NAG Library Routine Document

H02CGF

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

To supply individual optional parameters to H02CEF.

2   Specification

```
SUBROUTINE H02CGF (STR)
CHARACTER(*) STR
```

3   Description

H02CGF may be used to supply values for optional parameters to H02CEF. It is only necessary to call H02CGF for those arguments whose values are to be different from their default values. One call to H02CGF sets one argument value.

Each optional parameter is defined by a single character string of up to 72 characters, consisting of one or more items. The items associated with a given option must be separated by spaces, or equal signs [=]. Alphabetic characters may be upper or lower case. The string

```
    Print level = 1
```

is an example of a string used to set an optional parameter. For each option the string contains one or more of the following items:

– a mandatory keyword;

– a phrase that qualifies the keyword;

– a number that specifies an integer or real value. Such numbers may be up to 16 contiguous characters in Fortran 77's I, F, E or D formats, terminated by a space if this is not the last item on the line.

Blank strings and comments are ignored. A comment begins with an asterisk (*) and all subsequent characters in the string are regarded as part of the comment.

Normally, each user-specified option is printed as it is defined, on the current advisory message unit (see X04ABF), but this printing may be suppressed using the keyword **Nolist**. Thus the statement

```
    CALL H02CGF ('Nolist')
```

suppresses printing of this and subsequent options. Printing will automatically be turned on again after a call to H02CEF, and may be turned on again at any time using the keyword **List**.

Optional parameter settings are preserved following a call to H02CEF, and so the keyword **Defaults** is provided to allow you to reset all the optional parameters to their default values by the statement

```
    CALL H02CGF ('Defaults')
```

prior to a subsequent call to H02CEF.

A complete list of optional parameters, their abbreviations, synonyms and default values is given in Section 12 in H02CEF.

4   References

None.

5 Arguments

1: STR – CHARACTER(*) *Input*

On entry: a single valid option string (as described in Section 3 above and in Section 12 in H02CEF).

6 Error Indicators and Warnings

If a line is not recognized as a valid option, then a warning message is output on the current advisory message unit (see X04ABF).

7 Accuracy

Not applicable.

8 Parallelism and Performance

H02CGF is not thread safe and should not be called from a multithreaded user program. Please see Section 3.12.1 in How to Use the NAG Library and its Documentation for more information on thread safety.

H02CGF is not threaded in any implementation.

9 Further Comments

H02CFF may also be used to supply optional parameters to H02CEF. Note that if E04NKF/E04NKA is used in the same program as H02CEF, then in general H02CFF will also affect the options used by E04NKF/E04NKA.

10 Example

See Section 10 in H02CEF.