

WG14 N032

05 Dec 87

WG14 Meeting No. 3  
16-17 Nov 87

Vrije Universiteit  
Amsterdam, NETHERLANDS

The meeting began at 9:30 AM with P.J. Plauger as convener.

In attendance were:

Ed Keizer	The Netherlands
Jon van Brummen	The Netherlands
Keld Simonsen	Denmark
Peter E. Cordsen	Denmark
Cornelia Boldyreff	UK (BSI)
Bourstin Claude	France (AFNOR)
Jukka Korpela	Finland
P.J. Plauger	USA (ANSI X3J11)
Rex Jaeschke	USA (ANSI X3J11)

Opening comments: Plauger restated his intent that the ANSI and ISO C standards be one and the same. However, to achieve this, the efforts of the ANSI and ISO committees needed to be synchronized. The December 1987 ANSI meeting may well be the last chance for ISO to be heard. He then outlined the planned ANSI X3J11 meeting schedule and the public review procedures. He proposed that the primary goal of this ISO meeting be to produce a list of "show stopping" concerns for submission to the December ANSI meeting.

The letter ballot N413 should have been received by all ISO members. Responses are due by 22 Jan 88. You are encouraged to vote YES with a comment to the effect that the draft document in question is acceptable as an ISO working document and that you expect it to be modified appropriately to synchronize it with the latest ANSI draft. If you cannot vote YES you are encouraged to clearly state why before the December meeting of ANSI.

Boldyreff expressed concern that the letter ballot was based on the X3J11 draft dated 15 May 87 and that it was difficult to properly review this document in conjunction with the minutes of the subsequent X3J11 meetings. It would be much easier if the ballot were based on the latest possible X3J11 draft. Considerable discussion followed regarding the lengthy process involved in registering ISO documents and getting letter ballots initiated.

Plauger was unanimously appointed meeting chairman and Jaeschke offered to act as secretary.

Everyone in attendance then introduced themselves.



The minutes of the previous meeting (11 Jun 87 in Paris, FRANCE) were accepted without amendment.

Agenda changes: Boldyreff requested that item 6.2 be added so that synchronization of the ISO/X3J11 efforts could be formally discussed, particularly with regard to ISO's working with the latest possible X3J11 drafts.

New documents: A number of new documents were submitted for registration and distribution. They were:

N022 Denmark	Cover letter plus four separate issues
N023 Denmark	Proposal regarding alternate trigraphs
N024 France	AFNOR comments
N025 USA	Enforcement of grouping parentheses
N026 USA	Multi-byte character support
N027 UK	Miscellaneous BSI comments
N028 Finland	Miscellaneous Comments
N029 Netherlands	Questions and comments from ACE, Inc.

X3J11 Liaison Report: Plauser reported that X3J11 were receptive to constructive comments and suggestions from the international community, within reason. X3J11 had already agreed to provide support for the most pressing international issues and, generally, its membership felt that further support should be modest.

/usr/group Report: no one present had anything to report.

IEEE POSIX Report: Plauser had attended a recent meeting at the National Bureau of Standards along with other UNIX and UNIX-like software vendors. There was general discussion of a FIPS standard for POSIX. This is specifically for the US Federal Government. He indicated there was tremendous pressure on the US Government to have a POSIX standard. Such a standard will affect the ANSI/ISO C standard since POSIX is currently defined in terms of a C language binding. Currently, Plum Hall and AT&T System V validation suites were being used. It was not expected that work would begin on a FIPS standard or C validation suite for at least six months, and any such work is expected to have minimal impact on the ANSI/ISO C standardization efforts currently in progress.

ISO POSIX: Boldyreff reported that an ISO POSIX group had been formed and they would soon be voting on accepting Draft 12 as a DP (expected early 1988). ISO POSIX would be defined in terms of a language-independent binding.

"Show stopping Issues": A summary follows.

France	YES - grouping of parentheses and multi-byte support
UK	YES - preprocessor and file handling issues
Finland	None - just need clarification of some points
Netherlands	None
Denmark	None - would like alternate trigraphs to be considered
USA	None but need to know just what is in each header



It was decided that a complete list of the major problem areas be made and that a drafting committee be established. Most of the attendees volunteered to participate in the drafting committee, which met Monday evening at ACE's offices. Details of these issues are attached and are in a form suitable for submission to X3J11 as a formal paper at the December meeting. (Thanks to ACE for providing their office and computing facilities.)

Boldyreff/Keizer

"Move we submit N033 to X3J11, detailing changes requested by WG14."

