

MINUTES FOR 4-8 April 2005
MEETING OF ISO/IEC JTC1 SC22/WG14 AND INCITS J11

WG14/N1140

Meeting Times

Monday 04 April 2005 09:30-12:00 13:00-17:00
Tuesday 05 April 2005 09:00-12:00 13:00-17:00
Wednesday 06 April 2005 09:00-12:00 13:00-17:00
Thursday 07 April 2005 09:00-12:00 13:00-17:00
Friday 08 April 2005 09:00-12:00

Meeting Location:

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Host:
Standards Norway

Host Contact information:
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Meeting / venue information: N1070

1. Opening activities

1.1 Opening Comments (Lindelien, Benito)

1.2 Introduction of Participants/Roll Call

John Benito	WG14 Convenor	USA
Barry Hedquist	Perennial	USA
Fred Tydeman	Tydeman Consulting	USA
David Keaton	self	USA
Cecilia Galvan	Metrowerks	USA
P. J. Plauger	Dinkumware, Ltd	USA
Chris Walker	Dinkumware, Ltd	USA

Tana L. Plauger	Dinkumware, Ltd	USA	
Randy Meyers	Silverhill Systems	USA	
Dan Gohman	Cray	USA	
Douglas Walls	Sun Microsystems	USA	HOD
Francis Glassborow	Plum Hall	USA	
Mark Terrel	Cisco	USA	
John Parks	Intel	USA	
Robert C. Seacord	SEI/CMU	USA	
Herb Sutter	Microsoft	USA	
Edison Kwok	IBM	CANADA	HOD
Nick Stoughton	FSG	UK	HOD
Willem Wakker	ACE	Netherlands	HOD
Randy Marques	ATOS Origin	Netherlands	
Keld Simonsen	RAP	Norway	HOD

1.3 Selection of Meeting Chair (Benito)

John Benito - Meeting Chair
Barry Hedquist - Meeting Secretary

1.4 Procedures for this Meeting (Benito)

The Chair announced the procedures are as per normal. INCITS J11 members are reminded of the requirement to follow the INCITS Anti-Trust Guidelines which can be viewed at <http://www.incits.org/inatrust.htm>.

All 'N' document numbers in these minutes refer to JTC1 SC22/WG14 documents unless otherwise noted.

Comments in the minutes attributed to initials, such as "RM", indicate the initials of the above attendees, with the exception of the initials "PJ", which always refer to Bill Plauger.

1.5 Approval of Previous Minutes, (N1083) (Hedquist)

#2, DR218 remove, also in DR status.

10.1 add ")"

15.1.1 remove Oslo

TAG Minutes

Muller , tab USA

Seebach self USA,

4.0 add "and UGSPLM member" to restoration of voting rights.

Minutes approved as amended - Doc N1115

1.6 Review of Previous Action Items and Resolutions (Hedquist)

1. ACTION: Fred Tydeman to address issue of errors in Appendix G for complex multiply, and divide. OPEN

2. ACTION: Convenor to contact Doug Gwyn and try to get a resolution of DR236. DONE by Mak, paper in mailing, N1111.

3. ACTION: Tom Plum will communicate our discussion of WG21 Core Working Group Issue 268 to that Group. DONE

4. ACTION: Randy Meyers to propose an RoR for DR 219. CLOSED. Assigned to agenda item #10, Defect Reports.

5. ACTION: Clark Nelson to convert N1068 paper into a set of DRs (302-310). DONE

6. ACTION: Convenor to add the text from Fred Tydeman email to the Committee Discussion portion in DR 296. DONE

7. ACTION: Olwen Morgen to have a paper to close out DR219 in April 2005. CLOSED. Assigned to agenda item #10.

8. ACTION: Rationale Editor to add words to rationale for DR294. DONE

9. ACTION: Nick Stoughton to provide copy of Security TR to the Austin Group as Liaison. DONE

10. ACTION: Convenor - correct the typo in DR 291: Reference to J.3.1.2 should be J.3.12. DONE

11. ACTION: Willem Wakker to generate an issues list with proposed resolutions for Embedded TR. DONE

12. ACTION: Randy Meyers, deliver draft revision of Security TR to review team: Plum, Hedquist, Stoughton, Keaton, Galvan, Seebach. DONE

13. ACTION: Convenor - Forward Revised draft of Security TR to SC22 for Registration upon approval of the Editorial Committee. DONE

1.7 Approval of Agenda (Benito) (N1098)
lunch will be 1 hr

Deleted Agenda Items:

J11 TAG Agenda - delete item #3, Election of future US delegation.

