

MINUTES OF SPECIAL MEETING OF ISO/IEC JTC1/SC22/WG5

BSI CONFERENCE CENTRE LONDON, U.K.

26 February to 2 March 1990

1. Opening of the Meeting

The meeting was opened on Monday, 26 February 1990 by the convenor Jeanne Martin.

2. Appointments

A total of 31 delegates were present, representing 7 member countries plus 2 observers (European Community and CERN):

Austria (1)
Canada (3)
France (2)
Germany (2)
Japan (1)
United Kingdom (11)
United States (9)
European Community (1)
CERN (1)

As chairman, J. Martin announced the following tasks for the meeting:

- determine WG5's recommendations for further processing of DP 1539;
- Prepare a response document to the International comments;
- review S8.114 and prepare editorial recommendations.

A drafting committee was appointed comprising D. Muxworthy (co-ordinator), G. Schmitt, J. Wagener, W. Walter, G. Warren.

A committee was appointed to prepare the response document, comprising J. Reid (co-ordinator), A. Johnson, L. Schonfelder, L. Meissner, M. Ellis.

An editorial committee was appointed comprising M. Metcalf (co-ordinator), I. Philips, J. Tilbury, A. Tait, M. Hoffert.

B. Buckley was appointed vice-chairman, J. Wilson secretary and M. Hoffert document librarian.

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Subgroups were set up as follows:

GEN	A. Johnson (chairman), I. Philips (vice-chairman) - review sections 1,2,3,7,14 + Appendices
DATA	L. Schonfelder (chairman), J. Tilbury (vice-chairman) - review sections 4,5,6 + Appendix C
CIO	L. Meissner (chairman), A. Tait (vice-chairman) - review sections 8,9,10 + Appendix C
PROC	M. Ellis (chairman), M. Hoffert (vice-chairman) - review sections 11,12,13 + Appendix C

The subgroups were asked to review the ballot comments (documents N462 and N466) and the specific assignments as outlined in document N469 together with various editorial items and to prepare contributions to the response and editorial documents.

3. Report from the Berlin SC22 Meeting

Gerhard Schmitt represented WG5 at the Berlin SC22 meeting. His report is WG5-N445. He emphasized that it was understood at the SC22 meeting that WG5 at this particular meeting in London could authorize the generation of a document to be used for DIS processing in JTCL, based on the results of the SC22 ballot.

4. Report from X3J3

J. Martin announced that Jeanne Adams, who was to give this report, would not be present. She is recovering from flu and surgery and sent regrets for her absence and best wishes for the success of the meeting. Jerry Wagener chaired the most recent X3J3 meeting in Dallas and he reported on the current X3J3 status as part of his presentation of the responses to the Ispra resolutions.

5. ISPRA Resolutions

Jerry Wagener presented the approved X3J3 responses to the Ispra resolutions and some new text that he had prepared after the January X3J3 meeting based on the actions taken there to respond to the remaining items. See WG5-N473. There was some discussion of the X3 action to retain Fortran 77 as a companion standard to Fortran 90 in the US.

6. Report of the SC22 Ballot Results

J. Martin reported the result of the SC22 ballot as follows:

Yes	12	(Austria, Canada, China, Denmark, France, Hungary, Italy, Japan, Netherlands, Sweden, UK, USSR)
No	2	(Germany, USA)
Not Voting	6	(Belgium, Czechoslovakia, Finland, Iran, New Zealand, Switzerland)

The conditions for changing No votes to Yes, as well as the comments accompanying the Yes votes, were assigned to the appropriate subgroup for consideration and

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recommendation. It was noted that particular attention should be given to the following items:

- remove the facility for arbitrary character sets;
- incorporate editorial corrections and improvements;
- possibly add an ES "scientific" edit descriptor;
- possibly remove the constraint on KIND ordering.

