

Accredited Standards Committee\*

## InterNational Committee for Information Technology Standards (INCITS)

**Doc. No.:** T10/04-216r0

**Date:** July 19, 2004

**Reply to:** John Lohmeyer

To: T10 Membership  
From: Ralph Weber / John Lohmeyer  
Subject: Minutes of T10 Plenary Meeting #62 -- July 15, 2004  
Colorado Springs, CO

### Agenda

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4. Approval of Minutes - May 2004 Meeting - Seaside, CA (T10/04-135r1)
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  - 8.10 Automation/Drive Interface - Transport Protocol (ADT) {Project 1557-D} [Entzel]
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  - 8.12 SCSI Enclosure Services - 2 (SES-2) {Project 1559-D} [Elliott]
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- 11.2.1 NWIP for SAS-1.1 (04-126) [Elliott]
  - 11.2.2 FDIS Ballot for FDIS 14776-220: IT - Small Computer System Interface - Part 220: Fibre Channel Protocol for SCSI, Second Version (FCP-2)
  - 11.2.3 FCD SMC 1.25.13.11.13: 14776-351 recommendation
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- 12. Liaison Reports
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    - 12.5 SCSI Trade Association (STA) [Czekalski]
    - 12.6 IETF SCSI over IP [Black/Robinson]
    - 12.7 SNIA [Cummings]
    - 12.8 SATA II [Cox/open]
    - 12.9 Trusted Computing Group [Fitzpatrick]
  - 13. Review of Action Items
  - 14. Meeting Schedule
    - 14.1 Authorization of Working Group Meetings
  - 15. Adjournment

## Results of Meeting

### 1. Opening Remarks

John Lohmeyer, the T10 Chair, called the meeting to order at 9:00 a.m., Thursday July 15, 2004. He thanked LSI Logic for hosting the meeting.

John said that INCITS subgroup membership forms and the T10 document subscription forms are available on the meeting web site. He said that people should use these forms to ensure the INCITS Secretariat has the latest membership information. These forms should be mailed directly to the INCITS Secretariat.

As is customary, the people attending introduced themselves. Attendance was taken electronically via the meeting web site.

### 2. Approval of Agenda

No additions/changes were made to the draft agenda.

John Lohmeyer moved and Ralph Weber seconded that the agenda be approved. In the absence of any objections, the motion passed unanimously.

The following items were added/revised during the course of the meeting:

- 11.2.3 FCD SMC 1.25.13.11.13: 14776-351 recommendation
- 11.2.4 NWIP, SCSI Block Commands-2, 14776-322, SBC-2

### 3. Attendance and Membership

The membership requirements were reviewed. INCITS rules permit one vote per organization. An individual from a new organization must attend two out of three consecutive plenary meetings. He/she may apply for voting member-

ship the second meeting via a letter to the Chair of T10. The individual may begin voting at the beginning of his/her second meeting.

To maintain membership, organizations must pay the INCITS Service Fee (\$800).

John briefly discussed the mailing fees. Complete pricing information is contained in the 2004 membership form (available at [ftp://ftp.t10.org/t10/mem\\_form.txt](ftp://ftp.t10.org/t10/mem_form.txt)).

There are also minimum attendance requirements to maintain voting membership on T10. If a member organization fails to attend two of the last three T10 meetings, they are warned that failing to attend the next T10 meeting would result in their membership being terminated.

The Chair said he had sent letters to 5 people from 3 organizations informing them that their membership was in jeopardy due to non-attendance (see 04-161r0) and that their membership would be terminated if they did not attend this meeting. The following organizations were in attendance jeopardy:

Cisco Systems, Inc.  
Hitachi Cable Manchester  
Storage Technology Corp.

All the organizations in attendance jeopardy were present.

Had any of the organizations in jeopardy failed to attend the meeting, the members from that organization would have had their membership changed to non-voting status.

The following organizations became voting members of T10 at this meeting:

PMC-Sierra  
Foxconn

The T10 membership during the meeting was 41 organizations up from the 39 member organizations prior to the meeting. Enclosure (1) is the list of the people present at the meeting and enclosure (2) is the current T10 membership list.

John Lohmeyer reminded members that failure to vote on two out of the last three Letter Ballots also would result in membership jeopardy and then noted that no organizations are currently in Letter Ballot jeopardy.

#### **4. Approval of Minutes - May 2004 Meeting - Seaside, CA (T10/04-135r1)**

John Lohmeyer moved and Ralph Weber seconded that the minutes be approved. In the absence of any objections, the motion passed unanimously.

#### **5. Document Distribution**

Members who have any problems with their mailing subscription should deal directly with Parthenia Purnell ([ppurnell@itic.org](mailto:ppurnell@itic.org)) (202) 626-5741. A subscription form is included on the meeting disk.

John Lohmeyer requested that all documents for the next mailing be uploaded to the T10 web site by 10:30 a.m. on Thursday July 22, 2004. Documents received after this time may go into a subsequent mailing.

John reminded the committee of the requirements for document submission. Since T10 meets its document retention requirements by preparing mailings, documents included in the mailing must be suitable for archiving. This means that native-format and/or Portable Document Format (PDF) electronic originals with proper identification must be submitted.

