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# ISO WG21 Meeting, October 21, 2001

# **Record of Discussion**

# 1. Opening and introductions

Plum convened the meeting at 18:00 PDT. Klarer agreed to take minutes until Sutter arrived.

# 1.1 Welcome from host

# 1.2 Roll call of technical experts

Attendance:

Tom Plum	Convener	
Robert Klarer	Canada	
Herb Sutter	Canada	HOD
Georges Schumacher	France	HOD
Michiel Salters	Netherlands	HOD
Detlef Vollmann	Switzerland	HOD
Francis Glassborow	UK	HOD
Lois Goldthwaite	UK	
Andy Sawyer	UK	
Matt Austern	USA	
John Benito	USA	
Clark Nelson	USA	HOD
Bjarne Stroustrup	USA	

#### 1.3 Select meeting chair

Plum was selected as the chair.

# 1.4 Select meeting secretary

# 1.5 Select language

#### 1.6 Adopt agenda

A change to the agenda was made, as Benito will be unable to attend tomorrow's session, and will be unable to present C liaison Monday. Glassborow will present C liaison tomorrow.

An item concerning the book publication of the TC was added to the agenda.

The revised agenda was adopted.

#### 1.7 Select drafting committee

Georges Schumacher was named chair of the drafting committee, Robert Klarer and Matt Austern were also named to the drafting committee.

#### 1.8 Approve minutes from previous meeting

The minutes of the previous meeting were approved.

#### 1.9 Review action items from previous meeting

None.

#### 1.10 Recognize documents

No documents were recognized.

#### 2. Status, liaison and action item reports

#### 2.1 Small group status reports

## 2.2 Liaison Reports

#### 2.2.1 SC22 report

Plum reported that the SC22 plenary was held in Kona. Some use of teleconferencing was made for delegations that were unable to attend due to the world crisis. There was agreement to handle some issues by letter ballot that could easily have been handled at a meeting in more certain times. No controversy concerning the C++ library TR was expressed at the plenary. There was a contentious debate as to whether SC22 would reclaim from WG20 responsibility for internationalization issues.

Plum reported that our five-year anniversary is 2003, by when we have to announce our decision to revise/reaffirm/withdraw.

## 2.2.2 SC22/WG11 (Binding Techniques) report

[defer to Monday session]

## 2.2.3 SC22/WG14 (C) report

Benito reported that WG14 met last week. The meeting was hosted by Microsoft. The catering was "absolutely wonderful" and Microsoft hosted an excellent meeting. C should have a version ready for draft TR ready to submit after the April 2002 meeting. C has a total of 79 defects. A TC has been published and is available through SC22. WG14 has requested permission to make that TC publicly available. WG14 worked on the rationale and expects to publish it by year's end. Tentative meeting schedule: October 2002 - 14-18th (C) and 20th-25th (C++). This meeting will be co-hosted by Perennial and Dinkumware in Santa Cruz. April 2003 - there was a concern that it would be difficult to schedule these meetings around Easter. Tentative dates: 3/31 to 4/4 (C) and 4/7 to 4/11 (C++) ?? This meeting will be hosted by BSI in UK. October 2003 - Plum Hall has offered to host this meeting in Kona. April 2004 - Norway and Germany have expressed some interest in hosting this meeting.

Benito described the expanded liaison from WG14 (C) to WG21 (C++) and named the participants:

Raymond Mak (IBM, Canada) Jeff Muller (Oracle, USA) Douglas Walls (Sun, USA) Jan Kristofferson (Ramtex, Denmark) Francis Glassborow (self, UK) John Benito (Perennial, Convener WG14) Thomas Plum (Plum Hall, USA)

Benito mentioned that WG14 is considering undertaking a new project for adding a 16 bit character encoding. The German delegation is particularly interested in this issue.

Austern asked Benito whether WG14 had already resolved to use a variable-width encoding. Benito said that WG14 was not going to commit to any specific solution yet.

Plum noted that Denmark and a number of companies have had sessions amongst their C and C++ language experts since the issue of C and C++ compatibility was raised. Plum observed that there was general agreement that the companies wished to maintain C and C++ compatibility to a high degree.