MOTION: Agenda approved as modified: (Stoughton, Tydeman). Passed:
Unanimous consent.

1.8 Distribution of New Documents

None

1.9 Information on Next Meeting (Club Tremblant)

WG14 starts, starting on a Sunday, followed by SC22, followed by WG21.

1.10 Identification of National Bodies (Benito)

Countries represented:

Norway,
UK,
Canada,
USA,
Netherlands

1.11 Identification of J11 voting members (Walls, Tydeman)

13 voting J11 members out of 18 possible members. (See attached J11 minutes for attendees.)

2. Liaison Activities

2.1 INCITS/J11 (Walls, Meyers)

US TAG to vote on reaffirmation of ISO/IEC 9899:1999, C Language.

2.2 SC22/WG11 (Wakker)

Language Independent Data Types still in ballot, PJ asked for a copy.

2.3 SC22/WG14 (Benito)

Registration ballot for WDTR 24731 passed by one vote.

Call for Convenor has gone out, JB has responded.

2.4 J16/WG21 (Sutter)

WG21 will meet next week. WG21 Library TR is in ballot for WDTR registration & ballot. The ballot closes this week.

2.5 FSG - Free Standards Group (Stoughton)

The Linux Standard Base is out for DIS review, closes 10 May. Only the core document is in the JTC1 PAS process.

2.6 I18N-RG (Benito)

SC22 / I18N-RG met in Tokyo. Strong attendance, 2 day meeting, will make recommendations to SC22 on handling I18N issues. Keld will set up a web page.

2.7 Other

POSIX & Austin Group meeting in Reading, mostly handling Defect Reports, revision planned next year, minor in scope. Security TR was presented

3. Defect report status (Benito)

TC2 is done. No real pressing DRs. Douglas wants to be sure that DR236 gets addressed.

ACTION - Convenor to look at generating a cross reference of DR # to TC changes in the Standard.

4. Special Math Functions (Plauger)

C++ TR1 is in ballot, contains Special Math functions, and should be made C friendly. PJ has submitted a paper, WG14 N1117, on the wiki. Suggests that we agree with what C++ has done, unless there are major objections.

5. TR Status Report (N1087, N1095, N1096) (Wakker)

TR18037 is approved; several DRs have been approved and incorporated into a revised version of the TR, N1095. What do we want to do with this document? Submit as is, or wait to incorporate the remaining DRs. Includes name change that ITTF wanted. Consensus to incorporate the additional items submitted as defects and forward it as a revised TR.

Also, there is an issue of making the TR freely available, as approved by JTC1, but ITTF has not made that happen yet. Keld suggested reminding both SC22 Secretariat and ITTF.

6. Potential defect reports (N1094, N1097) (Tydeman, Wakker)

N1094 - Three potential defects: (Tydeman)

1. %.0a and rounding - no consensus to make this a defect.
2. %a and trailing zeros - defect DR319.
3. freopen - question of whether or not the 'implementation-defined' behavior applies to the case of 'filename' as well as NULL. Consensus is no, it applies only to NULL. Not a defect.

ACTION Convenor and PJ to come up with words to add to Rationale addressing issue #3.

N1097 - Rounding modes 5.2.4.2.2 is imprecise. Implementations want flexibility here. This is really a new requirement. Not a defect. Possible candidate for a future revision to the Standard. Nick suggested that we have a place to collect ideas for revisions.

7. Updated defect report for TR 18037 (N1096) (Wakker)

N1096 presents four potential new defects, numbered 19-22, to TR 18037.