People can obtain T10 document numbers and revised T10 document numbers by filling out a web form at <http://www.t10.org/members/>. The assigned T10 document number will be sent to the requestor by e-mail. The requestor may then reply to this email, including the document to be posted as an attachment. The document will be automatically posted on the T10 web site.

T10 members can complete this entire process using their personal T10 password. John explained that members who do not know their password should surf to the above URL and click on the "forgot password" link to have their password sent to them via e-mail.

John noted that non-members can also use the above document number process, but their requests will require approval by an administrator.

Minutes are available on the T10 World Wide Web page (see below), and are distributed to the T10 Reflector.

To be added to the T10 Reflector, send an e-mail to [majordomo@t10.org](mailto:majordomo@t10.org) with the line 'subscribe t10' in the message body.

The INCITS Secretariat maintains a World Wide Web page at:

<http://www.incits.org/>.

LSI Logic maintains a web site on behalf of T10 on a server donated by the SCSI Trade Association at:

<http://www.t10.org/>

There is also a mirror site at:

<http://www.t11.org/t10/>

The T10 document register is available at:

<ftp://ftp.t10.org/t10/dr.txt>

## **6. Call for Patents**

John Lohmeyer explained that this is a regular agenda item to identify any potential patent issues with developing standards and technical reports.

A document is available from ANSI, "Procedures for the Development and Coordination of American National Standards", at no charge. This document is also on the WWW at [http://www.incits.org/help/ansi\\_sdo.html](http://www.incits.org/help/ansi_sdo.html). Section 1.2.11 contains the ANSI patent policy. Amy Marasco manages patent issues for ANSI and can be contacted at [amarasco@ansi.org](mailto:amarasco@ansi.org) or 212-642-4954. Gene Milligan prepared a useful "Handy dandy Technical Committee's Patents Guide", which is available at <ftp://ftp.t10.org/t10/document.99/99-291r0.pdf>.

John Lohmeyer presented a summary of the ANSI patent policy prepared by Gary Robinson. The summary is also included on the Rules and Procedures (plus Patent Information) page on the T10 web site.

Bob Sheffield reminded the committee that a statement of the Intel patent policy can be found in T10/01-041r0.

John asked that anyone who knows of other applicable patents to contact him.

George Penokie noted that he had posted "IBM Patent Licensing Position for the INCITS T10 Committee on OSD" (04-227).

There were no other responses to the call for patents other than those mentioned above.

## 7. Review of Old Action Items

- 545 David Black will ensure that RFCs are written defining URLs for SNMP, CIM over HTTP/HTTPS, and SSH. *Carryover*
- 571 Gary Robinson will notify the JTC1/SC25 TAG that T10 has reviewed project 1.25.13.11.13: FCD 14776-351: SCSI SMC, and recommends that the JTC1/SC25 TAG vote to approve said FCD. *Carryover*
- 572 After the T10 Letter Ballot on SBC-2 has closed, Gary Robinson will inform the JTC1/SC25 TAG that T10 has reviewed the new work item proposal, and recommends the NWIP for SBC-2 (T10/04-125r0) as a US contribution to JTC1/SC25 and to approve the NP to be issued by SC25, answering the 6 questions 'Yes' and naming Gary S. Robinson as project editor. *Carryover*

## 8. Project Status Reports

### 8.1 Project Status Summary and INCITS Liaison [Lohmeyer]

John Lohmeyer said that the current T10 project status summary was included on the meeting web site and will be included in the mailing as usual.

Terry Nelson reported that the INCITS procedures group is reviewing the T10 procedures document. John noted that the procedures were reviewed several years ago when they were originally developed.

#### 8.1.1 INCITS Antitrust Guidelines

All T10 members should be aware of the INCITS antitrust guidelines available at <http://www.incits.org/natrust.htm>.

John reminded committee members that all persons present at a T10 meeting is responsible for identifying potential violations of the antitrust guidelines and reporting them to the chair. Discussions of the following topics are considered sensitive:

- \* Any company's prices or pricing policies;
- \* Specific R&D, sales and marketing plans;
- \* Any company's confidential product, product development or production strategies;
- \* Whether certain suppliers or customers will be served;
- \* Prices paid to input sources; or
- \* Complaints about individual firms or other actions that might tend to hinder a competitor in any market.

### 8.2 Object-based Storage Devices Commands (OSD) {Project 1355-D} [Weber]

Ralph Weber reported that comments resolution on the OSD letter ballot is complete and that the CAP working group has recommended accepting the resolution 7:1:2. The completed comments resolution documents are 04-108r5 (04-108r4 as revised), 04-095r4, 04-189r2, and 04-193r5 (r4 as revised).

Ralph Weber moved that documents 04-108r5, 04-095r4, 04-189r2, and 04-193r5 be accepted as resolving the OSD letter ballot comments, that the OSD editor be instructed to prepare OSD r10 reflecting the contents of the comments resolutions documents, and that the OSD r10 be forwarded to INCITS for further processing towards first public review. George Penokie seconded the motion.

