WG14 N2002
Meeting notes

C Floating Point Study Group Teleconference
2016-02-16
9 AM PST / 12 PM EST

Attendees: Rajan, Jim, Mike, Ian, Marius, David

New agenda items:
  None.

Last meeting action items:
  Ian: Talk to Lawrence Crowl regarding proposing this IEEE-754: 2008 binding to C++ as well. -
      In process.
    No response from Lawrence to an email sent by Ian.
    Second email sent out.
  Ian: Update and check the items listed and flagged under Feature_List_Part_1. - Not done.
  All: Focused Review of part 5 once the updated draft comes out. - Not done.
    Missing one review.
  Jim: Part 5: Page 2: Review the change to see if clarification is needed regarding "after"
      referring to time or source code. - Done.
  Jim: Part 5: Page 18: Line 45: Reword to make it clearer. - Done.
  Jim: Part 5: Page 20, 21: Change the '#define n' to '#define NUMBER_OF_ELEMENTS'. -
      Done (different macro name: LEN).
  Jim: Part 5: Page 21: Change the "for (i=0;" to "for (int i=0;" - Done.
  Jim: Get the changebar'd and dated version of previous TS's on the wiki to review. - Done.

New action items:
  Jim: Part 5: p12: Line 14: Change to "supports reproducible results for decimal floating types."
      or something similar.
  Jim: Part 5: Page 12, line 14; Page 13, line 3: Check the wording here to see if the standard
      does this (enumerate values and then later says it can have other values).
  Jim: Part 5: Page 5 line 9: occurrences -> occurrence
  Jim: Part 5: Page 10: Line 25: semantic type*s* -> semantic type. May occur in other places in
      the document (Ex. Page 9, Line 22; Page 19, Line 23)
  Jim: Part 1: Page 51: Line 3: Add a footnote to the 'l suffix' stating there are no functions with
      the 'f' suffix.
  Rajan: Send the DR template to Jim for parts 1-4 issues to get them ready in time for the
      WG14 meeting.

Next Meeting:
  *Monday March 15th, 2016, 12:00 EST, 9:00 PDT
  Same teleconference number.

Discussion:
  WG14 mailing is March 14th, 2016. Meeting is April 11-15th, 2016 at BSI, London, England.

IEEE 754 revision:
  Features being discussed for a future revision, not this one.

Arith23:
  Some changes being discussed for 754. Perhaps leave it for later?

Other:
  C Standard format change should be done soon if not already done.

Part 5: Various emails, documents (http://wiki.edg.com/twiki/pub/CFP/WebHome/cfp5-20160215.pdf):
 All changes OK.
 *ToDo: Jim: Part 5: p12: Line 14: Change to "supports reproducible results for decimal floating
    types." or something similar.
   Jim: Perhaps reword that part and later in that paragraph in general.

 Ian's comments (note sent today):
   Based off an older draft. Ex. first change already handled.
   Page 10: Already handled.
   Page 11-1: Already handled.
   Page 11-2: Already handled.
   Page 12-1: *ToDo: Jim: Page 12, line 14; Page 13, line 3: Check the wording here to see if
    the standard does this (enumerate values and then later says it can have other values).
   Page 12-2: *ToDo: Jim: Page 5 line 9: occurrences -> occurrence
   Page 13-2: Seems clear with context (the sentence before).
   Page 13-4: Already handled.
   Page 13-5: Already handled.
   Page 18: *ToDo: Jim: Page 10: Line 25: semantic type*s* -> semantic type. May occur in
    other places in the document (Ex. Page 9, Line 22; Page 19, Line 23)

 David's review to go still.

 We did not allow unspecified sub-exceptions to occur. The 754 committee said it is not
    allowed. Matches our current draft and 754 is adding this as well.

Part 1 (cfp1-20160202.pdf):
 Fred's Part 1 questions (Jim's response sent on 2016/01/13):
   Point 1: Should we add a footnote saying there are no functions with the 'f' suffix?
    *ToDo: Jim: Part 1: Page 51: Line 3: Add a footnote to the 'l suffix' stating there are no
    functions with the 'f' suffix.
   Point 2: No harm. Other implementations could have other types so the macros could be
    useful (Ex. HP's w/q suffixes).

 Page 18, line 19: OK.
 Page 38, line 24: OK.
 Page 40, line 30: OK.
 Page 48, line 24: OK.

 Note that this part was reformatted by ISO (other parts were not).
 Blaine suggested we create DR's for these changes. Ex. All the simple typo's in one, adding
    more text should be separate DR's.
 *ToDo: Rajan: Send the DR template to Jim for these issues to get it ready in time for the
    WG14 meeting.

Part 2 (cfp2-20160202):
  Title page: ISO replaces the title page so no issue here, but we will fix it for ourselves.
  Page viii: OK.
  Page 34: format -> type: OK.
  Page 50: May not be an editorial change (clarification).

Part 3 (cfp3-20160202):
  Title page: ISO replaces the title page so no issue here, but we will fix it for ourselves.
  Page 32: Typo, but not an editorial change. Should be it's own DR even though it is an
    obvious error.
  Page 39: OK.

Part 4 (cfp4-20160202):
  Title page: ISO replaces the title page so no issue here, but we will fix it for ourselves.

  Will post updated versions of these on the wiki.

 What should be proposed for the C standard:
  Should we propose most of part 1?
  Ian: Part 3 is useful so we should push for that as well.
   Intel and GCC have __float128 (possibly not by the compiler for Intel). AMD and GCC have
     16-bit float (half precision). Pushes the need for standardization.

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