#19 Typos - some types were entered incorrectly

#20 - Goes w/ #21, both deal with left shift, not written as intended, there should be no difference between the signed and unsigned versions. No implementation impact.

#21 - see #20

#22 - Need to replace types as needed for their intended use.

After some discussion, the committee decided, without objection, to incorporate the above defect items into post meeting mailing as revision to TR 18037.

8. Decimal Floating-point. (N1107, N1108) (Kwok)

N1107 - WDTR 24732, Draft 5

Some issues remain:

1. Sec 3, type names - similar to IEEE conventions, vs. those proposed in the document. Fred says there are other concepts he proposed are not included. JB

pointed out that we said in the beginning that we would follow IEEE's lead, so we should stay with that.

2. Sec 5.4, Allowing of implicit conversion, or not. Prefer explicit conversion via casts over implicit.

3. Extent of decimal support of the math library. Full range of math functions needed or not. If DFP will eventually replace BFP, then full support would be desired - which is what the present document proposes.

4. Spec does not define complex types for DFP. Should it? PJ doesn't think so, for now. Group consensus to leave complex out.

Try to have an ISO ready document available in October, i.e. complete technical content and ISO format, similar to the Embedded TR format. Have separate registration and technical ballots - we do not want to get ahead of IEEE efforts. Intel is proposing an alternative representation to IEEE which could slow that effort.

N1108 - The type and representation of unsuffixed floating constant (Mak)

Proposal for a translation-time data type (TTDT) to allow for the use of unsuffixed floating constants. Also could apply to TR 18037. PJ thinks the idea is too important to leave out, as a minimum a recommended practice. Edison is leaning toward making it part of the rules, i.e. 'required'. Randy agrees. We need to make sure that TTDT is compatible with type-generic macros of <tmath.h>. Lots of discussion over making this a separate TR. Decided to make it a separate section in the TR.

9. C Library Security TR 24731, (N1089, Meyers), (N1106, Austin Group), (N1110, van der Veen), (N1114)

N1093 - TR24731 (draft), dated 2004-12-09

N1089 - Editors report , Randy Meyers. One big issue is term 'undefined diagnosable behavior'. Some of the error conditions that fall into this category may not be detected until run-time. Implementations today do not generally deal with reporting of diagnosable error conditions after link time. We need to craft semantics for 'diagnostic required' that will allow for diagnosable errors reported at run-time. The prior term can be changed to 'diagnostic required', and semantics added to allow for reporting the condition detected at run time. One proposed concept is to create a paragraph called "Constraints", and describe the diagnosable conditions. Parallel the organization of the Language section - synopsis, constraints, description, returns.

Also: rsize_t replaced size_t in most places. Should it be defined everywhere size_t is defined? - yes.

N1106 - Austin Group Review of WDTR 24731. Detailed responses are listed below.

N1110 - Proposal to add Overflow Protected String Building (van der Veen). Proposes to add a new function, straddstr() to allow concatenation of one string to the end of another. No decisions were made regarding this proposal.

N1114 - All ISO Comments for CD & Registration Ballot WDTR 24731. CA - Canada, DE - Germany, JP - Japan, NL - Netherlands, GB - Great Britain, US - United States. Responses only. See N1114 for text of questions.

CA01 - Canada, Agree, use "safer" vice "secure". Need to check all uses of secure in TR.

CA02 - Disagree. PJ, we really want a complete set of functions that end in "_s", and should change only if there are honest, good reasons for doing so. There are a number of functions in 'other' domains that may or may not have the same name and/or provide similar behavior, however it is not acceptable to tell users / implementers to use / implement this function from POSIX, that function from BSD, this other function from SUS. General agreement on this topic, and the need for an Annex / Rationale that address why we made the decisions we did.

CA03 - Agree - see GB08

CA04 - Agree.

CA05 - The WDTR did not contain the function referred to by the comment.

DE01 - Question seems to be related to CA03. Will be discussed in rationale as it applies to the entire library.

DE02 - The length parameter was included in the review TR for those functions.

DE03 - Agree, more discussion on this concept for required diagnostics will be included in the next draft. See forward reference GB02.

