J3 / 03-103r1

INCITS / J3 ANSI Fortran Standards Committee   Craig T. Dedo
Replace IOSTAT_END and IOSTAT_EOR with Functions   March 31, 2003
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1   Replace IOSTAT_END and IOSTAT_EOR with Functions

2   To: J3
3   From: Craig Dedo
4   Subject: Replace IOSTAT_END and IOSTAT_EOR with Functions
5   Date: March 31, 2003

6   Edits refer to 02−007r3.
7   [3:20+] Add the list item:
8   (3) This standard allows more than one value to indicate an end-of-file or end-of-record condition.

9   [201:21−22]   Change "the value ... argument" to "a negative integer value to the IOSTAT
10   argument that would cause the result value of the IS_IOSTAT END intrinsic
11   function (13.7.54a) to be true".

12   [201:23]   Change "the value ... iostat" to "a negative integer value to the IOSTAT argument that
13   would cause the result value of the IS_IOSTAT EOR intrinsic function (13.7.54b) to be
14   true".

15   [216:12-15]   Replace the existing text in list items (3) and (4) with the following:
16   (3) With a processor−dependent negative integer value that would cause the result value of the
17   IS_IOSTAT END intrinsic function (13.7.54a) to be true if an end−of−file condition occurs
18   and no error condition occurs, or
19   (4) With a processor−dependent negative integer value that would cause the result value of the
20   IS_IOSTAT EOR intrinsic function (13.7.54b) to be true if an end−of−record condition occurs
21   and no error condition or end−of−file condition occurs. This value shall be different from any
22   value that causes the result value of the IOSTAT END intrinsic function (13.7.54b) to be
23   true.

24   [294:7+]   Add the following entries to the table in section 13.5.17:
25   IS_IOSTAT_END (I)   Test for end-of-file status
26   IS_IOSTAT_EOR (I)   Test for end-of-record status

27   [319:27+]   Add the following:
28   **13.7.54a   IS_IOSTAT END (I)**
29   **Description.** Determine whether the argument value indicates an end−of−file condition.

30   **Class.** Elemental function

31   **Argument.** I shall be of type integer.

32   **Result Characteristics.** Default logical.

33   **Result Value.** The result has the value true if and only if I is a value that could be assigned to the
34   *scalar−int−variable* in an IOSTAT= specifier to indicate an end−of−file condition (9.10.2).

35   **13.7.54b   IS_IOSTAT EOR (I)**
36   **Description.** Determine whether the argument value indicates an end−of−record condition.

37   **Class.** Elemental function

38   **Argument.** I shall be of type integer.

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1   **Result Characteristics.** Default logical.

2   **Result Value.** The result has the value true if and only if I is a value that could be assigned to the
3   *scalar−int−variable* in an IOSTAT= specifier to indicate an end−of−record condition (9.10.3).

4   [354:2-4]   Replace the paragraph with, "The default integer scalar constant IOSTAT_END is a
5   processor−dependent negative integer value that would cause the result value of the
6   IS_IOSTAT_END intrinsic function (13.7.54a) to be true.".

7   [354:6-9]   Replace the paragraph with, "The default integer scalar constant IOSTAT_EOR is a
8   processor−dependent negative integer value that would cause the result value of the
9   IS_IOSTAT_EOR intrinsic function (13.7.54b) to be true. This value shall be different
10   from any value that causes the result value of the IS_IOSTAT_END intrinsic function
11   (13.7.54a) to be true.".

12 [354:9+]   Add the following note.
13 **Note 13.18a**
14 The processor may provide more than one value that causes IS_IOSTAT_END or IS_IOSTAT_EOR
15 to be true.

16 [451:32]   Change "the value . . . module" to "a value that would cause the result value of the
17   IS_IOSTAT_EOR intrinsic function (13.7.54b) to be true".]

18 **References**
19 02-007r2, Fortran 2000 Draft

20 [End of J3 / 03-103r1]