CFP Meeting

2026/10/28: 8:00 AM PDT/3:00 PM UTC

[Please submit proposed changes to these minutes to Jerome or to the group. Revision changes appear at the bottom.]

Attendees and introductions

Rajan Bhakta, Jerome Coonen, Ariel Burton, Joshua Cranmer, David Hough

Agenda

https://cfp-wiki.esi.com.au/pub/CFP/WebHome/n3995.pdf

Previous meeting notes

https://cfp-wiki.esi.com.au/pub/CFP/WebHome/260930-Notes.pdf - 2026/09/30 Minutes

Study group logistics

Next meeting: 27 January 2027, 8:00 AM PDT/3:00 PM UTC

ISO Zoom teleconference: https://iso.zoom.us/j/9495503012?pwd=vHaKRZLdPqqyOkfDlPVblVgXbIbzeY.1

Note: Zoom link may change for this meeting or in the future. Email update will be provided if it is for this meeting.

Rajan:The Wednesday before U.S. Thanksgiving is the only day for a meeting between WG14 and the December CFP break. That day won't work for most of the group.

Jerome: Why don't we treat November as a retreat month to pick up the threads of the many carry-over items we've been sitting on. Perhaps we can get more active on the reflector, given that several items do not require huge debate.

C documents

The latest C2Y draft is N3886 2026/05/24: https://www.open-std.org/jtc1/sc22/wg14/www/docs/n3886.pdf

C23 has been published ISO/IEC 9899, available for purchase. https://www.iso.org/standard/82075.html

IEEE 754 update

David: The group is reducing the set of outstanding issues but apparently expanding the scope of the standard. As chair of the 2019 committee, I can't imagine how the 1985 process would have worked had email been in use then.

Jerome: Funny you mention that. Here is a 754-1985 update, a bit off topic. I've scanned a pretty complete set of the paper mailings 1978-1983. In support of some researchers looking at the collaborative aspects of the standards process, I indexed the mailings into a large table -- rows are contributors in order of appearance, columns are months over the duration, and cells have brief notes about each item in the respective mailing. Some interesting pictures emerge.

WG14 update

Rajan: The next meeting is 2026/11/16-21 in Brazil. Both C & C++ groups meet concurrently (suboptimal, but for logistical reasons). Many participants will be calling in.

C++ liaison

Joshua: Yes, our meetings are coincident with C. In a recent vote, the 2026 draft failed amid much debate. There will be a few fp papers in the coming meeting. Guy's work on an "Annex F" has stalled for now given other priorities. A topic of possible interest is new work in decomposing floating point numbers. This is a link to a working paper.

https://www.open-std.org/jtc1/sc22/wg21/docs/papers/2026/p4382r0.html

TS-4 and TS-5 revisions

None

News

None

Carryover action items from last meeting

Fred: Add to open items list the issue in 3928 from Trevor regarding the awkward language in H.4.1 regarding whether or not functions need to be supported, based on what types are supported.

Carry over

Fred: Submit the nextafter/nexttoward proposal in email 3963.

Carry over

Ariel & group: Investigate the sign of fromfp(-0.0) across IBM compilers and other systems.

Joshua has reported in email. Carry over for Ariel.

Fred & group: With input from the group, expand rationale and discussion of nextafter and zero cases

Carry over

Group: Interested members submit input on Fred's email 3964 re. nextafter() behavior around zero.

Carry over

Group: Submit thoughts about how SNaNs ought to behave in the printf/scanf functions.

Carry over, noting Jim submitted a comment.

Action items from last meeting

Damian & Rajan: Damian to send clean copies of Annex F Intro & Special Cases to Rajan, who will submit to WG14.

Done

Jerome & Joshua & group: Research the use of "range of representable values", what its definition might be, how the term itself might be rephrased, and its ties to C++ and to related C concepts like model numbers.

Carry over

Discussion of issues (as of 2026/09/28)

- **[cfp-interest 3962] Quantum of fromfp** - *Fred Tydeman - For reference (completed item)*
  Closed

- **[cfp-interest 3966] SNaN not raise invalid** - *Fred Tydeman*
  Carry-over

- **[cfp-interest 3967] Annex F - Introduction + SpecialCases** - *Damian McGuckin*
  Carry over pending WG14 response

- **[cfp-interest 3969] Re: binary vs decimal sNaN initialization** - *Rajan Bhakta*
  Not making meeting -- carry over

- **[cfp-interest 3965] Model numbers and double-double** - *Fred Tydeman*
  Carry over

- [cfp-interest 4010] Re: What do existing fromfp functions do for -0.0 result? - Joshua Cranmer
  Joshua -- LLVM returns -0 for all test cases, per email cfp3979. glibc libm might also support it.
  Carry over

Other issues

- https://cfp-wiki.esi.com.au/pub/CFP/WebHome/c26i.pdf
  Rajan: Suggests visiting this list on wiki as we look to 2027.

Adjournment

8:43 AM PDT

Action items to be carried over

Fred: Add to open items list the issue in 3928 from Trevor regarding the awkward language in H.4.1 regarding whether or not functions need to be supported, based on what types are supported.

Fred: Submit the nextafter/nexttoward proposal in email 3963.

Ariel: Investigate the sign of fromfp(-0.0) across IBM compilers and other systems.

Fred & group: With input from the group, expand rationale and discussion of nextafter and zero cases

Group: Interested members submit input on Fred's email 3964 re. nextafter() behavior around zero.

Group: Submit thoughts about how SNaNs ought to behave in the printf/scanf functions.

Jerome & Joshua & group: Research the use of “range of representable values”, what its definition might be, how the term itself might be rephrased, and its ties to C++ and to related C concepts like model numbers.

New action items

None

Carryover discussion items

- **[cfp-interest 3962] Quantum of fromfp** - *Fred Tydeman - For reference (completed item)*
- **[cfp-interest 3966] SNaN not raise invalid** - *Fred Tydeman*
- **[cfp-interest 3967] Annex F - Introduction + SpecialCases** - *Damian McGuckin*
- **[cfp-interest 3969] Re: binary vs decimal sNaN initialization** - *Rajan Bhakta*
- **[cfp-interest 3965] Model numbers and double-double** - *Fred Tydeman*
- [cfp-interest 4010] Re: What do existing fromfp functions do for -0.0 result?

Signoff

Respectfully submitted.

-Jerome Coonen