

June 23, 1992

TO: ISO/IEC JTC1/SC22/WG5 Members
FROM: Jeanne Martin, Convenor
SUBJECT: Victoria Meeting / This Distribution

Objectives of the 1992 Meeting

There are two primary objectives for this meeting:

- approve a strategic management plan for future Fortran development
- review and approve the Fortran 90 maintenance activities of X3J3

The results of the ballot on the draft L12 management plan are in N774. An alternate model, referred to as "the choo-choo train model" gained considerable support at the recent X3J3 meeting. In this model there is a standard revision every x years, where x is some number like 5 or 6. This simplifies administrative handling because it is totally foreordained. Any changes or extensions that are completely specified when the train comes through the station get on and become standardized. Any that are not ready must wait for the next train. This model would certainly satisfy the expectations expressed in N775 (Procedures for Accelerating the Development of standards). ISO (and IEC) want to reduce the development time. The average time is now 6 or 7 years, but they believe this is too long and more needs to be done to shorten the process. According to N775, Stage 2 (Development of working draft) should take 3 years maximum. Stage 3 (Committee stage) should take 4 years maximum. Stage 4 (Approval stage) includes the 6-month DIS ballot; ISO is considering a proposal to reduce the voting period to 4 months.

The latest version of X3J3's Fortran 90 maintenance document, S20.121, (N784) is included in this distribution. John Reid has begun a WG5 document (N768) that will (at the end of the meeting) contain all changes to IS 1539 that are approved by WG5. John did not have access to S20.121 in time to prepare a more extensive document for this distribution, but will probably have one available initially in Victoria. Also, Alla Gorelik found a few minor errors in IS 1539 during the process of translating the standard into Russian. They should be reviewed and added to the change document as appropriate. The SC22 ad hoc committee on interpretations is recommending (N783) that interpretations be published in corrigenda. This recommendation will be discussed at the SC22 meeting in Tampere, Finland, August 24-28. I will not be attending that meeting, so we need to find someone to represent the interests of WG5 there.

Other objectives are:

- review and approve the Guidelines for Bindings to Fortran 90 (N776)
- review the latest Varying Character String Draft (N777) and agree on future processing
- collect potential requirements for the next revision (Agenda Item 15: N778-N781)
- review other related standards and guidelines (CLID, CLIP, etc.)

This is our first chance to discuss the Bindings document prepared by the BSI Fortran Panel with David Muxworthy as editor. The object is to provide a guide for other standards groups that have the task of producing bindings to Fortran 90. When approved, we plan to send this document to the SC22 Secretariat for distribution to SC22 members and convenors. Perhaps a wider distribution would be desirable.

N777 was sent to the SC22 Secretariat on April 29, 1992 for CD registration. The Secretariat now has a ballot in progress (closes Aug. 28) on registration. [This is not the SC22 ballot on the CD; that comes after registration.] This version contains corrections to N769 that apply to the module and the test program (Annexes A and B) as well as changes to the standard itself. The entire module, except for the READ_STRING variants, has been exhaustively tested. Lawrie believes we should take a different approach to I/O in the final draft, but that this draft should be subjected to public scrutiny now. He does not think the document is ready to become a DIS; and plans to propose some changes as part of the UK vote on the CD. If he can find the time, he would like to produce an alternative version of the module using a different representation of the type and different algorithms to demonstrate how different models of the same interface are possible.

Lawrie has also written what I found to be a very interesting paper titled, *Observations Resulting from ISO_VARYING_STRING Work* (N778). This paper contains recommendations for changes and additions to Fortran 90 to improve the facilities for defining collateral standards that rely on the Fortran 90 language extension mechanisms. Thus it can be used to help develop requirements for the future revision. N779 follows up on one of Lawrie's suggestions. N780 recommends a minor extension to the pointer facility in Fortran 90. N781 suggests we develop a strategy for managing language evolution. Probably the strongest, most urgent requirements will come from the parallel community; Maureen will provide a status report on the work of the High Performance Fortran Forum (HPFF).

For quick reference, I have included a copy of the Lund Resolutions (N736) in this distribution, following the provisional agenda for Victoria. Lund Resolution L4 requested WG5 members and member bodies to review and comment on several documents developed by WG11. X3J3 did prepare comments (N787) on CLID (N741) and plans to comment on CLIP (N763). WG5 would be interested in knowing about reviews from other member bodies. Resolution L10 refers to Technical Reports on Guidelines; all now available as WG5 documents: N742 is TR 10176 Guidelines for the preparation of programming language standards, N749 is TR 9547 Programming language processors - Test methods - Guidelines for their development and acceptability, and N765 is PDTR 10182 Guidelines for language bindings.

Information from an ANSI-sponsored Convenor's Tutorial, April 13-14

I was invited to an ANSI Convenor's Tutorial in New York. I gained some useful information:

1. A second edition of the JTC1 Directives will be published by the end of the summer. See N788. There is new information on registration authorities and International Standardized Profiles (ISP) used primarily for SC21 standards. A third edition is also in the works for later publication.
2. There has not been a lot of experience with "I" projects as yet, but there is optimism that they will improve the process, certainly they will improve the synchronization part of it.
3. Once a corrigendum is produced, it is subject to a combined SC22 and JTC1 ballot of three months and if it passes, it is published. This is a much simpler process than that required for a revision.
4. There can be an unlimited number of amendments to an existing standard, but those who have had experience standardizing amendments are not enthusiastic about them particularly when the base standard was not developed as an "I" project.

1993 WG5 Meeting

The 1993 WG5 meeting will be July 5-9 in Bavaria. Karl-Heinz is negotiating for a conference centre in the Berchtesgaden district in the Alps near the German/Austrian border. The price of accommodation (in single/double rooms or family apartments) including full board and seminar facilities was DM 70 (\$44 as of April 19) per person in 1992, but may be more in 1993. The conference centre is approximately 25 km from Salzburg and 150 km from Munich. Reservations will need to be made by the end of 1992.