NAG Fortran Library Routine Document

X04ABF

Note: before using this routine, please read the Users' Note for your implementation to check the interpretation of ***bold italicised*** terms and other implementation-dependent details.

1 Purpose

X04ABF returns the value of the current advisory message unit number, or sets the current advisory message unit number to a new value.

2 Specification

```
SUBROUTINE X04ABF(IFLAG, NADV)
INTEGER           IFLAG, NADV
```

3 Description

This routine enables those library routines which output advisory messages to determine the number of the output unit to which the advisory messages are to be sent; in this case X04ABF is called with IFLAG $= 0$. X04ABF may also be called with IFLAG $= 1$ to set the unit number to a specified value. Otherwise a default value (stated in the User's Note for your implementation) is returned.

Records written to this output unit by other library routines are at most 120 characters long (including a line-printer carriage control character), unless those library routines allow users to specify longer records.

Note that if the unit number is set < 0, no messages will be output.

4 References

None.

5 Parameters

1: IFLAG – INTEGER *Input*

On entry: the action to be taken (see NADV).

Constraint: IFLAG = 0 or 1.

2: NADV – INTEGER *Input/Output*

On entry:

if IFLAG $= 0$, NADV need not be set;

if IFLAG $= 1$, NADV must specify the new advisory message unit number.

On exit:

if IFLAG $= 0$, NADV is set to the current advisory message unit number;

if IFLAG $= 1$, NADV is unchanged.

Note that Fortran unit numbers must be positive or zero. If NADV is set < 0, output of advisory messages is totally suppressed.

6 Error Indicators and Warnings

None.

7 Accuracy

Not applicable.

8 Further Comments

The time taken by this routine is negligible.

9 Example

In this example X04ABF is called by the user's main program to make the advisory message from the routine DUMMY appear on the same unit as the rest of the output (unit 6). Normally a NAG Fortran Library routine with an IFAIL parameter (see Chapter P01) would take the place of DUMMY.

9.1 Program Text

Note: the listing of the example program presented below uses ***bold italicised*** terms to denote precision-dependent details. Please read the Users' Note for your implementation to check the interpretation of these terms. As explained in the Essential Introduction to this manual, the results produced may not be identical for all implementations.

```
*     X04ABF Example Program Text
*     Mark 14 Revised.  NAG Copyright 1989.
*     .. Parameters ..
      INTEGER          NOUT
      PARAMETER        (NOUT=6)
*     .. External Subroutines ..
      EXTERNAL         DUMMY, X04ABF
*     .. Executable Statements ..
      WRITE (NOUT,*) 'X04ABF Example Program Results'
*
      CALL X04ABF(1,NOUT)
      CALL DUMMY
*
      STOP
      END
*
      SUBROUTINE DUMMY
*     .. Local Scalars ..
      INTEGER          NADV
*     .. External Subroutines ..
      EXTERNAL         X04ABF
*     .. Executable Statements ..
      CALL X04ABF(0,NADV)
      WRITE (NADV,*)
      WRITE (NADV,*) 'This is a dummy advisory message'
      RETURN
      END
```

9.2 Program Data

None.

9.3 Program Results

```
 X04ABF Example Program Results

 This is a dummy advisory message
```