirmed in 2001 (N3305)
22.13	Guidelines for the Preparation of Programming Language Standards (Fourth edition)	TR 10176	20	M. Küster Germany					Published (2003) Request to make freely available approved by JTC 1, sent to ITTF for final approval on 2003-09-30.
22.14	Binding Techniques for Prog Languages	TR 10182	11	D. Nelson USA					Published (1993)
22.15.01	Guidelines for Preparation of Conformity Clauses	TR 10034							Published (1990)
22.15.02	Test Methods for Programming Language Processors	TR 9547							Published (1988)
22.16	Language-Independent Procedure Calling	IS 13886	11	Convenor					Published (1996) Confirmed in 2001 (N3305) JTC 1 approved per N6491. Request sent to ITTF to make publicly available (awaiting IEC approval)
22.17	Language-Independent Datatypes	IS 11404 **CD 11404**	11	F. Farance USA					Published (1996) To be revised per 2001 Systematic Review (n3305) N3612 is CD letter ballot closing N3698 is SoV approving CD
22.18.01	Programming Language Modula-2 Base language	IS 10514-1	13	C. Pronk Netherlands					Published (1996) Confirmed in 2001 (N3305)

Project	Title	Ref. No.	WG	Proj. Editor	WD	CD	DIS	IS	Note
22.18.02	Object-Oriented Extensions to Modula-2	IS 10514-3	13	A. Wiedemann Germany					Published (1998) Confirmed in 2003 (N3659)
22.18.04	Generics in Modula-2	IS 10514-2	13	R. Sutcliffe Canada					Published (1998) Confirmed in 2003 (N3659)
22.19	Programming Language Extended Pascal	IS 10206		T. Hetherington UK					Published (1991) Confirmed in 2001 (N3305)
22.20	Programming Language C	IS 9899 **COR 2**	14	L. Jones USA					Published (1999) N3744 is Tech Cor 2 ballot, closes 2004-09-16 Backup PE: D. Walls (USA)
22.20.01	Extensions for the programming language C to support new data character types (Type 2 TR)	TR 19769	14	Mr. N. Mori Germany					NWI approved per N3393 N3579 is concurrent reg. And approval PDTR ballot N3649 is SoV N3678 is DoC N3679 is DTR text JTC 1 N7296 closes 2002-02-14 JTC 1 N7375 is SOV Sent to ITTF 2004-05-19 Published 202004-07-23 Backup PE: J. Benito (USA)
22.21.03.04	POSIX System Administration Software Administration	IS 15068-2	15	J. Ashford USA					Published (1999)
22.21.04.01.01	POSIX Part 1: Base Definitions Part 2: System Interfaces Part 3: Shell and Utilities Part 4: Rationale	IS 9945 (Parts 1-4)	15	M. Gonzalez Spain					Published (2003) DTC contained in N3703 N3731 is SOV Sent to ITTF 2004-05-06
22.21.04.02	POSIX – Binding for System API	IS 14519	15	T. Baker USA					Published (2001)
22.22.01	Prolog General Core	IS 13211-1	17	Convenor					Published (1995) Confirmed in 2000 (N3218)

Project	Title	Ref. No.	WG	Proj. Editor	WD	CD	DIS	IS	Note
22.22.02	Prolog Modules	IS 13211-2	17	J. Hodgson USA					Published (2000)
22.23	Programming Language Lisp	IS 13816	16	K. Pitman USA					Published (1997) Confirmed in 2002 (N3462)
22.24.01	Programming Language Extended APL	IS 13751	03	Convenor					Published (2001)
22.24.02	Character Repertoire for Extended APL	**IS 13751/ PDAM 1**	03	Convenor	(04/97)				N3082 is PDAM reg. Ballot N3095 is SoV N3532 is FPDAM ballot N3575 is SoV
22.28	Language Independent Arithmetic	IS 10967-1	11	K. Karlsson Sweden					Published (1995)
22.29.01	Vienna Development Method/ Specification Language, Part 1: Base Language	IS 13817-1	19	D. Andrews UK					Published (1996) Confirmed in 2001 (N3305)
22.30.01	Framework for Internationalization	TR 11017	20						Published (1998) Request to make freely available approved by JTC 1, sent to ITTF for final approval on 2003-09-30.
22.30.02.01	Functionality for Internationalization (Umbrella Project)		20						

