Business Plan and Convener's Report ISO/IEC JTC1/SC22/WG14 (The Programming Language C)

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SUBMTTED BY:

Convener, ISO/IEC JTC1/SC22/WG14

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1. MANAGEMENT SUMMARY

1.1. JTC1/SC22/WG14 STATEMENT OF SCOPE

Development and maintenance of ISO/IEC Standards related to the programming language C.

1.2. PROJECT REPORT

1.2.1. COMPLETED PROJECTS

None over this period.

1.2.2. PROJECTS UNDERWAY

JTC1.22.20.01 - Programming Language C (Revision of ISO/IEC 9899:1990)

JTC1/SC22 N2794 was submitted to SC22 for FCD ballot, the ballot period started on September 24, 1998, closing on January 12, 1999. The summary of voting can be found in document JTC 1/SC22 N2872 and resolutions for the comments can be found in document JTC 1/SC22 WG14 N873.

A document has been forwarded to JTC 1 for FDIS ballot.

1.2.3. CANCELLED PROJECTS

None over this period.

1.2.4. COOPERATION and COMPETITION

Where appropriate, WG14 has established active liaisons with other SC22 working groups. There is no apparent direct competition with any other current SC22 working group.

2. PEROID REVIEW

2.1. MARKET REQUIREMENTS

WG14 feels that it is responding to user community pressure and to implementers concerns to revise the ISO/IEC 9899 standard to keep current with today's programming trends and market. The Committee believes that evolution of Object Oriented programming, numerical extensions that were proposed by J11.1, internationalization, advancements in character set standardization, cross-language standards and cross-language bindings all need to be considered in the revised standard. Most of these issues where not considered during the technical discussions for the current ISO C Standard. Please, see document ISO/IEC JCT 1/SC22 N2265 "Charter for the Revision of the C Standard" for more details.

2.2. ACHIEVEMENTS

WG14 produced the ISO/IEC JTC 1/SC22.N2794 for FCD Ballot. WG14 resolved all comments that the FCD ballot generated, see document number ISO/IEC JTC 1/SC22 N2872 and ISO/IEC JTC 1/SC22 WG14 N873. A document was generated and forwarded to JTC 1 for FDIS. WG14 also worked on Defect Reports, keeping the Defect Report Log current.

2.3. RESOURCES

WG14 meets three times per year in co-located technical sessions with the US committee J11. Ten countries participate by attending these meetings or by being involved in the technical discussions that take place over the reflector. The countries are: Australia, Canada, Denmark, France, Germany, Japan, Netherlands, Sweden, UK, and the USA.

WG14 has been monitoring the cross-language standards activities, and are using the ISO/IEC JTC 1/WG20 guidelines on extended characters. WG14 has also keep apprised of the requirements of the LIA-1,2 standards.

WG14 liaison appointments are:

| Group | Name | Person assigned |
|-------|--------------------------------|-----------------|
| WG11 | Language Independent Datatypes | Keld Simonsen |
| WG15 | Posix | Keld Simonsen |
| WG20 | Internationalization | Keld Simonsen |
| WG21 | C++ | John Benito |

3. FOCUS NEXT WORK PERIOD

WG14 will focus on new work items after the FDIS ballot closes. The Committee discussed several possible new work items, but has not reached consensus on any item. Items identified:

- 1. Architecture Support Extensions: DSP-C, etc
- 2. Conformance
- 3. Sequence Points
- 4. Time

3.1. DELIVERABLES

WG14 anticipates that the FDIS 9899 will be approved, giving the C community a new Standard.

3.2. STRATEGIES

WG14 believes that routine handling will suffice to complete the progress desired.

3.3. RISKS

No problems are anticipated.

3.4. OPPORTUNITIES

None.

3.5. WORK PROGRAM PRIORITIES

WG14 will concentrate on the revision of 9899, however WG14 will still respond to Defect Report logged for the current ISO/IEC 9899:1990 Standard, and any defect reports filed for the FDIS.

4. OTHER ITEMS

4.1. POSSIBLE ACTION REQUESTS AT FORTHCOMING PLENARY

The Convener, J. Benito, first three-year term will be complete in September. Pending any approval needed by the US National Body, a second term will be requested at the SC22 Plenary in Berlin.

4.2. WG14 SUPPORTS SC22 N2718

WG14 supports the action requested in ISO/IEC JTC 1/SC22 N2718.

4.3. PROJECT EDITORS

The following individuals have been appointed project editors and backup project editors:

JTC1.22.20.01 Programming Language C (Revision of ISO/IEC 9899:1990) Larry Jones (Project Editor), Douglas Walls (Backup Project Editor)

4.4. ELECTRONIC DOCUMENT DISTRIBUTION

WG14 has conducted much of its detailed technical discussion using email reflector provided by the Danish UNIX Users Group and Keld Simonsen.

WG14 also has an ftp and Web site provided by courtesy of the Danish UNIX Users Group and Keld Simonsen.

WG14 is now providing all the appropriate committee documents on the Committee Web site, reducing the need for paper mailings.

4.5. RECENT MEETINGS

| 23-27 | Jun 1997 | London, UK | BSI, Plum Hall Europe |
|-------|----------|---------------------|------------------------|
| 20-24 | Oct 1997 | Menlo Park, CA USA | ANSI, Sun Microsystems |
| 02-06 | Feb 1998 | Frisco, CO USA | ANSI Keaton Consulting |
| 23-27 | Jun 1998 | Copenhagen, Denmark | Danish Standards |
| 05-09 | Oct 1998 | Santa Cruz, CA USA | ANSI, SGI/Cray |
| 01-05 | Feb 1999 | Portland, OR USA | ANSI, Intel Corp. |
| 21-24 | Jun 1999 | London, UK | BSI |

4.6. FUTURE MEETINGS

18-23Oct 1999Kona, HI USAANSI, Plum Hallnn-nnApr 2000Tokyo, JapanITSCJ, NEC