In response to a question from Terry Nelson, Bob Snively explained his vote against forwarding in CAP was based on concerns that no way had been provided for incorporating corrections for problems discovered during early implementations. Bob stated that the plans to bring forward an OSD-2 new project proposal in September satisfies his concerns and that he will be voting in favor of the motion.

The motion passed on a two-thirds vote of 27:0:0:14=41.

David Black was unable to attend, but sent John Lohmeyer an e-mail message requesting that, based on the successful resolution of the EMC letter ballot comments, his No vote on the letter ballot be changed to a Yes.

Based on the successful resolution of the ENDL Texas letter ballot comments, Ralph Weber asked that his No vote on the letter ballot be changed to a Yes.

Based on the successful resolution of the IBM letter ballot comments, George Penokie asked that his No vote on the letter ballot be changed to a Yes.

Based on the successful resolution of the LSI Logic letter ballot comments, John Lohmeyer asked that his No vote on the letter ballot be changed to a Yes.

Based on the successful resolution of the Seagate Technology letter ballot comments, Gerry Houlder asked that his No vote on the letter ballot be changed to a Yes.

Based on the successful resolution of the Veritas Software letter ballot comments, Roger Cummings asked that his No vote on the letter ballot be changed to a Yes.

Ralph Weber took an action item to prepare OSD r10. John Lohmeyer took an action item to forward OSD r10 to INCITS for further processing towards first public review.

### **8.3 SCSI Medium Changer Commands - 2 (SMC-2) {Project 1383-D} [Oetting]**

Erich Oetting reported SMC-2 had run into some pre-publication snags at ANSI. The ANSI editor was unable to work with the Word Perfect for Macintosh file. Erich Oetting converted the file to Framemaker, but there were still issues with how the tables and figures were converted. Once these issues are resolved, SMC-2 will go to INCITS for approval.

### **8.4 SCSI Primary Commands - 3 (SPC-3) {Project 1416-D} [Weber]**

Ralph Weber reported that SPC-3 revision 20 will be prepared based on proposals approved by this meeting and will be posted before the next meeting but probably not in time for the mailing. The committee agreed to move the forwarding letter ballot date to September 2004.

### **8.5 SCSI Block Commands - 2 (SBC-2) {Project 1417-D} [Elliott]**

Rob Elliott reported SBC-2 revision 15 will be based on the proposals accepted at this meeting and will be posted by Monday 26 July.

Rob Elliott requested that a letter ballot be conducted on forwarding SBC-2 revision 15 to first public review.

**8.6 SCSI Serial Bus Protocol -3 (SBP-3) {Project 1467-D} [Johansson]**

John Lohmeyer reported that SBP-3 had been published as INCITS.375:2004. He congratulated Peter Johansson for his hard work and dedication.

**8.7 SCSI RDMA Protocol - 2 (SRP-2) {Project 1524-D} [Simpson]**

In the absence of Cris Simpson, no report was available. John stated that he may request that the project be withdrawn if no progress is evidenced by the November meeting.

**8.8 SCSI Management Server Commands (MSC) {Project 1528-D} [Elliott]**

Rob Elliott reported that he has accepted the position of MSC editor. He stated a plan to have revision 0 of MSC posted before the next meeting, but not in time for the mailing.

**8.9 MultiMedia Command Set - 4 (MMC-4) {Project 1545-D} [McFerrin]**

Bill McFerrin reported that MMC-4 group has encountered setbacks in resolving MMC-4 letter ballot comments. He stated that MMC-4 should be ready for forwarding in September.

**8.10 Automation/Drive Interface - Transport Protocol (ADT) {Project 1557-D} [Entzel]**

Paul Entzel reported on the activities of the ADI working group (minutes in 04-199).

**8.11 Automation/Drive Interface - Commands (ADC) {Project 1558-D} [Entzel/Wideman]**

Paul Entzel reported that the ADC letter ballot comment resolution should be completed in time for the September meeting.

Paul note that project proposals for ADT-2 and ADC-2 will be prepared for consideration in September or November.

**8.12 SCSI Enclosure Services - 2 (SES-2) {Project 1559-D} [Elliott]**

Rob Elliott reported that SES-2 revision 10 will be prepared including the proposal approved by this meeting in time for the mailing. He noted that a letter ballot should be held towards the end of the year.

**8.13 Fibre Channel Protocol - 3 (FCP-3) {Project 1560-D} [Peterson]**

Dave Peterson reported on the activities of the FCP-3 working group (minutes in 04-233).

**8.14 SCSI Architecture Model - 3 (SAM-3) {Project 1561-D} [Weber]**

Ralph Weber reported that at the start of the week about 110 comments needed input from T10 members before they could be resolved. Around 20 comments were processed by the CAP working group (minutes in 04-215). Additional comments resolution meetings are planned following this plenary meeting and again on Friday.

A revision of the comments resolution document (04-116r3) that reflects the resolutions agreed during this meeting week will be posted in time for the mailing.

**8.15 Serial Attached SCSI - 1.1 (SAS-1.1) {Project 1601-D} [Elliott]**

Rob Elliott reported that SAS-1.1 revision 5 will incorporate all the proposals approved by this meeting.

**8.16 SCSI Stream Commands - 3 (SSC-3) {Project 1611-D} [Peterson]**

Dave Peterson reported on the activities of the SSC-3 working group (minutes in 04-232).