JP-General - See CA01 response.

JP01 - Discussion on whether or not to keep gets_s. fgets solves the problem of getting lines that are too big. Potential issue with 'conversion' of old code to 'safer' code. NS pointed out an approach that is malloc based, as suggested by Austin Group, however that requires that 'free' be called as well. PJ believes that relying on the programmer to free-up the buffer is problematic. Conclusion: keep gets_s, add words to the rationale.

JP02 - Agree, will add text to the rationale

JP03 - Agree, rationale will be extended to include these issues, and we will provide examples.

JP04 - Agree, see JP03

NL01 - Agree, the term 'diagnosed undefined behavior' has been changed, and the concept will be rewritten.

NL02 - Agree, will be rewritten

NL03 - Agree, this section will be rewritten.

NL04 - Agree, this section will be rewritten.

GB01 - Agree, see CA01, macro name will be changed to match the package.

GB02 - Agree, see NL01

GB03 - cannot have a standard dictate what to do if you don't conform to the standard, it is beyond the scope of the standard to make implementations do this. Every compile time flag is really a different implementation. The committee did not agree with moving this footnote. The rationale will expand on name space pollution issues.

GB04 - The committee did not agree to replace the use of `errno_t` and `resize_t`. Use of typedefs is good programming practice. Precedence exists in C++, POSIX, and other ISO Standards for this approach.

GB05 - Agree

GB06 - Disagree. The suggested functions have problems of their own; are usable in their own right, and could use their own safer versions; and the transformation / conversion process to safer functions is more easily done with the TR functions.

GB07 - Agree, the existing WDTR already does this.

GB08 - Agree. `s2` does not need checking.

GB09 - Disagree. The culture of C and C++ makes use of "..."

GB10 - Agree

GB11 - Disagree. Committee could not agree to make this change.

GB12 - Disagree. The primary emphasis of this TR is to eliminate buffer overflows and other potential vulnerabilities. The suggested changes do not have the level of vulnerabilities to justify their inclusion.

GB13 - Agree

GB14 - Agree - will include words similar to C99: 7.1.3;p1

GB15 - Agree

GB16 - Disagree. It is more algorithmically useful to return maxsize. Rationale will be provided for this.

GB17 - Disagree. The output string will match in most cases, however `asctime_s`'s behavior is better defined. Also PJ Items 3 & 4 (5.7.2.1) are too expensive, and should be eliminated (not part of the response). Normalized needs to be defined. Words need to be added to the rationale.

GB18 - Disagree - looks like a rendering problem.

US01 - Agree

US02 - Agree

US03 - Agree, will add a footnote.

US04 - Noted

US05 - Agree, see GB02

US06 - Intentional - It indicates a deletion on that line.

US07 - Agree

US08 - Agree

US09 - Disagree - intent is as written, is not good as a static initializer.

US10 - Agree, delete sentence "No assignment to `s` occurs", incorporate proposed text.

US11 - Agree

US12 - Agree

US13 - Agree

US14 - Agree - returns 0 in success, non-zero otherwise.

US15 - Intentional - It indicates a deletion on that line.

US16 - Agree

US17 - Agree, indicates truncation, will add explanation to rationale.

US18 - It's the time after adding 1900, actual calendar year, see GB11.

US19 - Agree, will match the wide version.

US20 - Agree

US21 - Noted - intentional, looking at alternative approaches.

US22 - Agree, see US16

US23 - Disagree - premature to standardize this at this time, although implementers may devise such a function if they wish.

US24 - Noted, see NL01

US25 - Agree, will add to new constraints. Also need to examine other instances of overlap, and incorporate them as well.

US26 - See CA02

US27A - Disagree, See US03

US27B - Disagree. It is left to implementations to determine how to implement `tmpnam_s` so that it can operate in multi-threaded environments and generate unique filenames. Keeping `tmpnam_s` also aids in transition / conversion. Words will be added rationale.

US27C - Disagree, See CA02

US27D - Disagree - this was considered earlier for the TR, but turned down. The committee believes that the optional nature of this suggestion is not desirable.