J. Martin expressed the hope that only the minimum number of changes should be made to the document. This would then be forwarded to SC22 for processing as a Draft International Standard (DIS 1539). A discussion followed on the above items in general terms and the following straw votes were taken:

- remove the facility for arbitrary character sets
(Yes 28, No 0, Undecided 0)
- add an ES edit descriptor
(Yes 26, No 0, Undecided 2)

7. U.S. Ballot Report

A. Johnson reported on the results of the U.S. ballot and the rationale behind the No vote as being the most expedient way of getting prompt action on the few remaining items.

8. Processing of Comment Responses

The Subgroups met on 4 occasions during the meeting and reported back to the full working group to seek guidance and confirmation of the various editorial changes to the draft document and proposals for the response document. Discussion took place on the major items arising from the subgroup reports and straw votes were taken as recorded below.

Discussion on KIND Ordering (L. Schonfelder)

R. Ragan's proposal (paper N463) to remove the constraint that increasing precision requires increasing KIND numbers was discussed by the DATA subgroup. A straw vote was taken on whether to remain with the status quo (as currently in the draft document) with the addition of Section Notes to advise implementors, or accept a (modified) version of Ragan's proposal.

(Yes 5, No 11, Undecided 10)

A further straw vote was taken on whether to add further Section Notes.

(Yes 23, No 0, Undecided 2)

Formal Vote on S8.114

A Formal Vote to accept document S8.114 as a replacement for DP 1539 was proposed by L. Schonfelder, seconded by M. Ellis and passed unanimously.

A number of straw votes were taken throughout the meeting to assist the subgroups in formulating their proposals. (Minor editorial votes usually passed with no dissenting votes and are not included.)

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- Should blanks be insignificant in BOZ strings?
(Yes 11, No 8, Undecided 9)
- Should blanks be character content for BOZ constants?
(Yes 3, No 17, Undecided 8)
- Should the parameter SIZE= be changes to CHARCOUNT= in non-advancing input?
(Paper N486)
(Yes 16, No 9, Undecided 4)
- Leave MIL STD Bits as it is in the document rather than alter it?
(Yes 24, No 1, Undecided 2)
- Change the Date_and_Time function to be compatible with ISO/DIS 8601?
(Yes 25, No 0, Undecided 0)
- Should guidance be given in the Section Notes on the spacing of values for n in KIND=n ?
(Yes 17, No 0, Undecided 12)
- Should n values in KIND=n be small or large?
(Small 4, Large 6, Undecided 19)
- Should an example be included to clarify Structures?
(Yes 28, No 0, Undecided 0)
- Should all guidance to the implementor concerning n values for KIND ordering be removed leaving only guidance to the user?
(Yes 17, No 6, Undecided 6)
- Should there be a 1:1 mapping of Kind to representation?
(Yes 14, No 5, Undecided 4)
- Should definitions for the terms "datum" and "subobject" be written into the document?
(Yes 24, No 2, Undecided 4)
- Re-write Section Notes on non-advancing I/O to clarify action to be taken by processor with respect to IOSTAT= and ERR=?
(Yes 29, No 0, Undecided 1)
- Modify constraint statement on intrinsic procedure name to remove conflict with S 18 document?
(Yes 13, No 6, Undecided 6)
- Should the Interface Block rules be modified to delete the MODULE PROCEDURE statement (paper N509)?
(Yes 9, No 15, Undecided 5)
- Add Hanzi and Kanji characters as examples of non-default character literal constants?
(Yes 27, No 1, Undecided 0)

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- Remove definition of END statement as an action statement?

(Yes 2, No 13, Undecided 13)

Discussion on the "Changes" Document

J. Wagener discussed how to synchronise WG5 and X3J3 activities with respect to changes to S8.114. The Changes Document will list the changes to S8.114 as determined by WG5 in London in order to complete the DIS. It will have three sections:

1. Changes based on member body comments.
2. Changes based on X3J3 actions, subject to X3J3 modifications at its next meeting.
3. Items deferred to X3J3 to resolve.

No further changes may be made.

ELLIS: I can't accept that X3J3 is allowed to do what it wants with any items.

