Bonn Resolutions: Status Report

ISO/TC97/SC22/WG5 (Fortran) at its meeting of July 1 to July 4, 1985 in Bonn: West Germany. has considered the following resolutions:

R1.   That WG5 believes that the work of X3J3, which has resulted in the development of S8, is in general representative of the needs of the Fortran community worldwide and encourages X3J3 to complete its work of forming S8 into a draft standard. WG5 further believes that any attempt to make a major downward revision would be retrogressive and detrimental to the interests of Fortran users. (17-0-0-12)

[The abstentions were primarily the X3J3 members in attendance.]

R2.   That WG5 believes that Section 1.1 of S8 should be revised to include the meaning described by the following paragraph: This standard specifies the form and establishes the interpretation of programs expressed in the Fortran language. The purpose of this standard is to promote portability, reliability, maintainability, and efficient execution of Fortran programs for use on a variety of computing systems. This standard is intended as an upwardly compatible extension to the preceding Fortran standard, X3.9-1978. informally referred to as Fortran 77. All standard-conforming. Fortran 77 programs are standard conforming under this standard.   (29-0-0-0)

[At the Oxford X3J3 meeting, the week after the Bonn meeting, the following proposal was passed by a vote of (yes 24 - no 0):

"Replace the second sentence of S8, 1.1 with:

The purpose of this standard is to promote portability, reliability, maintainability, and efficient execution of Fortran programs for use on a variety of computing systems. This standard is intended as an upward compatible extension to the preceding Fortran standard, X3.9-1978 (informally referred to as Fortran 77). It is the intent that all standard-conforming Fortran 77 programs are standard conforming under this standard."]

R3.   That WG5 requests that C. Ampt prepare a proposal for a CONVERSION NONE statement (or similar optional functionality) to be submitted to WG5 and X3J3 for consideration. (17-5-6-1)

[At the Oxford X3J3 meeting, a straw vote was taken on the desirability of CONVERSION NONE - (14 yes.- 11 no - 14 undecided).]

R4.   That WG5 requests that the DIN Fortran Group prepare a proposal for stream I/O to be submitted to WG5 and X3J3 for consideration as a supplementary or incremental standard. (20-0-7-2)

[At the Oxford X3J3 meeting, a straw vote was taken on the desirability of stream I/O - (5 yes - 16 no - 16 undecided).]

R5.   That WG5 believes that the text of the document should be such that the deprecated features can easily be left out. (26-1-2-0) [It is the intention of the Editorial Committee that this be done, and in fact, the Editorial Committee believes it has been done wherever possible.]

R6.   That WG5 supports the inclusion of type declarations with attributes as they appear in Section 5 of S8. (20-0-8-1)

R7.   That X3J3 reconsider the definition of the INITIAL attribute and the INITIALIZE statement so that only one of ~these constructs is necessary, by either:

(1) disallowing the initialization of sub-objects and subsequently deleting INITIALIZE

(2) extending the syntax of the INITIAL attribute

(3) introducing any other solution which prevents the (partial) duplication of functionality.

(17-3-9-0-)
[assigned to L. Schonfelder]

R8.   That WG5 believes that it should be possible to initialize sub-objects. (24-1-4-0)

[assigned to L. Schonfelder]

R9.   That WG5 supports the inclusion of keyword and optional arguments in user defined procedures. (26-0-3-0)

[At the Oxford X3J3 meeting, the following straw vote was taken with respect to keyword arguments:
Remove them entirely   0
Use them only with intrinsic functions   5
Leave them as is   28
Undecided   2

R10.   That WG5 believes an INTENT(IN) argument should be explicitly stated as being constant throughout each invocation of a procedure.   (19-2-8-0)

[K. Hirchert has the responsibility to clarify the semantics of INTENT(IN):]

R11.   That WG5 wishes that, when a processor supports lower case characters, their collating sequence be defined in the standard. (27-0-2-0)

[assigned to Subgroup 14]

R12.   That WG5 believes that the Fortran Character Set must contain only characters from Table 1 of the Basic Code Table of ISO 646 (1973) (7-bit coded character set for information processing interchange). In the case of those whose place has been reserved for national use, an alternative representation not including such characters must be defined in the standard. (20-1-7-1)

[assigned to Subgroup 14]

R13.   That WG5 believes that examples should be permitted in the body of the standard. (19-3-7-0)

[The Editorial Committee agrees.]