US28 - Agree, see US01

US29 - Agree

US30 - Agree

US31 - Agree

US32 - Agree, see US03

US33 - Agree, see NL01

N1106 - Austin Group (AG) Comments

AG01 - Noted. Thank you.

AG02 - Agree, see N1114/CA01

AG03 - Agree, see NL01

AG04 - Disagree. There is no requirement on anyone to implement this TR. It is a non-normative document, and is not an attachment to the C Standard. A non-normative document cannot dictate an implementations behavior when it chooses to not implement the features contained in that document.

AG05 - Agree, however there is a clear need to create a `asctime_s` for those who have already created legacy code using `asctime`. We will add a "Recommended Practice" pointing out that `strftime` should be used in preference to `asctime`.

AG06 - See AG04

Responses to Individual Austin Group Comments - See N1118.

ACTION - Nick S to produce a proposal for additional functions to be considered as possible additions to WDTR24731.

Further Discussion on Editors Report (N1089)

Sec 4.2, `qsort_s` - change return type to `errno_t`? yes

Sec 2.1, `printf` family functions that were not included in WDTR. Two functions, `sprintf_s` and `vsprintf_s`, would have the same prototype as `snprintf` and `vsnprintf`. Collapse to two functions, rather than four? Yes

Truncated result in `snprintf_s` will not be a constraint violation, and will return the length needed to get the correct result.

ACTION - Randy to produce a new WDTR in time for an editorial meeting between now and October that also incorporates the `printf_s` family.

Sec 2.4 - `_TRUNCATE` - `strncpy_s` is a truncation function, Microsoft was implemented an additional argument that uses `_TRUNCATE`. Do we want to add it?

Straw Pole

add `_TRUNCATE` Yes - 2, opposed - 9, abstain - 5.

There is no consensus to add `_TRUNCATE`.

10. Defect Reports (Summary, Version 1.17, 3/13/2005)

Add to list, DR 279, it's closed, and published in TC2.

DRs in REVIEW Status

DR 296 - Moved to CLOSED

DR 299 - Moved to CLOSED

DRs in OPEN Status

DR 219 - General agreement that the types of p1 and p2 are array of char, and not struct s. However, the Standard can be parsed in ways that disagree with that conclusion and can result in concluding that the effective type is something else, such as an int. Such parsing has no commercial relevance. Straw poll to make that conclusion a response, with additional words. Yes - 8, no -2, abstain - 6. Universal agreement that it is not a struct s. RM: it's an array of char, also an int, also an array of a single int.

Proposed response from Randy:

The effective types of *p1 and *p2 are not struct S because not all of the bytes of struct S are copied.

However, the memcpy calls do copy pieces of s. Those pieces contain objects with declared types.

memcpy (p1, (char *)&s + offsetof (s, i), len1); copies all of the bytes of s.i to an alignment suitable for an object of type int. The effective type of the resulting copy can be treated as having effective type int.

memcpy (p2, (char *)&s + offsetof (s, i), len2); copies all of the bytes of s.i and s.l. The memcpy also might copy bytes corresponding to padding before and after s.l.

The int object from s.i is copied to an alignment suitable for an object of type int . The object starting at *p2 extending for sizeof (int) bytes can be treated as having effective type int.

Because of alignment requirements and padding rules that vary from implementation to implementation, the long object from s.l might or might not be copied to an alignment suitable for an object of type long. If it is aligned properly, the object starting at *((char *) p2 + (offsetof (s, l) - offsetof (s, i))) extending for sizeof (long) bytes can be treated as having effective type long.

The objects resulting from the calls to memcpy may also be accessed by other types (primarily given by Subclause 6.5 paragraph 7).

-- end of Randy's response --

DR 236 (N1111, Raymond Mak). N1111 seems to be trying to limit the use of pointers to union members. Can we address this by simply saying 'here's what we meant when we wrote this', or do we want to reword the standard. The intent in C99 was that we can optimize that function. The standard does not prohibit the passing of pointers to union members. The key may be adding words that keeps programmers from trying to outfox compilers. In the example shown, it's "lying to the compiler", and optimizers should be forgiven for not getting it right. If you have a live pointer to a union member, and start mucking with the union, the resulting behavior is undefined. All agree that the earlier statement "Committee believes that Example 2 violates the aliasing rules in 6.5 paragraph 7" is correct. Example 1 falls into the same territory, it is effectively being treated as a union. Thus, making any change to the Standard may not be needed.