Project	Title	Ref. No.	WG	Proj. Editor	WD	CD	DIS	IS	Note
22.30.02.03	Specification Method for Cultural Conventions	**DTR 14652**	20	K. Simonsen Denmark	12/97	12/98 (2nd)			N2504 is concurrent CD reg CD ballot N2612 is vote summary N2637 is comts disposition N2638 is FCD Ballot Title change approved N2806 (res 98-18) N2732 is vote summary N2829 is comts disposition N2869 is second FCD ballot N2917 SoV N2937 DoC N2955 PDTR ballot N3024 SoV N3028 UK vote N3133 is DoC N3227 is text sent to JTC 1 for final approval N3261 is JTC 1 SoV (not approved) N3371 sent to JTC 1 for second LB JTC 1 N6721 is second LB for approval N3421 is DoC N3479 is final text, sent 2002-08-19 to ITTF for publication Re-sent 2003-06-19 following clarification of Annex issues Request to make freely available approved by JTC 1, sent to ITTF for final approval on 2003-09-30.
22.32	Programming Language C++ (second edition)	IS 14882	21	A. Koenig USA					Published (2003)
22.32.01	Technical Report of Type 2 on C++ Library Extensions (based on ISO/IEC 14882)	**NP 19768**	21	M. Austern USA					NP approval contained in N3368

Project	Title	Ref. No.	WG	Proj. Editor	WD	CD	DIS	IS	Note
22.33	Elementary Numerical Functions	IS 10967-2	11	K. Karlsson Sweden					Published (2001)
22.34	Complex Floating Point Arithmetic and Complex Elementary Numeric Functions	**CD 10967-3** **FCD 10967-3**	11	K. Karlsson Sweden	(09/99)	(09/00)			New title approved 9/95 Resolution 95-8 N1970 N3208 grants year extension for move from NP to CD stage N3270 is CD Reg. Ballot N3340 is CD Reg. SoV N3497 is CD Approval Ballot N3534 is SoV N3651 is Disp of comments N3754 is the text for FCD ballot, closes 2004-10-30
22.36	Amendment 1 to ISO 10279:1991 (Programming Language Full Basic Technical Info Bulletin 1)	IS 10279/ Amd. 1							Published (1994)
22.37	Test Methods for Measuring Conformance to POSIX	IS 13210	15	B. Hedquist USA					Published (1999)
22.38	Guide to POSIX Open Systems Environments	TR 14252	15	D. Folland UK					Published (1996)
22.45	Z Notation	IS 13568	19	I. Toyn UK					Published (2002)
22.46	Guidelines for Preparation of Language Independent Service Specification	TR 14369	11	Convenor					Published (1999)
22.47.1	PCTE, Part 1 PCTE, Part 2 PCTE, Part 3	IS 13719-1 IS 13719-2 IS 13719-3		SC 22 Secretariat					Published (1998) Published (1998) Published (1998) Confirmed in 2003 (N3659)
22.47.5	IDL Binding to PCTE	IS 13719-4		SC 22 Secretariat					Published (1998) Confirmed in 2003 (N3659)
22.9496	Programming Language CHILL (4th Edition)	IS 9496							Published (2003)
22.11756	Programming Language MUMPS	IS 11756		K. Schell USA					Published (1999)

Project	Title	Ref. No.	WG	Proj. Editor	WD	CD	DIS	IS	Note
22.14515-1.01	Initial System API	IS 14515-1	15	B. Hedquist USA					Published (2000)
22.14515-1.02	Amendment 1 to IS 14515-1:1996 - Realtime Extensions	IS 14515-1/ FDAM 1	15	B. Hedquist USA	06/96	01/97			N2162 is WD N2233 is PDAM Reg Ballot N2358 is SoV N2647 is PDAM Ballot N2744 is SoV N2871 is DoC N3112 is FPDAM Ballot N3189 is SoV JTC 1 N6567 grants one year extension to proceed to next stage N3558 is ToR for FDAM ballot Published (200407-11)
22.14515-2	Shell and Utilities Test Methods (TM for 22.21.02.01 and 21.02.02)	IS 14515-2	15	S. McCarron USA	08/95	03/96	08/97		N1924 is WD N2093 is CD reg and CD Ballot N2226 is Summary of Voting N2677 is ITTF Table of Replies JTC 1 N6567 grants one year extension to proceed to next stage Per Res. 02-08, text for FDIS ballot sent to ITTF on 2002-09-18 Published (2004)
22.14766	Guide for POSIX National Profiles	**PDTR 14766**	15	K. Simonsen Denmark					NP ballot is N1741 N1822 is summary of voting N2044 is JTC 1 vote summary N3162 is PDTR Reg. Ballot N3192 is SoV N3234 is PDTR LB N3299 is SoV Editing meeting scheduled
22.14977	Syntactic Metalanguage - Extended BNF	IS 14977 **WD 14977**	19	R. Scowen UK					Published (1996) To be revised per 2001 Systematic Review (n3305)

