

N3284: Final Minutes for the October 2023 WG14 Meeting

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 Planet North America Inc	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 Coentin		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]
There was sentiment to agree. 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 review names 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 Management Control Board (rather than study group)
 - Does WG14 wish to create an Informa 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