Proposed Response from PJ: Both programs invoke undefined behavior, by calling function `f` with pointers `qi` and `qd` that have different types but designate the same region of storage. The translator has every right to rearrange accesses to `*qi` and `*qd` by the usual aliasing rules.

DR 298 - We believe that the Constraint in 6.4.4 applies, and that a constant must have a type. If a type cannot be assigned, the program is invalid and violates the Constraint. Update the constraint in 6.4.4 to read:

Each constant shall have a type and the value of a constant shall be in the range of representable values for its type.

Add the following sentence as last sentence of the paragraph after the list in 6.4.4.1:

If an integer constant cannot be represented by any type in its list and has no extended integer type, then the integer constant has no type.

The second part involves `uint64_c`. The macros were not intended to be very smart, and may imply the use of compiler magic. Suggest changed words to 7.18.4;p2 - change "..a decimal.." to "..an unsuffixed decimal...".

DR 300 - Moved to REVIEW.

DR 301 - Moved to REVIEW.

DR 302 - Moved to REVIEW

DR 303 - Moved to REVIEW

DR 304 - Does the proposed addition to the constraint affect C? No - just a clarification. Change Suggested TC to Proposed TC.

DR 305 - Moved to REVIEW

DR 306 - Moved to REVIEW

DR 307 - Moved to REVIEW

DR 308 - Moved to REVIEW

DR 309 - Moved to REVIEW

DR 310 - Moved to REVIEW

DR 311 - States 'what it means for the declarators to "contain" a type is unclear.'

Declarators don't contain a type, it is the sequence of declarators that contains types. Further discussion is needed. OPEN

DR 312 - Asks if "known constant size" means something different from "not a VLA"?

It's a non-VLA of known size. The first example is a VLA, rather than the submitters claim that it is not. Should we replace the term 'known constant size' with 'non-VLA of known type', or define the term 'known constant size'. An object of known constant size is not a VLA, and is not an incomplete type.

Proposed response from Randy: Add to 6.2.5, after Paragraph 22: A type has 'known constant size' if the type is not incomplete and is not a variable length array type.

The statement, "Suppose the implementation does not accept any non-standard forms of constant expressions under 6.6#10, so that $(int)+1.0$ is an arithmetic constant expression but not an integer constant expression." , implies an interpretation of the standard that the implementation can extend the meaning of what constitutes an integer constant expression. For example, that $(int)+1.0$ is an integer constant expression.

The committee does not believe that it does. Even if an implementation accepts other forms of constant expressions, paragraph 6.6#10 does not change the definition of an integer constant expression given by paragraph 6.6#6, and $int[(int)+1.0]$ is still a VLA.

Paragraph 6.6#10 cannot be used to get around issuing diagnostics for constraint violations where integer constant expressions are required. Which we believe is what the first paragraph of the introductory text is implying.

DR 313 - Asks: If an incomplete array type has elements of unknown size, should the incomplete array type be a VLA type? Yes. Proposed response. Per 6.7.8;p17, The initializer initializes the sub object of the array `c[]`, which in this case is a VLA, therefore it violates the constraint in 6.7.8;p3. Move to REVIEW status.

DR 314 - Asks three questions:

Question 1: Does 6.2.7#2 refer to the types immediately after the declarations, or the types at any point where the declarations are in scope?

None of the above. The question is really one of reconciling types at link time.

Question 2: If each of the above three translation units started `extern struct t *x;`, would there be undefined behavior?

Yes, undefined behavior.

Question 3: Is an implementation required to accept compiling the three translation units above together into a program? .

Straw poll: Yes - 0, No - 12, Abstain - 3. The committee believes there is no such requirement in the Standard.

