

n3174: Draft Minutes for June 2023

By Clive Pygott

Minutes of the virtual WG14 meeting – 16th to 17th October 2023

Local contact information

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1. Opening Activities

1.1 Opening Comments (Seacord)

1.2 Introduction of Participants/Roll Call

| | | | |
|-------------------|-----------------------------------|-------------|----------------------------|
| Aaron Ballman | Intel | USA | C++ Compatibility SG Chair |
| Alex Celeste | Perforce | USA | |
| Bill Ash | SC 22 | | SC22 manager |
| Clive Pygott | LDRA Inc | USA | WG23 liaison, scribe |
| Douglas Teeple | Plum Hall | USA | |
| Elizabeth Andrews | Intel | USA | |
| Fred Tydeman | Keaton Consulting | USA | INCITS/C Vice Chair |
| Freek Wiedijk | Plum Hall | USA | |
| Henry Kleynhans | Bloomberg | USA | |
| Joshua Crammer | intel | USA | |
| Nick Stoughton | Logitech | USA | SC22 Austin Group Liaison |
| Rajan Bhakta | IBM | USA, Canada | INCITS/C Chair |
| Robert Seacord | Woven by Toyota, U.S. | USA | WG14 Chair |
| Aaron Bachmann | Austrian Standards | Austria | Austria NB |
| Martin Uecker | Graz University of Technology | Austria | |
| Chris Bazley | Arm | UK | |
| Dave Banham | BlackBerry QNX | UK | MISRA Liaison |
| Joseph Myers | CodeSourcery / Siemens | UK | UK NB |
| Eskil Steenber | Quel Solaar | Sweden | Sweden NB |
| Jakub Lukasiewicz | Motorola Solutions Systems Polska | Poland | Poland NB |
| JeanHeyd Meneide | NEN | Netherlands | Netherlands NB |
| Jens Gustedt | INRIA/ICube | France | France NB |
| Jabot Corentin | Self | France | France NB |
| Jyoti Kushwaha | Bureau of Indian Standards | India | India NB |
| Shiv Maddanimath | | India | India NB |

| | | | |
|-----------------|----------|------------|-------------------------|
| Roberto Bagnara | BUGSENG | Italy | Italy NB, MISRA Liaison |
| Michael Wong | Codeplay | Canada, UK | WG21 Liaison |

1.3 Procedures for this Meeting (Seacord)

1.4 Required Reading

1.4.1 [ISO Code of Conduct](#)

1.4.2 [IEC Code of Conduct](#)

1.4.3 JTC 1 Summary of Key Points [[N 2613](#)]

1.4.4 [INCITS Code of Conduct](#)

1.5 Approval of Previous Minutes

WG 14 Minutes, June 2023 [[N 3167](#)]

Motion to approve: Ballman, seconded: Bachmann.

Minutes unanimously approved.

1.6 Review of Action Items and Resolutions

Nothing to review.

1.7 Approval of Agenda [[N3093](#)] (INCITS/C motion, WG 14 motion)

Dunn moved, Gustedt seconded. Agenda unanimously approved.

1.8 Identify National Bodies Sending Experts:

- Austria
- Canada
- France
- India
- Italy
- Poland
- Sweden
- The Netherlands
- UK
- US

1.12 Note where we are in the current C23 Schedule

As [N3165](#).

2. Reports on Liaison Activities

2.1 ISO, IEC, JTC 1, SC 22

2.2 National bodies in WG 14

2.3 WG 21

Next meeting Kona – in 3 weeks. Discussion topic includes safety.

2.4 WG 23

2.5 MISRA C

Met last week – nothing planned for publication 2024.

2.6 Austin Group

2.7 Unicode Consortium

2.8 Other Liaison or Collaboration Activities

3. Reports from Study Groups

3.1 C Floating Point Study Group

Still handling C and TS-18661 issues. For this meeting, here to get part 4 and 5 agreed to go out to ballot as a revised version.

