

Date: 25 February 1994
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WG14/N327
X3J11/94-011

TC X3J11 1994 ANNUAL REPORT

I. Executive Summary: X3J11 continued to participate as the USA TAG to WG14 in the ongoing development of the C Programming Language Internationalization Normative Addendum under project 980-I, and in the ongoing development of Defect Reports by WG14.

The normative addendum PDAM #1 has been balloted as has the Technical Corrigendum #1.

X3J11's only task group, X3J11.1, continued its work on producing a Technical Report on numeric extensions to Standard C. On January 1, 1994, this work was absorbed by X3J11 and X3J11.1 was disbanded.

II. Projects

II.1 Project 980-I

a. Project Number and Title: 980-I C Programming Language Internationalization Addendum. [authorized by X3/92-2443R]

b. Target Date: This addendum was targeted for PDAM ballot by the end of December, 1993. This target was met. It is expected the Addendum will be formally adopted before the end of 1994.

c. Project Description: X3J11 functions as the US TAG for the development of this Addendum (JTC1 22.20.02).

d. Publications During Past Year: The PDAM draft of the Addendum was distributed as X3J11/93-034 (WG14/N288) dated 22 August 1993. The latest draft of the Record of Responses #1 was distributed as X3J11/93-035 (WG14/N289) dated 22 August 1993. The latest draft of the Technical Corrigendum #1 was distributed as X3J11/93-036 (WG14/N290) dated 22 August 1993.

e. Statement of Progress: Some time was spent adding the finishing touches to the Japanese component of the Addendum, which concerns a new library for C which operates upon "wide characters." The Danish component of the Addendum concerns the representation of C programs in the invariant subset of the ISO-646 character set. Much time was spent in search of a compromise which could achieve consensus. At the December 93 meeting, it was decided no further compromise could be achieved with the vote steady at seven nations in favor, two opposed.

Most of the committee's time was spent in establishing the procedures for dealing with, and then processing, defect reports.

Some time was also spent on fine-tuning the Technical Corrigendum #1.

Over the year, excellent progress was made and all goals were met.

f. Statement of Status: We are on track to having the Addendum formally adopted before the end of 1994.

g. Future Plans: We plan to continue recommending responses for defect reports to WG14 and, at the next meeting (June 94), begin to lay the groundwork for the US contribution to a revision of the standard.

The work formerly done by X3J11.1 will be continued by X3J11.

II.4 Project 813-DT (by X3J11.1, Numerical C Extensions Group)

a. Project Number and Title: 813-DT Numerical C Extension [authorized by X3/90-2054R]

b. Target Date: December 1994.

c. Project Description: The principal technical issues that are being addressed are: Optimization of pointer usage, Complex arithmetic, Variable sized arrays, FP/IEEE issues (including infinity and NaN handling), Data parallelism, Extended initializers and compound literals, and Extended integer range.

d. Publications During the Past Year: None.

e. Statement of Progress: Most subgroups made considerable progress towards their component of a final document. One subgroup seems to be at an impasse with regard to choosing between two main approaches.

f. Statement of Status: The final drafts from three subgroups are being considered by X3J11 and WG14. The final drafts from the remaining four subgroups are expected by the end of 1994.

g. Future Plans: X3J11.1 was disbanded in January 1994. All goals and responsibilities have been taken over by X3J11 and remain the same; to deliver a Technical Report by the end of 1994.

III. Committee Activities

III.1 TC activities (X3J11)

a. Previous Year's Meetings: May '93, Garden City, LI, NY; Dec '93 Kona, HI.

b. Next Year's Planned Meetings: June '94 San Jose, CA; Dec '94 Dallas, TX.

To best utilize the considerable technical expertise available in X3J11, X3J11 and WG14 voted an intent to hold all future meetings jointly, starting in December 1994. Meeting frequency will be increased from twice to three times a year starting in calendar year 1995 and meetings will be extended from the current three days to five.

c. Officers:

Chair: (resigned Feb 93)

Jim Brodie

Motorola

106 S. Terrace

Chandler AZ 85226

Chair: (appointed mid-93)

Rex Jaeschke

DEC Professional

2051 Swans Neck Way

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Vice-Chair:

Thomas Plum

Plum Hall Inc.

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Kamuela HI 96743

Last trained: mid-92

Last trained: mid-90

International Representative:

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Perennial

Suite 130

3004 Mission Street

Santa Cruz, CA 95060

Vocabulary Representative:

Andrew E. Johnson

Open Software Foundation

1 Cambridge Center

Cambridge, MA 02142

Last trained: Sep-93

Last trained: ____

d. Membership: (See Attachment 1.)

e. Liaison Activities: SC22/WG14 (ISO C), X3J16 (ANSI C++).

f. Administration Matters of Note: None.

g. Procedural Matters of Note: None.

h. Recommendations: None.

III.2 Task Group activities (X3J11.1)

a. Previous Year's Meetings: May '93, Garden City, LI, NY; Dec '93 Kona, HI.

b. Next Year's Planned Meetings: None since X3J11.1's function has been absorbed by X3J11.

c. Officers:

Chair: Rex Jaeschke
DEC Professional
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Vice-Chair: Tom MacDonald
Cray Research, Inc.
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Last trained: mid-92

Last trained: mid-92

d. X3J11.1 Membership:

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e. Liaison Activities: X3J11 (ANSI C), WG14 (ISO C), X3J16 (ANSI C++) and WG21 (ISO C++), X3H5 (Parallel model and language binding).

f. Administration Matters of Note: None.

g. Procedural Matters of Note: None.

h. Recommendations: None.

IV. Anticipated Projects: None.

X3J11 has no internal operating procedures.

V. Future Trends in this Technical Area:

Most members of the C committees believe an enhanced C language has a significant role to play in future software development. Some parts of C++ likely will be adopted in future revisions of C. Other efforts will also impact C's future. These include the technical report being produced by X3J11.1, parallel programming by X3H5 and others, and internationalization. Cross-language standards and bindings are also expected to impact future C standards efforts.