DR 315 - three questions asked:

1. Must bit-fields of type `char` nevertheless have the same signedness as ordinary objects of type `char`, and similarly for those of types `short` (or `short int`), `long` (or `long int`), `long long` (or `long long int`)? This is unspecified in the Standard - No
2. But what should `sizeof(x.a + x.b)` evaluate to, when `(x.a + x.b)` has such a bit-field type which does not occupy an integer number of bytes? It must be something larger than `int`.
3. Must an implementation define representations occupying an integer number of bytes (with some padding bits) for all such types, although such representations would have no use other than to define the result of `sizeof`? Yes.

Move to REVIEW.

DR 316 - Unprototyped functions are being deprecated. Per the response provided in DR 255: "The Committee does not wish to further refine the behavior of calls not in the scope of prototypes. In practice, this will not be a problem, and the Committee does not wish to define the behavior." We have no intention of 'fixing' the old style rules. However, the observations made in DR 316 seem to be generally correct.

Move to REVIEW

DR 317 - The grammar says that an empty parens stands for an empty identifier list not an empty parameter-type-list.

Move to REVIEW.

DR 318 - There is a conflict between the handling of a cast and the precision of a float when the FLT_EVAL_METHOD is 2. PJ believes that when a cast is performed, you should get what you cast. DG, not present, has an opposing point of view to keep the initial precision. That position is also supported by John Parks. Francis agrees with PJ's position.

Straw poll: Move suggested TC (a cast is what it is) yes - 11, no - 0, abstain - 3

Move to REVIEW.

11. Separate WG14 administration (Benito) and J11/U.S. TAG meetings (Meyers, Walls)

See J11 / WG14 US TAG Minutes at the end of these minutes.

12. Defect report review

See Agenda Item 10.

13. Embedded TR Items

- syntax error for fixed point constants, needs a single paragraph to fix.
- C99, Sec 6.7.5.2;p2, is not written to match it's intent. Has proposed rewording.

14. DR 279 issue

There is a potential issue with the adoption of DR 279 on the portability of existing code, since the earlier code relied on a promise that is no longer there. PJ agrees that the restriction was handy. Consideration to either undoing the change, or adding a feature test macro.

Straw poll: 1) add a feature test macro yes - 13, no - 0, abstain - 2

2) undo DR 279 that created this change - yes - 2, no - 9, abstain - 5

Also: consider adding some words to the Rationale.

15. Administration

15.1 Future Meetings

Intel possible, fall 2006, in either Boston or Portland.

Straw poll, preference for Boston or Portland:

Boston - 15

Portland - 5

2005 Oct, hosted by Canada, Mont Trembant, Quebec. Current dates are

WG14 25-28 Sep, 2005

SC22 29 Sept - 2 Oct, 2005

WG21 3 - 8 Oct, 2005

2006 Mar/Apr - Berlin Germany 19 Mar, 26 Mar, 2 Apr, all possible week starts

2006 Fall - West Coast - TBD [15 Oct, 22 Oct, 29 Oct possible]. OOPSLA is week of Oct 22.

15.1.1 Future Meeting Schedule

Editing review meeting for TR 24731 - possibly end of June, in Redmond. Likely teleconference.

15.1.2 Future Agenda Items

None

15.1.3 Future Mailings

Post Lillehammer meeting mailing items to be to JB by 9 May 2005.

Pre Mont Trembant mailing items to be to JB by 29 Aug 2005.

15.2 Resolutions / Votes

Does WG14 want to establish a liaison between WG14 and the SC22 POSIX Advisory Group?

Straw Poll: yes - 15, no - 0, abstain - 0.

Should Nick Stoughton act as that liaison, with Keld Simonsen as the back-up?

Straw Poll: yes - 14, no - 0, abstain - 0

15.2.1 Review of Decisions Reached

No formal decisions reached.

15.2.2 Formal Vote on Resolutions

None.

15.2.3 Review of Action Items

ACTION: Tom Plum will communicate our discussion of WG21 Core Working Group Issue 268 to that group. DONE

ACTION - Convenor to look at generating a cross reference of DR #s to TC changes in the Standard.

