

Agenda for February 24 - 28, 2025
72nd MEETING OF ISO/IEC JTC 1/SC 22/WG 14
WG 14/N3502

Dates and Times

24 February, 2025	09:00 – 12:00	Lunch	13:30 – 16:30
25 February, 2025	09:00 – 12:00	Lunch	13:30 – 16:30
26 February, 2025	09:00 – 12:00	Lunch	13:30 – 16:30
27 February, 2025	09:00 – 12:00	Lunch	13:30 – 16:30
28 February, 2025	09:00 – 12:00		

Meeting Location

*Graz University of Technology
Biomedical Engineering Building
Stremayrgasse 16
8010 Graz
Austria*

Meeting information

Venue information: [n3399](#)

Meeting Scribe: aceleste@perforce.com

Local contact information

Martin Uecker uecker@tugraz.at

1. Opening Activities

- 1.1 Opening Comments (Seacord)
- 1.2 Introduction of Participants/Roll Call
- 1.3 Procedures for this Meeting (Seacord)
- 1.4 Required Reading

1.4.1 [ISO Code of Ethics and Conduct](#)

1.4.2 [ISO Guidance and Process](#)

1.4.3 [IEC Code of Conduct](#)

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

- 1.5 Approval of Previous Minutes

WG 14 Minutes, October 2024 [[N3372](#)] (motion)

- 1.6 Review of Action Items
- 1.7 Approval of Agenda [[N3502](#)] (motion)
- 1.8 Identify National Bodies Sending Experts

2. Reports on Liaison and Collaboration Activities

- 2.1 ISO, IEC, JTC 1, SC 22
- 2.2 National bodies in WG 14
- 2.3 WG 21
- 2.4 WG 23
- 2.5 MISRA-C
- 2.6 Austin Group
- 2.7 Unicode Consortium
- 2.8 Other Liaison or Collaboration Activities

3. Study Groups

- 3.1 C Floating Point Study Group activity report ([Rajan](#))
- 3.2 C Memory Object Model Study Group activity report ([Sewell](#))
- 3.3 C and C++ Compatibility Study Group activity report ([Meneide](#), Nina)
- 3.4 Undefined Behavior Study Group activity report ([Svoboda](#))
- 3.5 defer ([Meneide](#))
Improved `__attribute__((cleanup(...)))` Through defer, r1 [[N3442](#)]
- 3.6 Extensions to support embedded processors
- 3.7 Infrastructure Group ([Meneide](#))
- 3.8 New Study Group proposal (if applicable)

4. Future Meetings

- 4.1 Future Meeting Schedule

Sept -19, Carnegie Mellon University, Pittsburgh, PA, USA [[n3501](#)]

Spring, 2026 Candidate: [Suan Sunandha Rajabhat University](#)

- 4.2 Future Mailing Deadlines

Note: Please request document numbers at least one week before these dates.

Pre-Pittsburgh 2025 – 15 August, 2025

Post-Pittsburgh 2025 – 19 October, 2025

5. Document Review

Monday, 24 February

- Resolution of ballot comments on DTS 18661-4, DTS 18661-5, and DTS 6010 (as much time as needed)
- [ha6](#), `std::arg.h` wording... v3 [[N3363](#)] (0.5 hours)
- [Meneide](#), Literal suffix for `size_t` [[N2998](#)] (0.5 hours) (first part of discussion)

Lunch Break

- [Celeste](#), ``auto`` as a placeholder type specifier, v2 [[N3472](#)] (0.5 hours)
- [Svoboda](#), Slay Some Earthly Demons V (update v3) [[N3484](#)] (0.5 hours)
- [Múgica](#), Integer and arithmetic constant expressions, v. 2 [[N3459](#)] (0.5 hours)
- [Keane](#), Named Loops Should Name Their Loops: An Alternative Syntax for N3355 [[N3377](#)] (0.5 hours)
- [Gustedt](#), Array subscripting without decay v6 [[N3493](#)] (0.5 hours)