**8.17 MultiMedia Command Set - 5 (MMC-5) {Project 1675-D} [McFerrin]**

Bill McFerrin reported that MMC-5 has received several presentations on new device types to be included. He expressed confidence in the prospects for timely completion of MMC-5 based on the bounds already placed on MMC-5 inputs. He noted that one MMC-4 media type is already obsolete in MMC-4, owing to the rate at which the technology changes.

**8.18 SCSI Architecture Model - 4 (SAM-4) {Project 1683-D} [Penokie]**

George Penokie reported that work on the UML diagrams for SAM-4 continues in the CAP working group (minutes in 04-215) and that there will be no revisions of SAM-4 until the SAM-3 Letter Ballot resolution is finished.

**9. Old Business**

There was no old business.

**10. New Business****10.1 Project Proposal for SCSI to ATA Translation (SAT) Standard (04-174) [Sheffield]**

Bob Sheffield presented the SAT project proposal, 04-174r3. Bob Sheffield moved that 04-174r3 be approved as a new project proposal for SCSI / ATA Translation (SAT). Mark Evans seconded the motion.

The motion passed on a two-thirds vote of 26:0:1:14=41.

John Lohmeyer took an action item to forward 04-174r3 to INCITS for further processing as a new project proposal for SAT.

**10.2 Actions on SAS Protocol Working Group Recommendations**

The recommendations from the SAS-1.1 working group (minutes in 04-214) were presented to the committee.

George Penokie reviewed the following proposals recommended for inclusion in SAS-1.1:

- 04-029r4 (Close Port Selector Detection Gap) [Sheffield]
- 04-030r4 (Fix SP Hang States) [Sheffield]
- 04-115r2 (SAS-1.1 Miscellaneous changes) [Elliott]
- 04-137r2 (ST\_T (transport layer for SSP target ports) state machines) [Evans]
- 04-170r1 (Number of Pad Bytes Fix) [Penokie]
- 04-165r0 (SMP functions for SGPIO) [Elliott]
- 04-168r1 (RRDY and CREDIT\_BLOCKED clarifications) [Elliott]
- 04-175r2 (REPORT MANUFACTURER INFORMATION changes) [Elliott]
- 04-183r1 (BROADCAST (CHANGE) on virtual phy resets) [Elliott]

Rob Elliott moved that 04-029r4, 04-030r4, 04-115r2, 04-137r2, 04-170r1, 04-165r0, 04-168r1, 04-175r2, and 04-183r1 be approved for inclusion in SAS-1.1. Bob Sheffield seconded the motion. The motion passed on a vote of 25:0:4:12=41.



### 10.3 Actions on SAS PHY Working Group Recommendations

The recommendations from the SAS PHY working group (minutes in 04-225) were presented to the committee.

George Penokie reviewed the following proposals recommended for inclusion in SAS-1.1:

- 04-131r1 (Miscellaneous physical layer changes) [Elliott]
- 04-177r2 (1.5 Gbit OOB requirements) [Penokie]
- 04-150r3 (TCTF update) [Cox]

Alvin Cox moved that 04-131r1, 04-177r2, and 04-150r3 be approved for inclusion in SAS-1.1. Rob Elliott seconded the motion. The motion passed on a vote of 25:0:4:12=41.

### 10.4 Actions on CAP Working Group Recommendations

The recommendations from the CAP working group (minutes in 04-215) were presented to the committee.

George Penokie reviewed the following proposals recommended for inclusion in SPC-3:

- 04-141r3 (Allowing only Task Management Functions through ACA) [Penokie]
- 03-337r7 (SPC-3 Third party persistent reservations) [Penokie]
- CAP minutes (04-215) (Identify A2h for TRUSTED COMPUTING IN B5h for TRUSTED COMPUTING OUT) [Weber]
- 04-211r1 (WORM support for streaming devices ASC/ASCQ) [Banther]
- 04-213r1 (TEST UNIT READY reservations correction) [Elliott]
- CAP minutes (04-215) (Mark device types 0Ah and 0Bh Obsolete) [Elliott]

Rob Elliott moved that 04-141r3, 03-337r7, 04-211r1, 04-213r1, and the obsolete device type changes shown in the CAP minutes (04-215) be approved for inclusion in SPC-3. Roger Cummings seconded the motion. The motion passed on a vote of 25:0:2:14=41.

Ralph Weber moved that the TRUSTED COMPUTING IN/OUT operation code definitions shown in the CAP minutes (04-215) be approved for inclusion in SPC-3. Gerry Houlder seconded the motion. The motion passed on a vote of 19:1:9:12=41.

George Penokie reviewed the following proposals recommended for inclusion in SPC-3 and SBC-2:

- 04-031r3 (Miscellaneous diagnostic page topics) [Elliott]
- 04-011r5 (Changing Logical Block Sizes) [Penokie]
- 04-169r3 (Protection Information Fixes) [Penokie]

George Penokie moved that 04-031r3, 04-011r5, and 04-169r3 be approved for inclusion in SPC-3, SBC-2, and SMC-2 (for 04-031r3 only). Rob Elliott seconded the motion. The motion passed on a vote of 25:0:4:12=41.