Motion carried, unanimously.

Next Meeting: Boldyreff offered the meeting facilities at BSI's office in London, UK on 13-14 Jun 88. This should provide plenty of time for X3J11 to produce a new draft and rationale as a result of their 18-22 Apr 88 meeting in Nashua, New Hampshire.

Bourstin/Keld

"Move that WG14 accept as its working document the latest X3J11 draft, and recommend that its members review this latest draft whenever possible."

Motion carried, unanimously.

(The motion was intended to resolve the concern by the UK (and others) that the ISO and X3J11 drafts were always out of synchronization.)

\* Plauger accepted an action item to draft a letter to ISO stating this position.

\*\* Jaeschke accepted an action item to mail MS-DOS diskette copies of the latest X3J11 draft and rationale to all ISO C members on his mailing list, as soon as the versions became available. He was also requested to provide the address, etc. where the public could obtain copies of the draft and rationale during the public review period. He also offered to provide a list of the most popular items that were not included in the standard.

The committee thanked Ed Keizer and the Vrije Universiteit for providing the meeting facilities and lunches for the two days.

The meeting was adjourned at 11:50 AM on Tuesday, 17 Nov 87.



# ATTACHMENT

## Proposed C Language Extensions

At the (informal) extensions meeting I convened at Boulder, Colorado in Mar 87, the following extensions were identified as being of interest to those present. Contact me (Rex Jaeschke) if you are interested in being the focal point for other topics.

Contact	Number Interested	Extension Description
Weil, Dave	25	Standard #pragmas
Pennello, Tom	23	Inter-language calling conventions
Plum, Tom	21	typeof() operator
Darnell, Peter	19	Concurrency support (parallel processing)
MacDonald, Tom	19	Complex arithmetic (also Meloy)
Nolan, Chris	18	Case ranges
Nolan, Chris	18	Anonymous unions (ala Pascal variant records)
Pennello, Tom	17	Various address space ptrs - (i.e., near/far)
Meissner, Mike	17	In-line functions
Nolan, Chris	17	External names - spelling and length
Prosser, Dave	17	Classes (ala C++)
Johnson, Andy	16	Initializer repeat counts
Hempfer, Phil	15	Screen I/O control (ala curses)
Gwyn, Doug	14	Zero-sized aggregates
Hohensee, Paul	14	Vector support
Prosser, Dave	14	varargs macros
Prosser, Dave	14	Line-oriented comments (ala C++)
Gwyn, Doug	14	Environment control (OS, machine, etc.)
Meissner, Mike	13	Raw mode input (getc)
Baumbach, Jim	13	alignof() operator
Pennello, Tom	12	Allow statements to precede declarations
Prosser, Dave	12	Random access aggregate initialization
Paul	12	Aliasing control
Plum, Tom	11	Strong enum typing
Hausman, John	11	Semantics for shared file access
Prosser, Dave	11	Includability of a header
Plum, Tom	11	Benign typedefs
Jervis, Bob	10	ASM - in-line assembler
Darnell, Peter	9	Representation control (e.g. Integer*4)
Eberhart, Lidia	9	Common shared regions
Meloy, Sue	8	International issues
Prosser, Dave	7	Default parameter values (in functions)
Prosser, Dave	7	Charize (stringize for characters)
Jaeschke, Rex	6	Spelling of locale strings
Plum, Tom	6	"Fat" casts - constructors
Nolan, Chris	5	External names with "funny" characters
Lau, Dan	5	Embedded environments
Bartels, Steve	5	Cardinal/unsigned arithmetic
Gwyn, Doug	5	#exit [message]
Pennello, Tom	4	Underscores in integers (ala ADA)
Darnell, Peter	4	Semantics for register in prototypes
???	4	Arrays as first class objects
Weil, Dave	3	Preprocessor I/O (#in, #out)
Pennello, Tom	3	Named parameter association
Plum, Tom	2	Echo of stdin to stdout



ATTACHMENT  
Purchasing X3J11 Draft and Rationale

The following information is taken from the press release announcing the X3J11 public review period in Nov 87. I assume that the same arrangements will be used for the next public review period - "This draft standard is available for public review and comment for a xx-month period ending xxx. Copies may be obtained from GLOBAL ENGINEERING DOCUMENTS, INC. by calling (800) 854-7179 or (714) 540-9870. Global Engineering is located in Santa Ana, California, USA, which is in the Pacific Standard Time (PST) zone. Single copy price: US\$65.00 (includes both the draft Standard and the Rationale document)"