Project	Title	Ref. No.	WG	Proj. Editor	WD	CD	DIS	IS	Note
22.15145	FORTH Programming Language	IS 15145		J. Rible USA					Published (1997) Confirmed in 2002 (N3462)
22.15287	International Standardized Profiles (Umbrella Project)		15						
22.15287.02	Standardized Application Environment Profile -- Part 2: POSIX Realtime Application Support (AEP)	ISP 15287-2	15	J. Oblinger USA					Published (2000)
22.15287.02.01	Amendment 1 to ISP 15287-2:2000 - Embedded Systems Profile	PDAM 1 to 15287-2	15						Approval for addition to PoW contained in N3208
22.15287.02.02	Amendment 2 to ISP 15287-2:2000 - Extended Profiles	PDAM 2 to 15287-2	15						Approval for addition to PoW contained in N3208
22.15291	Ada Semantic Interface Specification	IS 15291	09	Greg Gicca & C. Roby USA					Published (1999) Mr. Gicca to be approved as PE at next Plenary.
22.15851	Communications Protocol - Open Interconnect	IS 15851		K. Schell USA					Published (1999)
22.15852	M Windowing API	IS 15852		K. Schell USA					Published (1998)
22.15897	Procedure for the Registration of Cultural Elements Revision of IS 15897:1999	IS 15897 **CD 15897**	20	K. Simonsen Denmark					Published (1999) N2845 is Reg Auth Approval Conc. Reg. & CD ballots approved by N3013 Res. (99-15) N3266 is conc. Reg and CD ballot N3341 is SoV N3437 is DoC N3586 is FCD ballot N3666 is SoV N3680 is DoC N3681-sent to RA

Project	Title	Ref. No.	WG	Proj. Editor	WD	CD	DIS	IS	Note
22.15942	Guidance for Use of Ada In High Integrity Systems (Type 3 TR)	TR 15942	09	B. Wichmann UK					Published (2000) Freely available on ISO site
22.16262	ECMAScript language specification	IS 16262		M. Cowlishaw ECMA					2nd edition Published (2002)
22.16509	Year 2000 Terminology	IS 16509		K. Lewis USA					Published (1999)
22.18009	Ada: Conformity Assessment	IS 18009	9	E. Ploedereder Germany					Published (1999)
22.18011	POSIX Realtime Distributed Systems API (Language Independent) (C Language & Ada Language)	**NP 18011**	15	P. Place USA					NWI did not originate in SC22 N2861 is JTC 1 SoV on NWI Conc. Reg and CD ballots approved by N3013 (Res. 99-15)
22.18015	C++ Performance (Type 3 TR)	**PDTR 18015**	21	L. Goldthwaite UK					N2831 is NP for SC 22 ballot N2891 is SoV N2952 is JTC 1 SoV on NP N3502 is Reg. LB N3536 is SoV N3646 is LB for PDTR N3699 is SOV JTC 1 N7372 is DTR LB JTC 1 N7439 is SOV

Project	Title	Ref. No.	WG	Proj. Editor	WD	CD	DIS	IS	Note
22.18037	C Extensions to Support Embedded Processors	**TR 18037**	14	W. Wakker Netherlands Backup PE: J. Benito USA					N3039 is NP for SC 22 N3083 is SoV JTC 1 N6089 is NP Ballot N3120 is JTC 1 SoV N3269 is PDTR Reg. Ballot, N3339 is SoV approving reg. N3395 is PDTR ballot N3470 is SoV N3529 is DoC N3574 is 2nd PDTR ballot N3608 is SoV N3674 is Doc N3675 is DTR text JTC 1 N7295 closes 2004-02-11 Sent to ITTF 2004-05-06 Published 2004-07-18
22.20970	J-Consortium: JEFF file format specification	IS 20970	TBD	J Consortium					Published (2002)
22.23270	C# Language Specification	IS 23270	TBD	R. Jaeschke USA					Published (2003)
22.23271	Common Language Infrastructure	IS 23271	TBD	J. Miller USA					Published (2003)
22.23272	Technical Report on CLI	TR 23272	TBD	J. Marcey USA					Published (2003)
22.24715	Technical Report on the Conflicts between the ISO/IEC 9945 (POSIX®) Standard and the Linux Standard Base Specification	**PDTR 24715**	TBD						N3694 is SoV approving NP and PDTR
22.24732	Extensions for the Programming Language C to Support Decimal Floating Point Arithmetic	**NP 24732**	14						N3720 is NWIP N3740 is SOV
22.24733	Extensions for the Programming Language C++ to Support Decimal Floating Point Arithmetic	**NP 24733**	14						N3721 is NWIP N3741 is SOV

Stabilized Standards

Project	Title	Ref. No.	WG	Proj. Editor	WD	CD	DIS	IS	Note
	ALGOL 60	ISO 1538		J.W. van Wingen Netherlands					Withdrawn in 1989 Made stabilized standard in 2003

Recently Transferred Projects

Project	Title	Ref. No.	WG	Proj. Editor	WD	CD	DIS	IS	Note
22.30.02.02	International String Ordering and Comparison - Method for Comparing Character Strings and Description of the Common Template Tailorable Ordering	IS 14651	20	A. LaBonte Canada					Transferred to JTC 1/SC 2 per JTC 1 Singapore Resolution 24.
22.30.02.02.01	Amendment 1 to IS 14651	IS 14651/ Amd. 1	20	A. LaBonte Canada					Published (2003) Transferred to JTC 1/SC 2 per JTC 1 Singapore Resolution 24.