George Penokie reviewed the following proposals recommended for inclusion in SBC-2:

- 04-171r1 (Make FORMAT UNIT operating modes optional) [Elliott]
- 04-164r1 (Defect descriptor wording corrections) [Elliott]
- 04-176r0 (New CRC figure and example C code) [Elliott]
- 04-192r0 (Commands during format operation) [Elliott]
- CAP minutes (04-215) (Change the non-volatile cache log page code to 17h) [Weber]
- 04-184r1 (Read Long clarification) [Houlder]

Rob Elliott moved that 04-171r1, 04-164r1, 04-176r0, 04-192r0, 04-184r1, and the log page code change shown in the CAP minutes (04-215) be approved for inclusion in SBC-2. Bill Galloway seconded the motion. The motion passed on a vote of 25:0:4:12=41.

## 10.5 Actions on Other Working Group Recommendations

The recommendations from the FCP-3 working group (minutes in 04-233) were presented to the committee.

Dave Peterson reviewed 04-154r1 (Incorrect Logical Unit Number for task management) [Elliott] a proposal recommended for inclusion in FCP-3.

Rob Elliott moved that 04-154r1 be approved for inclusion in FCP-3. Dave Peterson seconded the motion. The motion passed on a vote of 25:0:4:12=41.

## 11. ISO/IEC

### 11.1 ISO/IEC Report [Robinson]

In the absence of Gary Robinson, John Lohmeyer presented the ISO/IEC report (04-210).

He noted that Gary had recently uploaded the following documents from the SC 25/WG 4 meeting in Chitose, Japan:

SC25/WG4Chi007 Attendance List (04-206r0) [Robinson]  
 SC25/WG4Chi008 Project Status (04-207r0) [Robinson]  
 SC25/WG4Chi009 Meeting Report (04-208r0) [Robinson]  
 SC25/WG4Chi010 Draft Resolutions (04-209r0) [Robinson]

Bob Snively, who also attended the Chitose meeting, added some personal praise on the excellent hospitality of the host.

### 11.2 ISO/IEC Business [Robinson]

#### 11.2.1 NWIP for SAS-1.1 (04-126) [Elliott]

Gary Robinson requested by email that this item be deferred to the next meeting.

#### 11.2.2 FDIS Ballot for FDIS 14776-220: IT - Small Computer System Interface - Part 220: Fibre Channel Protocol for SCSI, Second Version (FCP-2)

John Lohmeyer moved to report that T10 has reviewed FDIS 14776-220: IT - Small Computer System Interface - Part 220: Fibre Channel Protocol for SCSI, Second Version (FCP-2) and recommends that the JTC1/SC25 TAG vote to approve said FDIS. Dave Peterson seconded the motion.

The motion passed with a roll call vote of 31:0:0:10=41. Details of the roll call vote are as follows:

Organization	Voter	Vote
Adaptec, Inc.	Tim Symons	Yes
Agilent Technologies	Niels Reimers	Yes
Amphenol Interconnect		(not present)
Brocade	Robert Snively	Yes
Cisco Systems, Inc.	Claudio DeSanti	Yes
CNT	David Peterson	Yes

Crossroads Systems, Inc.		(not present)
Dallas Semiconductor	Doug Cole	Yes
Dell, Inc.	Kevin Marks	Yes
Dot Hill Systems Corp		(not present)
EMC Corp.		(not present)
Emulex	Robert H. Nixon	Yes
ENDL	Ralph O. Weber	Yes
FCI	Douglas Wagner	Yes
Foxconn Electronics	Elwood Parsons	Yes
Fujitsu		(not present)
General Dynamics		(not present)
Hewlett Packard Co.	Rob Elliott	Yes
Hitachi Cable Manchester	Mike Guzman	Yes
Hitachi Global Storage Tech.	Dan Colegrove	Yes
IBM Corp.	George O. Penokie	Yes
Intel Corp.	Robert Sheffield	Yes
Iomega Corp.	David Hawks	Yes
LSI Logic Corp.	John Lohmeyer	Yes
Madison Cable Corp.		(not present)
Maxtor Corp.	Mark Evans	Yes
Microsoft Corp.	Emily Hill	Yes
Molex Inc.	Jerry Kachlic	Yes
Panasonic Technologies, Inc	Terence J. Nelson	Yes
Philips Electronics	William P. McFerrin	Yes
Pivot3, Inc.		(not present)
PMC-Sierra	Bill Lye	Yes
QLogic Corp.		(not present)
Quantum Corp.	Paul Entzel	Yes
Seagate Technology	Gerald Houlder	Yes
Storage Technology Corp.	Erich Oetting	Yes
Sun Microsystems, Inc.	Vit Novak	Yes
Texas Instruments	Robert Kando	Yes
Toshiba	Yutaka Arakawa	Yes
UNISYS		(not present)
Veritas Software	Roger Cummings	Yes

This two-thirds roll call vote passed (31:0:0:10=41).

John Lohmeyer took an action item to communicate the recommendation to approve FDIS 14776-220 to INCITS today.