R14.   That WG5 supports the statement that features denoted as deprecated in Fortran 8X should be considered for possible deletion during the development of the next Fortran standard. (27-0-2-0)

[This is the current X3J3 definition of deprecated.]

R15.   That WG5 recommends that environmental intrinsics to provide information (e.g. ASCII/EBCDIC. bits per character) about the character data type should be added. (12-0-16-~1)

R16.   That WG5 recommends that a RANDOM intrinsic procedure should be added. (21-4-4-0)

[assigned to Subgroup 18]

R17.   That WG5 supports the current list of array intrinsic functions as being satisfactory. (21-0-5-3)

R18.   That WG5 wishes to express its concern to X3J3 about the possible performance effects of passed on precision and requests that X3J3 clarify the possible implementation mechanisms which can ensure effective efficient implementations. (20-0-8-1)

[assigned to Subgroup 18]

R19.   That WG5 urges X3J3 to try to ensure that the design of Fortran 8X does not prohibit the calling of existing Fortran 77 object code. (24-3-0-2)

[assigned to J. Reid and R. Page]

R20.   That WG5 believes that EXIT should apply to CASE and block IF statements.(12-12-5-0) Failed

R21.   That WG5 believes there should be some processor-independent means in Fortran 8X of determining input record lengths. (16-0-12-1)

[assigned to Subgroup 16]

R22.   That WG5 requests that its convener forward to SC22 a request to create a new work item to deal with a clarification of the file handling facilities which may be assumed by a high level language. (25-0-4-0)

[See attached letter to R. Kearney and J. L. Cote.]

R23.   That WG5 requests that BSI prepare a proposal for requirements on processors for the issuing of error and warning messages related to the use of extensions to the standard and of deprecated features. (12-7-8-1)

R24.   That WG5 believes that it should be possible to use the procedure interface block both to define a procedure and to describe a reference to the procedure. (18-0-11-0)

[assigned to Subgroup 17]

R25.   That WG5 requests that the Canadian Fortran Working Group prepare a proposal for the extended call to the character functions ISCAN, VERIFY.. and INDEX as discussed in Geneva and described in the Canadian submission in the-minutes of that meeting to be submitted to WG5 and X3J3 for consideration. (27-0-2-0)

 R26.   That WG5 believes that Fortran 8X should be consistent as far as possible with ISO 2382/15, Data Processing Vocabulary/15 Programming Languages. (15-2-6-5)

[to be investigated by George Paul]

R27.   That WG5 supports the definition of BIT and CHARACTER as string data, both having length-specification, and all applicable aggregate features such as assumed/supplied lengths and ALLOCATE-ability. (10-12-6-1)   Failed

R28.   That WG5 wishes to allow a scalar of any type to be allocatable. (22-0-7-0)

[assigned to Subgroup 15]

R29.   That WG5 supports the inclusion of indexed -sequential file access as described in document number 28 in the minutes. (11-5-13-0)

R30.   That WG5 wishes to extend the standard so as to be able to make the keyword CALL optional and to be able to pass an argument list in the form of an I/O list. (9-18-1-1) Failed

R31.   That WG5 believes that user defined operators should allow a reasonable set of unambiguous strings formed from the characters + - * / = < >.   (12-6-11-0)

[See attached letter from M. K. Shen.]

 R32.   That WG5 requests that the DIN Fortran Working Group prepare a proposal for the specification of a record length in the OPEN statement for sequential files, either for fixed length records or for the maximum record length for files with variable length records, to be submitted to WG5 and X3J3 for consideration. (11-2-13-2)

R33.   That WG5 would like to express its appreciation to the Convener, Jeanne Martin. the Chairman, Jeanne Adams, the organizer, Karl-Heinz Rotthauser, and to the CM and its staff and those organizations who have provided further support. (29-0-0-0)