Subject: Illformed tables in clause 13
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Date: 2007/05/07

1 Introduction

Clause 13 contains what are commonly called the "intrinsic procedure summary tables". The trouble is, that they are not in the form of tables. They are not in the form of anything else either: they just do not make sense as normative text (which is what they appear to be formatted as).

Since these are redundant and duplicative, there is also the usual problem as noted by Dick Weaver.

2 Action

The editor is going to turn these into proper tables. Input is solicited as to details.

3 Form of the tables

There are several forms these tables could take, depending on what information one wishes to present.

They could be combined into a simple overall table. That loses the current "numeric" vs. "mathematical" (huh?) etc. discrimination, though that appears not to be used almost anywhere. (Even the "collective subroutine" classification is already captured in the "Class" field.)

Overall, it is less than obvious that multiple tables are better than one big table in alphabetic order.

4 Dealing with duplicitous redundancy

Many table entries use the same "Description" text as the main specification. Unfortunately, many also do not – maybe for reasons of unnecessary tersity, mostly just because these were edited at different times. In the interests of consistency, we should change all these to use the same text as the "Description".

In the few examples the editor examined in detail, this could easily be achieved by copying the main Description text to the table, and this would result in no loss of clarity.

5 Table placement

Since the tables do not contain any normative information that does not appear in the main specification of the intrinsic functions, they could be classed as "informative". To that end, they could form an additional annex.

If we (a) combine the tables into a single table, and (b) use the same descriptive text as in the Descriptions, this could be achieved automatically by a LaTeX macro. (Doing the same thing with keeping the multiple tables is possible, but more work – I am not sure at this point how much more, but maybe only an extra hour or so.)

Doing this would have the additional bonus of forever removing the possibility of forgetting to update the table when a function is modified or added.

6 Table format examples

These examples serve to illustrate some possibilities, whether we keep the multi-table split or do a unified one. The particular intrinsic functions chosen show what happens with long argument lists and long descriptions, i.e. the "bad" cases.

Table 1: **Standard intrinsic functions**

Function	Description
ABS (A)	Absolute value.
ACHAR (I [, KIND])	Character in a specified position of the ASCII collating sequence. It is the inverse of the IACHAR function.

Standard intrinsic functions (cont.)

Function	Description
AIMAG (Z)	Imaginary part of a complex number.
BESSEL_JN (N, X) or BESSEL_JN (N1, N2, X)	Bessel function of the first kind of order N.
GET_ENVIRONMENT_VARIABLE (NAME [, VALUE, LENGTH, STATUS, TRIM_NAME])	Get the value of an environment variable.

Table 2: **Standard intrinsic functions 2**

Function	Arguments	Description
ABS	(A)	Absolute value.
ACHAR	(I [, KIND])	Character in a specified position of the ASCII collating sequence. It is the inverse of the IACHAR function.
AIMAG	(Z)	Imaginary part of a complex number.
BESSEL_JN	(N, X) or (N1, N2, X)	Bessel function of the first kind of order N.
GET_ENVIRON-MENT_VARIABLE	(NAME [, VALUE, LENGTH, STATUS, TRIM_NAME])	Get the value of an environment variable.

Table 3: **Standard intrinsic functions 3**

Function	Arguments	Class	Description
ABS	(A)	Elemental	Absolute value.
ACHAR	(I [, KIND])	Elemental	Character in a specified position of the ASCII collating sequence. It is the inverse of the IACHAR function.
AIMAG	(Z)	Elemental	Imaginary part of a complex number.
BESSEL_JN	(N, X)	Elemental	Bessel function of the first kind of order N.
BESSEL_JN	(N1, N2, X)	Transformational	Bessel function of the first kind of order N.
GET_ENVIRON-MENT_VARIABLE	(NAME [, VALUE, LENGTH, STATUS, TRIM_NAME])	Subroutine	Get the value of an environment variable.

7 Notes and Decisions

Whether the table is fully boxed or not does not alter the available space noticeably. However I do recommend the use of the horizontal lines for providing the headings when the tables are continued across pages.

Format 1, 2 or 3?
Boxed or unboxed?
Multiple tables or unified?
In c13 or a new Annex?

Editor's tentative recommendation: 1, boxed, unified, new annex.
(Seems to provide reasonable looks and good future-proofing with fairly minimal effort.)