Afternoon break

- [Múgica](#), Discarded-III. Updates N3382 [[N3464](#)] (0.5 hours)
- [Múgica](#), Preprocessing integer expressions [[N3465](#)] (0.25 hours)
- [Celeste](#), ``if`` declarations, v5, wording improvements [[N3473](#)] (0.5 hours)

Tuesday, 25 February

- [Meneide](#), `_Record` types, r0 [[N3332](#)] (0.5 hours)
- [Heumann](#), Initialization of anonymous structures and unions (v2) [[N3451](#)] (0.5 hours)
- [Celeste](#), Remove the imaginary I [[N3390](#)] (0.5 hours)
- [Meneide](#), Transparent Aliases, r4 [[N3329](#)] (0.5 hours)

Morning break

- ~~[Mele](#), Enabling Generic Functions and Parametric Types [[N2698](#)] (0.5 hours)~~
- ~~[Seacord](#), Composite types [[N3432](#)] (1 hours) (also see [Uecker](#), Slaying A Triple-Headed Demon [[N3397](#)] for background information)~~
- ~~[Gustedt](#), Clarify syntactic terms for array declarators v3 [[N3495](#)] (0.5 hours)~~
- ~~[Gustedt](#), Reproducible expressions v3 [[N3499](#)] (0.5 hours)~~

Lunch Break

- ~~[Gustedt](#), Objects of known constant size v3 [[N3498](#)] (0.5 hours)~~
- ~~[Uecker](#), Forward Declaration of Parameters v4 [[N3394](#)] (0.5 hours)~~

Afternoon break

- ~~[Bazley](#), Alternative syntax for forward declaration of parameters [[N3433](#)] (0.5 hours)~~
- ~~[Uecker](#), Memory Safety: Unsafe Buffer Usage [[N3395](#)] (0.5 hours)~~

Wednesday, 26 February

- ~~[Uecker](#), Improved Type Safety for Null Pointer Constants, v2 [[N3426](#)] (0.5 hours)~~
- ~~[Uecker](#), The Containerof Macro [[N3398](#)] (0.5 hours)~~
- ~~[Bazley](#), `_Optional`: a type qualifier to indicate pointer nullability (v2) [[N3422](#)] (0.5 hours)~~
- ~~[Bachmann](#), Reducing undefined behavior for printf-style functions v2 [[N3471](#)] (0.5 hours)~~
- ~~[Ballman](#), Clarifications on null pointers in the library [[N3466](#)] (0.5 hours)~~

Morning break

- ~~[Uecker](#), Slay Some Earthly Demons X [[N3409](#)] (0.25 hours)~~
- ~~[Uecker](#), Slay Some Earthly Demons XI [[N3410](#)] (0.25 hours)~~
- ~~[Uecker](#), Slay Some Earthly Demons XII (Updates: N3411) [[N3477](#)] (0.25 hours)~~
- ~~[Uecker](#), Slay Some Earthly Demons XIII (Updates: N3412) [[N3478](#)] (0.25 hours)~~
- ~~[Uecker](#), Slay Some Earthly Demons XIV [[N3418](#)] (0.25 hours)~~
- ~~[Uecker](#), Slay Some Earthly Demons XV (Updates: N3419) [[N3480](#)] (0.25 hours)~~

Lunch Break

- [Uecker](#), Slay Some Earthly Demons XVI (Updates N3420) [[N3481](#)] (0.25 hours)
- [Uecker](#), Slay Some Earthly Demons XVII (Updates N3421) [[N3482](#)] (0.25 hours)
- [Gustedt](#), Clarify the specification of the width macros v2 [[N3496](#)] (0.5 hours)

Afternoon break

- [Gustedt](#), Even simpler defer for direct integration v2 [[N3497](#)] (0.5 hours)
- [Gustedt](#), Clarify status of non-returning functions with respect to function attributes v3 [[N3494](#)] (0.5 hours)
- [Uecker](#), Unspecified Sizes in Definitions of Arrays, v2 [[N3427](#)] (0.5 hours)