### 11.2.3 FCD SMC 1.25.13.11.13: 14776-351 recommendation

John Lohmeyer moved to report that T10 has reviewed project ISO/IEC FCD SMC 1.25.13.11.13: 14776-351, and recommends that the JTC1/SC25 TAG vote to approve said FCD. Erich Oetting seconded the motion.

The motion passed with a roll call vote of 31:0:0:10=41. Details of the roll call vote were identical to those in agenda item 11.2.2.

John Lohmeyer took an action item to communicate the recommendation to approve FCD SMC 1.25.13.11.13: 14776-351 to INCITS.

### 11.2.4 NWIP, SCSI Block Commands-2, 14776-322, SBC-2

John Lohmeyer moved approve the NWIP, SCSI Block Commands-2, 14776-322, SBC-2 (T10/04-125r0) as a US contribution to JTC1/SC25 and to approve the NP to be issued by SC25, answering the 6 questions 'Yes' and naming Gary S. Robinson as project editor. Rob Elliott seconded the motion.

The motion passed with a roll call vote of 31:0:0:10=41. Details of the roll call vote were identical to those in agenda item 11.2.2.

John Lohmeyer took an action item to forward 04-125r0, an ISO NWIP for SBC-2, to INCITS.

## **12. Liaison Reports**

### **12.1 T11 Liaison Report [Snively]**

Bob Snively presented the T11 liaison report contained in T10/04-223r0.

### **12.2 T13 Liaison Report [Colegrove]**

Dan Colegrove provided an oral report to the committee on the activities of T13. For details regarding T13 activities see [www.t13.org](http://www.t13.org).

### **12.3 SFF Industry Group [Allan]**

In the absence of Dal Allan no report was available.

### **12.4 IEEE 1394 [Johansson]**

In the absence of Peter Johansson, no report was available.

### **12.5 SCSI Trade Association (STA) [Czekalski]**

Marty Czekalski provided an electronic report on the activities of the SCSI Trade Association. The report is available in 04-234r0.

### **12.6 IETF SCSI over IP [Black/Robinson]**

Roger Cummings reported that the SCSI MIB is going to be the subject of an All IETF Last Call within the next month.

### **12.7 SNIA [Cummings]**

Roger Cummings provided an electronic report in 04-235r0 that was displayed for the committee to review.

### **12.8 SATA II [Cox/open]**

The SATA II group has not yet designated an official liaison to T10.

Alvin Cox reported that SATA II phy has been posted publicly, meaning that work can begin on the SAS-1.1 phy changes for 3 Gbs support.

### **12.9 Trusted Computing Group [Fitzpatrick]**

In the absence of Mike Fitzpatrick, no report was available.

### 13. Review of Action Items

- 545 David Black will ensure that RFCs are written defining URLs for SNMP, CIM over HTTP/HTTPS, and SSH.
- 571 Gary Robinson will notify the JTC1/SC25 TAG that T10 has reviewed project 1.25.13.11.13: FCD 14776-351: SCSI SMC, and recommends that the JTC1/SC25 TAG vote to approve said FCD.
- 572 After the T10 Letter Ballot on SBC-2 has closed, Gary Robinson will inform the JTC1/SC25 TAG that T10 has reviewed the new work item proposal, and recommends the NWIP for SBC-2 (T10/04-125r0) as a US contribution to JTC1/SC25 and to approve the NP to be issued by SC25, answering the 6 questions 'Yes' and naming Gary S. Robinson as project editor.
- 573 Ralph Weber will prepare OSD r10.
- 574 John Lohmeyer will forward OSD r10 to INCITS for further processing towards first public review.
- 575 John Lohmeyer will forward 04-174r2 to INCITS for further processing as a new project proposal for SAT.
- 576 John Lohmeyer will communicate the recommendation to approve FDIS 14776-220 to INCITS today.
- 577 John Lohmeyer will communicate the recommendation to approve FCD SMC 1.25.13.11.13: 14776-351 to INCITS.
- 578 John Lohmeyer will forward 04-125r0, an ISO NWIP for SBC-2, to INCITS.

### 14. Meeting Schedule

The next plenary meeting of T10 will be Thursday September 16, 2004 in Nashua, NH at the Crowne Plaza Hotel (603-886-1200), hosted by Hitachi Cable Manchester. The meeting will begin at 9:00 a.m. on Thursday.

The meeting list for the next plenary week is:

September 2004 Meeting Map  
(2004/07/15 Version)

Monday 9/13	9	10	11	12	1	2	3	4	5	6	7	8	
	+-----+												
	ADI WG											(10)	
	+-----+												
	SAS Protocol WG											(40)	
	+-----+												
Tuesday 9/14	8	9	10	11	12	1	2	3	4	5	6	7	8
	+-----+												
	SAS Physical WG												(25)
	+-----+												
	SCSI/ATA Trans SG   CAP WG											(40)	
	+-----+												
	ADI WG   FCP-3 WG   STA Marcom *											(20)	
	+-----+												
	T11.5 FAIS WG											(30)	
	+-----+												
Wednesday 9/15	9	10	11	12	1	2	3	4	5	6	7	8	
	+-----+												
	CAP WG												(40)
	+-----+												
	MMC WG												(25)
	+-----+												
	SSC-3											SFF	(30)
	+-----+												
	STA Plenary * /Adm*/ TCC*											(20)	
	+-----+												
	T11.3 FC-SP WG											(20)	
	+-----+												
Thursday 9/16	8	9	10	11	12	1	2	3	4	5	6	7	8
	+-----+												
	T10 Plenary											LB cmnt resolution	(45/15)
	+-----+												
	FCIA Board Meeting *											(12)	
	+-----+												
Friday 9/17	8	9	10	11	12	1	2	3	4	5	6	7	8
	+-----+												
	LB resolution											(15)	
	+-----+												

Meetings marked with == are T10-authorized meetings.  
 Meetings marked with -- are other groups and may change without notice.  
 Meetings marked with (\*) are closed meetings of other groups.

