

## Advice on Replacement Calls for Withdrawn/Superseded Procedures

The following list illustrates how a call to procedure, which has been withdrawn or superseded, may be replaced by a call to a new procedure. The list indicates the minimum change necessary, but many of the replacement procedures have additional flexibility and users may wish to take advantage of new features. It is strongly recommended that users consult the procedure documents.

### Module 9.4: nag\_con\_nlin\_lsq

#### Procedure: nag\_con\_nlin\_lsq\_sol

*Scheduled for withdrawal at Release 6*

#### Replacement Procedure: nag\_con\_nlin\_lsq\_sol\_1

##### Old:

```

SUBROUTINE obj_fun(first_call,x,finish,f,f_jac)
...
END SUBROUTINE obj_fun
...
USE nag_con_nlin_lsq, ONLY: nag_con_nlin_lsq_sol, ...
...
CALL nag_con_nlin_lsq_sol (obj_fun,...)

```

##### New:

```

SUBROUTINE obj_fun(first_call,x,finish,f,f_jac,needf)
...
  INTEGER, OPTIONAL, INTENT (IN) :: needf(:)
...
END SUBROUTINE obj_fun
...
USE nag_con_nlin_lsq, ONLY: nag_con_nlin_lsq_sol_1, ...
...
CALL nag_con_nlin_lsq_sol_1 (obj_fun,...)

```

Current usage of `nag_con_nlin_lsq_sol` can be replaced by using `nag_con_nlin_lsq_sol_1` and adding the optional input argument `needf` in the specification of the user-supplied procedure `obj_fun` as shown above. No further changes are needed.