Plum suggested in the reflectors that WG21 would do the mirror image of what the C committee had done to expanded the C liaison. Plum proposed a number of individuals to be named to the expanded liaison from  $C^{++}$  to C, as follows:

Francis Glassborow (UK) Jan Kristofferson (Ramtex, Denmark) Robert Klarer (IBM, Canada) Greg Colvin (Oracle, USA) Steve Clamage (Sun, USA) Tom Plum (Plum Hall, Convener WG21) John Benito (Perennial, USA)

Motion that the named individuals be made liaisons from WG21 to WG14.

Motion (Nelson, Goldthwaite) passed (6, 0, 0).

# 2.2.4 SC22/WG15 (POSIX) report

[defer to Monday session]

## 2.2.5 SC22/WG20 (Internationalization) report

[defer to Monday session]

3. New business

**Defect Report procedures** 

Austern presented the status of the Defect Report status. Austern reported that the TC will be available in two forms. The first of this will report only the changes that have been approved by WG21. This will be the official TC, as it will assume the form required by ISO. The technical contents of the TC will also be available in the form of a revised standard, with changes applied and identified, with both the new text and the previous text represented.

## Status of RR and TC

There was discussion on the status of the TC. Austern reported 340 DRs about half of which are defects, a few dozen are either open or not yet classified. Koenig is able to produce what ISO requires as well as what internal committee members desire. Some Working Groups and national bodies have attempted to freely distribute TCs eletronically, and whether ISO will permit this is unclear. After discussion, Plum summarized that it seemed we should give ISO only what they asked for, namely the changes, and let Koenig go on to generate the updated standard as an internally available document. Benito added that ISO also wants the DRs that relate to the TCs, as part of the RR. Plum and Nelson noted that a distinct RR is not required since the only issues that we classify as DRs are ones we intend to include in the TC.

#### Future meeting schedules

Plum had suggested that the Hawaii meeting in October 2003 would be a good time to overlap by several days with WG14.

#### Performance TR status and planning

Plum reported that there were projects that were late two years ago and keep being given "just one more year," so if the Performance TR is delayed by a few months it's not a major concern.

#### Library TR status and planning

Deferred.

## Portability-Issues TR status and planning

This was a Dutch request, which we believe was agreed to be deferred as part of the work on the next standard.

## Press release planning

We have been trying to get out a press release at each meeting for better visibility. There doesn't seem to be a burning need to say anything in particular at this time. There was inconclusive discussion.

## Future/extensions/evolution of C++

Stroustrup suggested there would be value in reestablishing something like the Extensions Working Group. Where it would be different from before is that the interesting issues are on the border of the language and the library, and whether issues are Core or Library issues. The charter would include language extensions as well as library extensions that would interact with core language features. Stroustrup has not yet communicated with the J16 chair about this, and suggested perhaps at most an hour or two meeting about this topic during this week. Plum confirmed that we are now asked by the SC22 plenary to begin the discussion about a new version of the standard, but Plum urged calling it the Evolution group until discussion comes to a point where Extensions is justified.

## 4. Review and approve resolutions and issues

#### 5. Closing process

# 5.1 Select chair for next meeting

Plum was selected.

#### 5.2 Establish next agenda

Same.

## 5.3 Future meetings

Covered.

## 5.4 Future mailings

Will be covered tomorrow.

## 5.5 Assign document numbers

None.

## 5.6 Review action items

None.

## 5.7 Any other business

Goldthwaite reported that BSI has agreed to let Wiley publish the C and C++ standards, the latter with the TC included. Wiley plans to publish both books in early 2002. Benito raised timing concerns given the time required for ISO bureaucracy to approve and publish the TC. All agreed this was a laudable goal, and discussion ensued.

## 5.8 Thanks to host

Plum thanked the host, Microsoft and Jon Caves, for a wonderfully hosted C meeting and the facilities for this week's meeting.

## 5.9 Adjournment

Meeting adjourned at 20:10 PDT.