BSL Seminar growing chocognity

A UK View of Standard C

Cornelia Boldyreff
C Panel Convenor
Department of Computer Science
Brunel University
Uxbridge UB8 3PH
UK

- Historical Background
- Present Status of Work
- Future Directions

Historical Background

Early 1980s - Work on C Standardisation Begins

- Work on C Libraries by /usr/group

1983 - CBEMA initiatiated work on a C standard with Formation of X3J11

Spring 1986 - ANSI Proposed New Work Item on C Approved by ISO

Summer 1986 - BSI C Panel Formed

September 1986 - Inaugural Meeting of ISO WG 14 - C

Some Early Decisions Taken by X3J11

- Include C PreProcessor
- Standardise the Commonly Used Libraries
- Forego a Formal Definition Technique
- Harmonise Existing Implementations of C
- Forego Invention of New Language Features; Retain "Spirit of C" and "Prior Art"

Some Goals of the BSI C Panel

- Internationalise C
- Improve C Language and Libraries where possible, for example, removing UNIX dependencies
- Clarify the Definition Given in the Draft Standard
- Remove Unnecessary Compromises in the Draft which Militate Against Portability and Make Conformance Testing Hard, for example, "Implementation Defined" Features

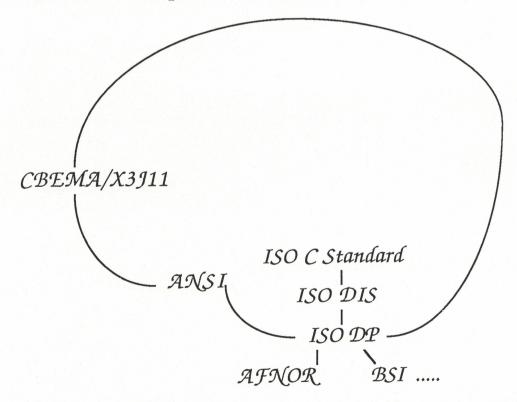
Present Status of Work

X3J11 have produced a revised draft of the proposed C Standard which with X3 approval is ready to be forwarded to ANSI for approval as an ANSI Standard.

This draft will be reballoted at ISO Level as a DP.

The BSI C Panel has asked X3J11 to defer action on the present draft until outstanding UK and Danish concerns have been resolved at ISO level.

All concerned would like to have a Single International Standards: The ISO C Standard which is the same as the ANSI C Standard, the BSI C Standard, etc. and within Europe, a Single European C Standard.



More Work is Required - Consideration of Conformance Testing has brought to light defecencies in the present darft.

Future Directions

- The End is in Sight: A Usable Testable C Standard
- The Next Version of the C Standard Should be Formal
- Formalised C would provide an excellent basis for the Standardisation of C++

The BSI C Panel supports the standardisation of C++ with C as a proper subset of C++; however, we do not feel it would be productive to initiate work on C++ until there is an approved ISO C Standard.