Other T10-authorized meetings:

Meeting	Date	Location / Contact
ADI Calls	TBD	To be announced via T10 reflector
MSC Call	TBD	To be announced via T10 reflector
SAS PHY Calls	Bi-weekly	TBA via T10 reflector / Cox
SAT Call	TBD	TBA via T10 reflector / Sheffield

## Map Abbreviation Key:

ADI: Automation Drive Interface (tape library interface)  
 Amnd: Amendment  
 CAP: Commands, Architecture, and Protocols  
 Fast-80: Data Transfer at 80 Mega-transfers/sec. (a.k.a., Ultra3,Ultra160)  
 Fast-160: Data Transfer at 160 Mega-transfers/sec. (a.k.a., Ultra320)  
 FC: Fibre Channel  
 I/F: Interface  
 IETF: Internet Engineering Task Force (the group that sets Internet standards)  
 iFC: Internet Fibre Channel  
 IPS: Internet Protocol SCSI  
 iSCSI: Internet SCSI  
 LB: Letter Ballot  
 MMC: Multimedia Commands (CD-ROM, DVD, etc.)  
 OSD: Object-based Storage Device  
 Par.: Parallel (e.g., SPI-n)  
 PH or PHY: Physical (Connectors, Cables, Transceivers, etc.)  
 PIP: (SCSI) Passive Interconnect Performance  
 Plenary: Full Committee Meeting  
 Res: Resolution  
 SAS: Serial Attached SCSI  
 SBC-2: SCSI Block Commands - 2  
 SBP-3: Serial Bus Protocol - 3  
 SCSI: Small Computer System Interface  
 SES: SCSI Enclosure Services  
 SFF: SFF Industry Group (not an INCITS activity)  
 SG: Study Group  
 SMC-2: SCSI Medium Changer - 2 Commands  
 SPC-3: SCSI Primary Commands - 2 (3rd generation)  
 SPI-4: Fourth Generation SCSI Parallel Interface  
 SPI-5: Fifth Generation SCSI Parallel Interface  
 SRP: SCSI RDMA Protocol (was SVP)  
 SRP-2: SCSI RDMA Protocol (2nd generation)  
 SSC-2: SCSI Stream Commands - 2 (includes Tape)  
 SSM-2: SCSI Signal Modeling (2nd generation)  
 SSWGs: Specific-Subject Working Groups  
 STA: SCSI Trade Association (Closed meeting -- not an INCITS activity)  
 STA Marcom: STA Marketing Communications (Closed meeting -- not an INCITS activity)  
 STA Tech: STA Technical Meeting (T10 members invited)  
 STP: Serial ATA Tunneled Protocol  
 T10: SCSI Storage Interfaces Technical Committee  
 T11: Device Level Interfaces Technical Committee  
 WG: Working Group (same as Ad Hoc Group)

For more information about T10 activities, please contact the following people:

Activity	Contact	Telephone/Email
ADT	Paul Entzel	(720) 406-5782 paul.entzel@quantum.com
ADC	Rod Wideman	(720) 249-5796 rod.wideman@adic.com
SBC-2, SES-2, SAS-1.1, MSC	Rob Elliott	(281) 518-5037 Elliott@hp.com
MMC-4, MMC-5	Bill McFerrin	(325) 423-1560 billmc@tstar.net
SBP-3	Peter Johansson	(510) 527-3926 PJohansson@ACM.org
SAM-4	George Penokie	(507) 253-5208 gpenokie@tivoli.com
SMC-2	Erich Oetting	(303) 673-2178 Erich_Oetting@Stortek.com
SPC-3, SAM-2, SAM-3, OSD	Ralph Weber	(214) 912-1373 roweber@acm.org
SSC-3, FCP-3	Dave Peterson	(763) 268-6139 david_peterson@cnt.com
SRP-2	Cris Simpson	(503) 712-4333 cris.simpson@intel.com
Other Activities	John Lohmeyer	(719) 533-7560 lohmeier@t10.org

The long-term T10 meeting week schedule is:

Date	Location	Host/Comments
Sep 13-17, 2004	Nashua, NH	Hitachi Cable
Nov 8-12, 2004	Austin, TX	Crossroads
Jan 17-21, 2005	Las Vegas, NV	Hitachi GST
Mar 7-11, 2005	Dana Point, CA	QLogic
May 2-6, 2005	Oklahoma City, OK	Fujitsu
Jul 11-15, 2005	Colorado Springs, CO	LSI Logic
Sep 12-16, 2005	Vancouver, BC	PMC Sierra
Nov 7-11, 2005	Austin, TX	Crossroads
Proposed dates for 2006:		
Jan 9-13, 2006		
Mar 6-10, 2006		
May 8-12, 2006		
Jul 10-14, 2006		
Sep 11-15, 2006		
Nov 6-10, 2006		

John Lohmeyer moved that the 2006 dates in the above list be approved. Mark Evans seconded the motion. The motion passed 30:0:0:11=41.

