WG 14 N1727

WG14 CFP meeting minutes for the meeting of 2013/07/11

Attendees: David, Fred, Ian, Jim, Marius

Note taker: Jim

Agenda:

No new items requested

Notes from 2013-06-13 meeting:

Fred: Next meeting should be July 11 instead of June 11

Old action items:

Al: Mike: Check what 754 says and provide a recommendation for INF, (S)NAN for quantum - done

Al: Jim: Add the quantum function after renaming quantexp to iquantexp. Jim to try wording this suggestion – done (Ilquantexp instead of iquantexp)

Al: Jim: Redo the document (applies to part 2 and 3) with the unsigned char arrays for encodings, implementation defined bit/byte mappings, each array element will have 8 bits of the encoding regardless of the array element size. – done for part 2, in progress for part 3

Al: All: once the draft update to n1722 is sent, this is the review section assignments: - mostly done (except Introduction)

New action items:

Al: Jim do send email proposal about WANT macros

Al: All to review proposal in July 10 email about Part 2 ISSUE 4, by end of tomorrow July 12

Next meeting: August 8th, 2013, 12:00 EST, 9:00 PDT

Part 1 status

Ballot ends Aug 16.

Jim is adding changes (to a private draft), mostly editorial, a few borderline technical Jim traveling Aug 16-29 will delay consideration of ballot comments

Part 2 review

Comments from assigned reviews incorporated in draft (posted for reviewers)

Draft includes approach of accumulated changes

most notably in tgmath subclause

will be bigger deal in Part 3

Issues from July 9 email

Issue 1: Should the WANT macro appear in changes to C11? If so,

do we need to change the WANT macro name to not refer to TS?

Part 1 might need to change for consistency.

Option 1: remove #define WANT from Synopses of library functions can be reconsidered if and when TS is integrated into the Standard

Options 2: change the name to say __STDC_WANT_IEC_60559_LIB_EXT2 and include in changes to C11

also need more changes to C11 to identify all that depends on the macro

Both options affect Part 1

Al: Jim to send email proposal about WANT macros

Issue 2: Should we change strfrom functions to return type size_t,

with SIZE_MAX as error return? (Joseph Meyers recommendation)

This affects Part 1 too.

Ideally, WG 14 would decide this

We could add a note about the deficiency in current spec

Issue 3: Do we need to specify enhancements for related WG 14 maintained documents, most notably Special Math Functions?

Don't unless WG 14 asks for it

Issue 4: Subclauses 5.2.4.2.2 in C11 and 5.2.4.2.2a specified in Part 2 don't fit together well. Some of 5.2.4.2.2 refers to a floating types in general, but some is applicable only to standard floating types. Needs rework.

Proposal in July 10 email

AI: All to review email by end of tomorrow

Issue 5: Is this a desirable fix/clarification for 5.2.4.2.2a#2:

"Except for assignment and cast (which remove all extra range and precision), the values of the operands and results of decimal floating expressions, and the values of decimal floating constants, may be evaluated to a format whose range and precision is greater than required by the type (6.3.1.8)."

Jim proposed this update:

"Except for assignment and cast (which remove all extra range and precision), the values of the operands and results of decimal floating expressions subject to the usual arithmetic conversions,

and the values of floating constants of decimal floating types,

may be evaluated to a format

whose range and precision is greater than required by the type (6.3.1.8)."

Decimal floating constants aren't necessarily of decimal floating type.

Issue 6: Should IEEE references be ANSI/IEEE?

The IEEE 754-2008 document doesn't use ANSI/IEEE

Leave this to ISO if a change is needed.

Issue 7: Draft is still not consistent with C11 on use of floating vs floating-point.

Editor will review for consistency with C11

Ready for WG 14 balllot?

Would need to have draft ready this month

Better not to push it before next WG 14 meeting

Jim will consult with WG 14 chair

Part 3:

Update in progress but not ready yet

Jim planning to post draft for review before Aug meeting

Will organize assigned review, assuming draft seems ready