3.2 C Memory Object Model Study Group

No report

3.3 C and C++ Compatibility Study Group

Aaron stepped down as chair of the study group, Jean Heyd stepped up as WG14 chair, Nina Ranns stepped up as WG21 chair. Currently trying to set up a meeting to discuss Contracts syntax (safety and security related); people interested in that topic should plan to attend as it's trying to nail down a syntax direction for the feature.

<https://doodle.com/meeting/participate/id/dLPJwJAd> is the poll to determine when to have that meeting.

3.4 Undefined Behaviour Study Group

Paper on 'defining UB' drafted for discussion in January (hopefully) and another on examples for issues in J.2.

It was noted that Annex J2 does not cover 'implicit UB', where the standard says 'if *condition*, the behaviour is...' but does not define what happens if the condition is not true. Anyone that notices such implicit UB that is not already addressed in J2, is encouraged to bring it to the attention of the Study Group.

4. Future Meetings

4.1 Future Meeting Schedule

- Hybrid meeting – Strasbourg, France, 22-26 Jan 2024
- TS 18661 Parts 4 and 5 DTS ballot resolution, TBD
- Mid to Late 2024, TBD

4.2 Future Mailing Deadlines

Note: Please request document numbers by **one week before these dates**.

- Post-Virtual-202310 – 17 November 2023
- Pre-Strasbourg Hybrid 202401 – 15 December 2023
- Post-Strasbourg Hybrid 202401 – 23 February 2024

5. Document Review -WG14 Business

The main purpose of this meeting is to prepare TS 18661 Parts 4 and 5 for Draft Technical Specification (DTS) ballot, and group administration.

5.1 TS 18661 Parts 4 and 5 Preparation

All comments raised by WG14 and on the reflector have been addressed (barring one received today).

- Rajan, TS 18661-4 revision draft [N3163]
- Rajan, TS 18661-5 revision draft [N3164]
Straw poll: 'For FP_{FLT, DEC}_EVAL_METHOD, does WG14 prefer use of unsupported values of width to be diagnosed (rather than be UB). Y=11 N=0 A=4. Strong consensus to diagnose.
- Rajan, TS 18661 revisions slide deck [N3165]
It was noted that N2361 and issues related to exception handling need to be addressed post C23.

The following polls were taken:

Does WG14 wish to see the library features provided by TS 18661-4 v2 names reviewed and be split into different headers. Y=8 N=0 A=8. Consensus

Does WG14 agree to bring TS 18661-5 v2 to ballot including editorial revisions documented as of 16th Oct. Y=12 N=0 A=4. Consensus to submit for balloting Action RCS

5.2 Administrative proposals

- Seacord, C2Y Plan
Discussed
- Ballman, Issue tracking system N 3002 [N3002]
The paper includes three suggestions for straw polls:
 - Does WG14 want to adopt something along the lines of the official issues list workflow in N3002? Agreed without vote
 - Does WG14 want to explicitly discourage the issues list maintainer from using a public, unofficial issues list? No, the committee is happy with a public unofficial list, provided the implementation is robust against changes in the software support.
 - Does WG14 want to empanel a study group (or some other group) to discuss and propose possible resolutions for issues in advance of committee meetings?
Yes, but as a [configuration control board](#) (CCB) (rather than study group)
 - Does WG14 wish to create an informal infrastructure administrative group? Agreed and will initially consist of: Daniel Plakosh, JeanHeyd Meneide, Aaron Ballman, and Joseph Myers.
- Meneide, C-document system (0.5 hours)
- Celeste, n3171 - C, Requests for Implementation [N3171]

Straw poll: Does WG14 support the existence of a CRFI (C Request for Implementation) community that exists outside of WG14? Y=10 N=0 A=7 Clear direction to proceed. Nine member indicated interest in joining such a group.

6. Clarification Requests - WG14 Business

The previous queue of clarification requests has been processed.

7. Any Other Business

No other business raised.

8. Resolutions and Decisions reached - WG14 Business

8.1 Review of Decisions Reached

None

8.2 Review of Action Items

- RCS to submit TS 18661-5 for ballot after editorial changes.

9. Thanks to Host

Thanks to Iso for Zoom

10. Adjournment

10.1 proposed: Tydeman, seconded: Bhakta– no objections, meeting adjourned.