Thursday, 27 February

- [Thomas](#), `frexp` and double double [[N3357](#)] (0.5 hours)
- [Thomas](#), range error definition followup (updates N3383) [[N3461](#)] (0.5 hours)
- [Thomas](#), complex operators (updates N3406) [[N3460](#)] (0.5 hours)

Morning break

- [Tydeman](#), `SIGFPE` and I/O, version 2 [[N3401](#)] (0.5 hours)
- [Thomas](#), Improved treatment of error conditions for functions that round result to narrow type (updates N3404) [[N3492](#)] (0.5 hours)
- [Thomas](#), Improved wording for treatment of error conditions in `<math.h>` [[N3405](#)] (0.5 hours)
- [Thomas](#), Complex literals warning [[N3452](#)] (0.5 hours)

Lunch Break

- [Rowe](#), TrapC [[N3423](#)] (0.5 hours)

Afternoon break

- [Meneide](#), Variable Length Array Allocation Control, r0 [[N3437](#)] (0.5 hours)
- [Meneide](#), `#embed` Synchronization, r0 [[N3438](#)] (0.5 hours)
- [Meneide](#), Big Array Size Survey, r1 [[N3469](#)] (0.5 hours)
- [Lukasiewicz](#), Pitch for `#dialect` directive [[N3407](#)] (0.5 hours)
- [Celeste](#), C Extensions to Support Generalized Function Calls, v4 [[N3389](#)] (0.5 hours)
- [Múgica](#), Preprocessor integer expressions, v. 2 [[N3505](#)] (0.5 hours)
- [Meneide](#), Integer Constant Expression-Initialized `const` Integer Declarations are Implicitly `constexpr`, r1 [[N3443](#)] (0.5 hours)

- [Colomar](#), Function pointers are more readable with `typeof()` [[N3450](#)] (0.5 hours)
- [Svoboda](#), Examples of Undefined Behavior [[N3453](#)] (0.5 hours)

Friday, 28 February

- [Lukasiewicz](#), About branding, community, website [[N3408](#)] (0.5 hours)
- [Ersek](#), integer promotions and conversion ranks, and alignments, in C17 [[N3444](#)] (0.5 hours)
- [Gustedt](#), Chasing Ghosts I: constant expressions [[N3447](#)] (0.5 hours)

Morning break

- [Gustedt](#), Chasing Ghosts II: accessing allocated storage [[N3448](#)] (0.5 hours)
- [Bazley](#), Enhanced type variance [[N3449](#)] (0.5 hours)
- [Gustedt](#), Objects of known constant size v4 [[N3508](#)] (0.5 hours)
- Rajan, N3357 questions [[SC22WG14.29101](#)] (0.25 hours)
- [Múgica](#), Array subscripting without decay (0.25 hours)
- [Gustedt](#), Objects of known constant size v4 [[N3508](#)]

Adjourn at noon

7. Other Business

None

Scheduled for Pittsburgh:

- [Uecker](#), Comments on Array Type [[N3428](#)] (0.5 hours)
- [Gustedt](#), The `__COUNTER__` predefined macro [[N3457](#)] (0.5 hours)
- [Meneide](#), `__self_func`, r1 [[N3470](#)] (0.5 hours)
- Chronister, Initializing static and thread objects with compound literals [[N3235](#)] (0.5 hours)
- Gerasimov, Mandatory diagnostic message on missing return statements [[N3483](#)] (0.5 hours)
- [Johnson](#), Namespaces Without Name Mangling [[N3491](#)] (0.5 hours)

Old papers that haven't been scheduled yet pending request from the author:

- [N2658](#) 2022/01/03 [Bachmann](#), Make pointer type casting useful without negatively impacting performance - updates n2484
- [N3160](#) 2023/08/20 Grüniger, Add min, max for integers to C

The following paper(s) will not be ready for this meeting:

- [MacDonald](#), Defect with wording of restrict specification [[N3025](#)]
- [MacDonald](#), Provenance-Style Specification of restrict [[N3058](#)]

8. Recommendations and Decisions reached

- ~~8.1 Review of Decisions Reached~~
- ~~8.2 Review of Action Items~~

9. Thanks to Host

10. Adjournment (motion)