

**Disposition of Comments  
arising from the JTC1 ballot on  
DIS 1539-1**

The ballot on DIS 1539-1 resulted in 23 approval votes from P members and 1 disapproval vote, together with 3 approval votes from O members; 3 P members did not vote and 1 O member abstained. The draft was therefore approved.

The disapproval vote was from France and, in addition, two countries (Japan and the UK) submitted comments with their approval votes. The actions taken by WG5 in response to these comments are detailed below. In particular, it should be noted that the revised French title was supplied by the French member body, whose vote of disapproval is therefore changed to one of approval.

**IMPORTANT NOTE: The changes to the English and French titles detailed in the response to AFNOR ITEM 1 and Japan Item JP1 are directed at ITTF, as these errors occurred on the pages supplied by them.**

**A. AFNOR Ballot Comments on ISO/IEC DIS 1539-1 - Fortran, Part 1**

SOURCE: AFNOR

AFNOR votes NO to ISO/IEC DIS 1539-1

AFNOR will reverse its vote if its comment on the French title is adopted.

**ITEM 1**

Qualifier: Major editorial

Reference: Document title

Rationale:

French title inaccuracy "Specification" should be without an "s" - "formel(les)" is the french equivalent of "formal".

Proposed Change:

Change the French title for the following:

Technologies de l'information - Langages de programmation - FORTRAN-  
Partie 1 : spécification du langage.

The proposed new title is chosen after the first line of page xiii, introduction, Standard programming . . .

We also suggest that the English title be: Language Specification.

WG5 Response:

Agreed in principle. However, the English title was also wrong. It should be

Information technology - Programming languages - Fortran -  
Part 1: Base Language  
(Revision of ISO/IEC 1539:1991)

The French title should be

Technologies de l'information - Langages de programmation - Fortran -  
Partie 1: Langage de base

In this connection, the following three changes have been made to the text of the standard to incorporate the part name:

*Page xiii: Foreword, paragraph 1*

Replace first two sentences by the following:

"ISO/IEC 1539 is a multi-part International Standard defining the Fortran programming language. This document is Part 1 - Base Language, ISO/IEC 1539:1997."

*Page xiii: Introduction, paragraph 1*

Replace the first sentence by the following:

"This part of the international standard comprises the specification of the base Fortran language."

*Page 1: Section 1.1*

Replace the second sentence by the following:

"This publication, ISO/IEC 1539-1, which is the first part, specifies the form and establishes the interpretation of programs expressed in the base Fortran language."

**ITEM 2**

Qualifier: Editorial

Reference: P.178 - Note 10.30

**Rationale:**

Should precise the pre-last paragraph of p.177 (where the proposed sentence could also be placed as an alternative)

**Proposed Change:**

Add the following precision as first sentence:

For integer output, w may be constant (type dependent) or variable (value-dependent).

**WG5 Response:**

No. If this change were made, similar changes would also need to be made elsewhere in the Standard. The existing note is clear, and the wording has remained largely unchanged since FORTRAN 77.

**ITEM 3**

Qualifier: Editorial

Reference: P.212 - two first constraints

**Rationale:**

The 2 first constraints should be re-written in order to facilitate distinction between what is general and what is particular of the functions.

**Proposed Change:**

Re-write the 2 first constraints as follows:

The specification part of a pure subprogram shall specify the intents of all dummy arguments except...

In the case of a pure subprogram of type function, all dummy arguments shall have INTENT (IN), except...

**WG5 Response:**

No. The present wording is clear and unambiguous. The proposed change is an alternative which might have marginal advantages, but the wording proposed creates subtle technical changes and would require further technical work on the DIS.

**ITEM 4**

Qualifier: Editorial

Reference: P.213 - Note 12.33 second paragraph

**Rationale:**

It is not the place in an International Standard to state that checking is better than flexibility, nor that adherence to the letter of the text rather than to its spirit is an enhancement. This statement seems to support the principle of gratuitous constraints.

**Proposed Change:**

Remove the last sentence of the paragraph.

**WG5 Response:**

Agreed. This change has been made.

**ITEM 5**

Qualifier: Editorial

Reference: P.215 - last paragraph

**Proposed Change:**

Remove the paragraph as it is. Provide a note (12.38) stating something like:

The full specifications of intrinsic subroutines are known by the compiler. They may thus have the elemental attribute and be implemented accordingly although they do not verify the given constraints. For instance, in a reference to the elemental intrinsic subroutine MVBITS, the actual arguments to the TO and FROM dummy arguments may be the same variable. However, any other elemental subroutine reference must satisfy the restrictions on subroutine referencing of 12.4.1.6.

This note could also be moved to 12.4.1.6, to which it pertains more.

**WG5 Response:**

No. The paragraph is essential normative text. Its removal would be a substantial technical change, because 12.4.1.6 would then preclude a call being made to MVBITS in this way.

**ITEM 6**

Qualifier: Editorial

Reference: P.222 - Note 13.5

**Rationale:**

It is not clear what is meant by "remaining" in this context: "non-elemental" or "different from MVBITS" or "to be described further". We believe that "different from

MVBITS" should be preferred. In the present text, it is easier to understand mistakenly (?) one of the two other meanings.

Proposed Change:  
Clarify note 13.5

WG5 Response:

We agree that some clarification may be desirable. Instead of the proposed text, however, we have replaced "remaining" by "non-elemental".

**B. JAPAN'S COMMENTS ON ISO/IEC DIS 1539-1**

The National Body of Japan approves ISO/IEC DIS 1539-1 with the following comments.

**Item No: JP1**

Page: Cover Page (first page)

Qualifier: Editorial

Proposal: In the title, replace "FORTRAN" with "Fortran".

WG5 Response:

Agreed

**Item No: JP2**

Page: Title Page (second page)

Qualifier: Editorial

Proposal: In the title, add the part name ", Form Specification" after "Part 1".

WG5 Response:

No. Instead the part name should be "Base Language", with a corresponding change to the French part name.

**Item No: JP3**

Page: 277

Qualifier: Editorial

Proposal: In the fifth line of the subclause "14.1.2.3", replace "for each argument or operand" with "for each operand".

WG5 Response:

Agreed.

**Item No: JP4**

Page: All pages

Qualifier: Editorial

Proposal: In both the header and footer lines for each page, delete "COMMITTEE DRAFT".

WG5 Response:

Agreed. This would have been done in any case.

**C. UK COMMENTS ON ISO/IEC DIS 1539-1 (REV) : PROGRAMMING LANGUAGES : FORTRAN**

The UK votes approval of the DIS ballot, however, if any changes are made by SC22/WG5 to the Proposed Technical Corrigendum 3 to ISO/IEC 1539:1991 as a result of comments made in the recent SC22 ballot, corresponding changes should also be made to the revision of ISO/IEC 1539:1991.

WG5 Response:

Agreed. The only change made was that referred to in the Japanese comment JP4.