Recently Cancelled/Withdrawn Projects

Project	Title	Ref. No.	WG	Proj. Editor	WD	CD	DIS	IS	Note
22.35	Extensions for real-time Ada	TR 11735	09	N. Kettani France					Published (1996) Approval for Withdrawal by JTC 1 in March 2003 (JTC 1 N 6987)
22.21.02.03	POSIX - Amendment 1 on Batch Services Portability Extensions	**IS 9945-2/ PDAM 1**	15	N. Aaronson USA	12/92	8/94	12/95	08/96	N1645 is PDAM N1758 is SoV N2017 is DoC N2232 is ITTF ToR N2480 is DoC Time delay in forwarding for pub. required new JTC 1 LB N2961 is ITTF ToR JTC 1 N6567 grants one year extension to proceed to next stage
22.21.03.05	POSIX System Administration User Administration	**DIS 15068-3**	15	M. Kirk UK	07/94	11/95	08/97		WD is N1635 N1986 is CD reg and ballot N2086 is SoV N2475 is DoC N2673 is ITTF Table of Replies JTC 1 N6567 grants one year extension to proceed to next stage

Project	Title	Ref. No.	WG	Proj. Editor	WD	CD	DIS	IS	Note
22.39	POSIX - Amendment 5 to Portable Operating System Interface (POSIX) - Part 1: System API	**IS 9945-1/PDAM 5**	15	Convener	06/95	08/96			N1125 is NWI summary N1843 is WD N2210 is PDAM reg ballot N2347 is SoV N2601 is DoC N2648 is PDAM ballot JTC 1 N6567 grants one year extension to proceed to next stage
22.40	POSIX - Amendment 8 to Portable Operating System Interface (POSIX) - Part 1: System API	**IS 9945-1/PDAM 8**	15	S. Walli USA	06/96	08/98			N1126 is NWI summary N2159 is WD N2404 is PDAM reg. Ballot N2489 is SoV N2599 is DoC N2817 is PDAM ballot N2875 is SoV N3038 is FPDAM ballot N3085 is SoV JTC 1 N6567 grants one year extension to proceed to next stage
22.41	POSIX - Amendment 2 to IS 9945-2, POSIX - Part 2: Shell and Utility Security Administration	**IS 9945-2/ FPDAM 2**	15	S. Walli USA	11/94	7/95			N1737 is WD N1896 is draft CD N2054 is CD reg. Ballot N2156 is SoV N2971 is DoC N2972 is PDAM ballot N3047 is SoV N 3208 approves extension of time permitted between CD and DIS stages JTC 1 N6567 grants one year extension to proceed to next stage

Project	Title	Ref. No.	WG	Proj. Editor	WD	CD	DIS	IS	Note
22.15287.01	POSIX Supercomputing Application Environment Profiles	**FPDISP 15287-1**	15	J. Oblinger USA					N2723 Revised is FPDISP Blt N2724 is Explanatory Report N2859 is SoV JTC 1 N6567 grants one year extension to proceed to next stage
22.15879	Distributed Software Administration DCE-RPC Interoperability (XDSA/DCE)	**DIS 15879**	15	M. Kirk Open Group			02/98		Fast-track - Open Group (PAS) N2659 is ITTF Table of Replies JTC 1 N6567 grants one year extension to proceed to next stage
22.12	Industrial Realtime Fortran	IS 7846							Published (1985) Withdrawn in 1996
22.10.02	Ada Numeric Packages	IS 11430	09	K. Dritz USA					Published (1994) Withdrawn 2000-09-28
22.10.03	Ada Primitive Functions	IS 11729	09	K. Dritz USA					Published (1994) Withdrawn 2000-09-28
22.15435	APIs for Internationalization	**NP 15435**	20	K. Simonsen Denmark					Withdrawn per JTC 1 N6756 and Kona Resolution 01-26
22.15436	Interfacing Modula-2 to C	**NP 15436**	13	Convenor					Cancelled per JTC 1 N6567 and Kona Resolution 01-03
22.21.03.01	POSIX System Administration (Umbrella Work Item)		15	M. Kirk USA					Withdrawn per JTC 1 N6567 and Kona Resolution 01-14
22.21.01.03.03	POSIX - Amendment 4 to Portable Operating System Interface (POSIX) - Part 1: System API	**IS 9945-1/PDAM 4**	15	S. Walli USA					Withdrawn per JTC 1 N6567 and Kona Resolution 01-14