John Lohmeyer asked people interested hosting one of the meetings in 2006 to contact him.

#### 14.1 Authorization of Working Group Meetings

John noted that the working group meetings are required to operate under the same voting procedures as does T10 (that is, one vote per organization) and the results of a working group are not binding on the parent committee. Ad hoc groups should strive to achieve consensus prior to bringing issues to T10.



Erich Oetting moved that T10 authorize the T10-related meetings and events in the list above that had not previously been approved through the end of August 2004. Bob Nixon seconded the motion. In the absence of any objections, the motion passed unanimously.

## **15. Adjournment**

John Lohmeyer moved and Ralph Weber seconded that the meeting be adjourned. In the absence of any objections, the motion passed unanimously. The meeting was adjourned at 10:45 a.m. on Thursday July 15, 2004.

**Enclosure(1) -- Meeting Attendees**

Name	S	Organization	Electronic Mail Address
Mr. Tim Symons	P	Adaptec, Inc.	Timothy_Symons at adaptec dot com
Mr. Niels Reimers	A	Agilent Technologies	niels_reimers at agilent dot com
Mr. Robert Snively	P	Brocade Comm. Systems, Inc.	rsnively at brocade dot com
Dr. Claudio DeSanti	P	Cisco Systems, Inc.	cds at cisco dot com
Mr. David Peterson	P	CNT	david_peterson at cnt dot com
Mr. Doug Cole	A	Dallas Semiconductor	doug dot cole at dalsemi dot com
Mr. Kevin Marks	P	Dell, Inc.	kevin_marks at dell dot com
Mr. Robert H. Nixon	P	Emulex	bob dot nixon at emulex dot com
Mr. Ralph O. Weber	P	ENDL Texas	roweber at ieee dot org
Mr. Douglas Wagner	P	FCI	dwagner at fciconnect dot com
Mr. Elwood Parsons	P	Foxconn Electronics	elwood dot parsons at foxconn dot com
Mr. Rob Elliott	P	Hewlett Packard Co.	Elliott at hp dot com
Mr. Mike Guzman	A	Hitachi Cable Manchester	mguzman at hcm dot hitachi dot com
Mr. Dan Colegrove	P	Hitachi Global Storage Tech.	daniel dot colegrove at hgst dot com
Mr. Werner Glinka	A	Hitachi Global Storage Tech.	werner dot glinka at attglobal dot net
Mr. George O. Penokie	P	IBM / Tivoli Systems	gop at us dot ibm dot com
Mr. Robert Sheffield	P	Intel Corp.	robert dot l dot sheffield at intel dot com
Mr. David Hawks	P	Iomega Corp.	hawks at iomega dot com
Mr. Joe Breher	V	Lingua Data	joe at lingua-data dot com
Mr. John Lohmeyer	P	LSI Logic Corp.	lohmeier at t10 dot org
Mr. Martin Czekalski	A	Maxtor Corp.	marty_czekalski at maxtor dot com
Mr. Mark Evans	P	Maxtor Corp.	mark_evans at maxtor dot com
Ms. Emily Hill	P	Microsoft Corp.	emhill at microsoft dot com
Mr. Jerry Kachlic	A	Molex Inc.	jerry dot kachlic at molex dot com
Mr. Edward A. Gardner	V	Ophidian Designs	eag at ophidian dot com
Dr. Terence J. Nelson	P	Panasonic Technologies, Inc	terry at tjnelson dot com
Mr. William P. McFerrin	P	Philips Electronics/CD Edge	billmc at tstar dot net
Mr. Bill Galloway	P	Pivot3, Inc.	billg at pivot3 dot com
Mr. Bill Lye	A	PMC-Sierra	lye at pmc-sierra dot com
Mr. Craig W. Carlson	A#	QLogic Corp.	craig dot carlson at qlogic dot com
Mr. Paul Entzel	P	Quantum Corp.	paul dot entzel at quantum dot com
Mr. Alvin Cox	V	Seagate Technology	Alvin dot Cox at seagate

Mr. Gerald Houlder	P	Seagate Technology	dot com gerry dot houlder at seagate dot com
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Mr. Yutaka Arakawa	P	Toshiba	yutaka dot arakawa at tais dot toshiba dot com
Mr. Roger Cummings	P	Veritas Software	roger dot cummings at veritas dot com
Mr. Curtis Stevens	AV	Western Digital	Curtis dot Stevens at wdc dot com

39 People Present

Status Key: P - Principal  
A,A# - Alternate  
AV - Advisory Member  
L - Liaison  
V - Visitor

**Enclosure(2) -- T10 Attendance Database**

Generated on 2004/07/16 at 09:17:12

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