MEEK: The 3 categories should be: 1. required changes subject to X3J3 decisions, 2. desired changes, 3. items delegated to X3J3.

SCHONFELDER: I support Meek. We must endeavour to put as much as possible into category 1.

BUCKLEY: We must make sure any item not on the list cannot be touched.

ELLIS: We should authorise me convenor, possibly plus someone else, to approve changes made by X3J3 on behalf of WG5.

SCHMITT: The tone of the document should be that we have finished the work and only small modifications can be done at this stage. This meeting has the power and obligation to make the decisions.

The chairman ruled that when voting on the Changes Document, individual votes will not be taken. If there are more than 3 "No" votes on any item, roll call votes by country will be taken. Any item will be included in the document if not more than 2 countries vote against it.

On this basis, the papers labelled N507, N508, N510, N511, N512, N513, N514, N515, N516, N517, N518, N520 and N522 passed. Paper N519 (re-write section 14.6.2 to highlight association status) was referred to X3J3 for further processing. M. Metcalf was given the task of completing the Changes Document based on the collected edits from the subgroups and sending it to X3J3 by 10th March 1990.

From the list of changes subject to ratification by X3J3, votes by country were taken on the inclusion of two items:

- M. Metcalf proposed removing the item in paper N486 - change the SIZE= parameter in non-advancing I/O to CHARCOUNT=
Vote to include item (Yes 0, No 2, Undecided 4)
Therefore this item was removed from the list.

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- J. Wagener proposed removing the item in paper N506 - need for 1:1 mapping of Kind representation.
Vote to include item (Yes 3, No 3, Undecided 0)
There being more than 2 countries objecting, the item was removed from the list under ISO rules.

B. Buckley proposed that the Changes Document as it then stood be accepted; seconded by M. Ellis; carried unanimously.

Discussion on the Response Document

J. Reid introduced the draft document (N495b) and called for straw votes on the following:

- should the pointer reference change be considered as editorial or an amendment?
(Editorial 20, Amendment 1, Undecided 5)
- should the requirement that a processor detect items not in Chapter 13 (Intrinsic Procedures) be considered as editorial or an amendment?
(Editorial 21, Amendment 1, Undecided 5)

A motion to move document N495b was proposed by J. Reid, seconded by T. Lahey and carried unanimously.

10. Adoption of Special Resolutions

L1. Processing of the second DP1539

That WG5

- recommends that the draft proposed international Fortran standard be ANSI X3J3 document S8.114 as amended by ISO/IEC JTC1/SC22/WG5 N502,
- notes that this recommendation will resolve both negative votes on the draft standard,
- notes that the changes from the second DP1539 are primarily those requested in WG5 Ispra resolutions 14 and III (July 1989),
- notes that the detailed responses to member body ballots are contained in ISO/IEC JTC1/SC22/WG5 N495,
- requests X3J3, as editor, to review and complete items contained in WG5 N502 at its meeting 115 (April 30 to May 4, 1990),
- directs its convenor to prepare the final document after X3J3 meeting 115 and to forward it to SC22 for DIS processing by May 31, 1990. In the event that X3J3 makes changes beyond N502 the convenor may conduct a 30 day WG5 letter ballot on accepting the document with these changes.

Individual votes: 27 yes - 2 no - 0 abstain

Country votes: 7-0-0

L2. Name of the Language

That WG5 resolves that the formal name of the language be "Fortran", rather than "FORTRAN", and agrees that the informal name be "Fortran 90".

Individual votes: 28-0-1

Country votes: 7-0-0

L3. One Worldwide Standard

That WG5, having reviewed events subsequent to the WG5 Ispra meeting (July 1989), reaffirms its resolution 15 that the draft proposed Fortran standard become the sole international Fortran standard and that there be no subset.

Individual votes: 28-0-1

Country votes: 7-0-0

L4. Withdrawal of FORTRAN 77

That WG5 recommends to SC22 that SC22 requests each member body to withdraw its FORTRAN 77 standard at the earliest opportunity.

