To: WG5/X3J3
From: WG5 Convenor
Subject: Content of Fortran 2000
Date: 13 February 1997

1. Required Content of Fortran 2000

Following extensive work in subgroups, and votes in full Plenary (both individual and, where appropriate, by country) WG5 has determined that Fortran 2000 shall contain the following items:

- Allocatable components (see N1230)
- Asynchronous I/O (see N1189 item #52)
- Constructors/destructors (see N1189 item #89)
- Derived type I/O (see N1189 item #17)
- Floating point exception handling (see N1231)
- Inheritance (see N1189 item #88 and N1272)
- Internationalization (see N1268 and N1273)
- Interoperability with C (see N1237)
- Interval arithmetic (see N1189 item #62)
- Parameterized derived types (see N1189 item #14)
- Polymorphism (see N1189 item #88 and N1272)
- Procedure pointers (see N1189 item #43)

Note that N1189 is the WG5 Repository of Requirements (Standing Document 5).

It is the intention of WG5 that the revised standard shall be published no later than November 2002.

2. Possible Additional Minor Technical Enhancements

WG5 has also authorised X3J3 to work on the following minor technical enhancements for incorporation in Fortran 2000, subject to the proviso that any work carried out on them does not adversely affect any of the work required to address the major items listed above:

- Access to status error messages (see N1268)
- Allow PUBLIC entities of PRIVATE type (see N1189 item #75)
- Command line arguments (see N1189 item #20)
- Derived type encapsulation (see X3J3/96-133)
- Enhanced complex constants (see X3J3/96-132r1)
- Extend max/min intrinsics to character (see N1189 item #64, X3J3/96-131r1)
- Extended initialization expressions (see N1189 item #66, X3J3/96-165)
- Generic rate_count in system_clock (see N1189 item #61, X3J3/96-116r1)
- IEEE I/O rounding inquiry intrinsics (see N1271)
Increased statement length (see N1189 item #50, X3J3/96-138)
Intent for pointer arguments (see N1189 item #44, X3J3/96-098r1)
Mixed case syntax elements (see N1189 item #67, X3J3/96-055r1)
Named scratch files (see N1189 item #73, X3J3/96-169r1)
Passing specific/generic names (see N1189 item #59, X3J3/96-144)
PUBLIC and PRIVATE derived type components (see N1267)
Renaming defined operators (see N1189 item #41)
Specifying pointer lower bounds (see N1189 item #02, X3J3/96-154)
Stream I/O (see N1189 item #63)
VOLATILE attribute (see N1269)

Note that references to X3J3 documents indicate that X3J3 has already begun work on these items, following WG5’s earlier authorisation to work on various (unspecified) minor technical enhancements.

WG5 will review this list at every meeting in the light of information provided by X3J3 regarding the progress on the major items for Fortran 2000, and may reduce it if it feels that this will be necessary in order to meet the publication schedule.