ACTION - Convenor and PJ to come up with words to add to Rationale addressing issue #3 in N1094.

ACTION - Nick Stoughton to produce a proposal for additional functions to be considered as possible additions to WDTR 24731.

ACTION - Randy to produce a new WDTR in time for an editorial meeting that also incorporates the discussions held to date.

ACTION - Editorial Committee review N1114 prior to sending up to SC22 (Hedquist, Meyers).

ACTION - Convenor to send disposition of comments for WDTR24731 to SC 22 after review by editorial committee.

ACTION - Convenor to establish a liaison with the SC22 POSIX Advisory Group.

15.2.4 Thanks to Host - Thank you Standards Norway.

Thanks to Dinkumware for the network support.

Thanks to DKUUG for providing the projector.

Thanks to Chris Walker for making the run into town to obtain the much needed electrical adapters.

Thanks to Chris Walker and Keld Simonsen for setting up and making sure the network was functional.

15.3 Other Business

None.

16. Adjournment

Adjourned at 11:00 am, 8 April, 2005

MOTION: (Plauger, Hedquist). Passed, unanimous consent

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Minutes for the INCITS/J11 U.S. TAG Meeting, Wednesday April 6th at 16:15

Attendees:

John Benito	Blue Pilot	USA	
Barry Hedquist	Perennial	USA	
Fred Tydeman	Tydeman Consulting		USA
David Keaton	self	USA	
Cecilia Galvan	Metrowerks	USA	
P. J. Plauger	Dinkumware, Ltd	USA	
Tana L. Plauger	Dinkumware, Ltd	USA	
Randy Meyers	Silverhill Systems	USA	J11 Chair
Dan Gohman	Cray	USA	
Douglas Walls	Sun Microsystems	USA	J11 IR
Francis Glassborow	Plum Hall	USA	
Mark Terrel	Cisco	USA	
John Parks	Intel	USA	
Robert C. Seacord	SEI/CMU	USA	
Herb Sutter	Microsoft	USA	
Nick Stoughton	USENIX	USA	
Edison Kwok	IBM	USA	

Meeting Started at 4:30 pm, 4/6/2005.

Meeting Chair: Randy Meyers, J11 Chair, Not Voting

Meeting Secretary: Barry Hedquist, Perennial

1. Proposal to SC22 Future Directions Study Group (N1109)

This document was reviewed. No action by J11 is needed.

2. 2005 Five-Year Maintenance Review of Programming Language C

The committee agreed that the existing C Standard should be reaffirmed.

Motion (Sutter, Stoughton):

J11 recommends the reaffirmation of the current C language standard:
INCITS/ISO/IEC 9899:1999 [2000]

Roll Call Vote:

John Benito	Blue Pilot	YES	
Barry Hedquist	Perennial	YES	
Fred Tydeman	Tydeman Consulting		YES
David Keaton	self	YES	
Cecilia Galvan	Metrowerks	YES	
P. J. Plauger	Dinkumware, Ltd	YES	
Dan Gohman	Cray	YES	
Douglas Walls	Sun Microsystems	YES	
Francis Glassborow	Plum Hall	YES	
John Parks	Intel	YES	
Herb Sutter	Microsoft	YES	
Nick Stoughton	USENIX	YES	
Edison Kwok	IBM	YES	

PASSES (13,0,0,18)

3. INCITS official designated member/alternate information.

Be sure to let INCITS know if designated member or alternate changes, or if their email address changes. Send contact info to Lynn Barra at ITI, lbarra@itic.org.

4. Announcement: Douglas Walls has been reappointed as IR for three years starting in May 2005.

5. Restoration of voting rights for HP. Voting rights have not yet expired, but will at the end of this meeting. If HP requests they be restored, we will address it at the next meeting.

6. J11 Web Site Maintenance. The INCITS/J11 web site seems out of date. Old annual report (2003), member list seems to be not current. Page says it was updated April 1, 2005.

7. Adjournment at 4:55 PM Motion (Hedquist , Sutter) PASSES, Unanimous Consent.