Individual votes: 26-2-1

Country votes: 6-0-1

L5. Response to Berlin Resolution 134

That WG5, in order to respond to SC22 Berlin resolution 134 on collaboration between WG5 and X3J3 to reconcile differing positions on the retention of FORTRAN 77, requests its convenor to draft a letter to SC22 describing the sequence of events since the Berlin meeting, to ask that X3J3 review the letter at its meeting 115 (April 30 to May 4, 1990), and to submit it to WG5 for review at its Rotterdam meeting (August 13-17, 1990) prior to forwarding it to SC22 for the SC22 AG meeting on October 10-12, 1990.

Individual votes: 27-1-1

Country votes: 7-0-0

L6. Future Evolution of the Language

That WG5 believes that the concept of language evolution is important and that this issue should be on the agenda for the August 1990 WG5 meeting; further, it urges members to provide discussion material for that meeting.

Individual votes: 29-0-0

Country votes: 7-0-0

L7. Appreciation of X3J3

That WG5 thanks most warmly the chair, office-bearers and members of X3J3 for their work in developing DP1539, especially in the rapid production of document S8.114, and expresses its appreciation for bringing this project towards a successful conclusion.

Passed by unanimous consent

L8. Appreciation for Drafting a Varying String Module

That WG5 expresses its appreciation to Lawrie Schonfelder for preparing a draft Fortran 90 module for the new work item JTC1.22.02.02 allocated to WG5 to develop a module that provides varying character string functionality.

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Passed by unanimous consent

L9. Appreciation for Publication of Second DP 1539

That WG5 expresses its appreciation to Loren Meissner for obtaining permission to publish the second DP1539 in Fortran Forum.

Passed by unanimous consent

L10. Votes of Thanks

That WG5 wishes to express its appreciation to the Convenor (Jeanne Martin), the vice-chair (Ben Buckley), the secretary (John Wilson), the hosts (the BSI Fortran Panel) and to BSI and its staff who have contributed to the success of the meeting, and to King's College London Computing Centre for hosting the social event

Passed by unanimous consent

11. Closing Business

The Minutes of the Ispra meeting were tabled as paper N475. They will be processed at the Rotterdam meeting. F. Milinazzo was thanked by the chairman for his work in producing them. Some minor corrections were noted and these will be passed on to F. Milinazzo.

B. Meek announced that plans are in hand within the UK to collect material for a book on the subject of User Needs for Information Technology Standardisation. The idea for the book arose in USFIT (User Standards Forum for LT.) formed on the initiative of NCUF (National Computer Users Forum) and established under the Aegis of ITUSA (I.T. Users Standards Association). A call for papers, either existing material or new contributions, has been issued and participants should contact B. Meek as soon as possible.

12. Future Meetings

The next meeting will take place in Rotterdam, 13 - 17 August 1990: further details will be available shortly. Offers for the 1991 meeting have been received from Canada, Sweden and India.

13. Adjournment

The chairman thanked the BSI Fortran Panel for organising the meeting at short notice. The meeting was adjourned at 15:00 on Friday 2nd March 1990.

JDW
April 2, 1990

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London WG5 Meeting Attendees

Austria

Gerhard Schmitt

Canada

Albert Buckley
Fausto Milinazzo
Graham Warren

European Community

Michael Metcalf
Aurelio Pollicini

France

Francois Ficheux
Christian Mas

Germany

Karl-Heinz Rotthaeuser
Wolfgang Walter

Japan

Hideo Wada

United Kingdom

Malcolm Cohen
Miles Ellis
Fred Hopper
Brian Meek
Steve Morgan
David Muxworthy
John Reid
Michael Roth
Lawrie Schonfelder
Julian Tilbury
John Wilson

United States

Andrew Johnson
Richard Kelble
Tom Lahey
Maureen Hoffert
Jeanne Martin
Loren Meissner
Ivor Philips
Andrew Tait
Jerrold Wagener