

Accredited Standards Committee\*

## InterNational Committee for Information Technology Standards (INCITS)

**Doc. No.:** T10/04-039r0

**Date:** January 16, 2004

**Reply to:** John Lohmeyer

To: T10 Membership  
From: Ralph Weber / John Lohmeyer  
Subject: Minutes of T10 Plenary Meeting #59 -- January 15, 2004  
Chandler, AZ

### Agenda

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- 11.2.2 FCD Ballot for FCD 14776-222: IT - Small Computer System Interface - Part 222: Fibre channel protocol for SCSI, second version (FCP-2)
- 11.2.3 FDIS Ballot for FDIS 14776-150: IT - Small Computer System Interface - Part 150: Serial Attached SCSI (SAS)
- 11.2.4 Approval of list of delegates [Robinson]
- 12. Liaison Reports
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  - 12.4 IEEE 1394 [Johansson]
  - 12.5 SCSI Trade Association (STA) [Czekalski]
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  - 12.7 SNIA [Cummings]
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- 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 January 15, 2004. He thanked Bob Sheffield of Intel 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 FDIS Ballot for FDIS 14776-150: IT - Small Computer System Interface - Part 150: Serial Attached SCSI (SAS)

### 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 12 people from 6 organizations informing them that their membership was in jeopardy due to non-attendance (see 03-375r0) and that their membership would be terminated if they did not attend this meeting. The following organizations were in attendance jeopardy:

General Dynamics  
Hitachi Cable Manchester  
Madison Cable Corp.  
Pivot3, Inc.  
Toshiba  
UNISYS Corporation

All the organizations were present at the meeting.

The members from the organizations that failed to attend would have had their membership changed to non-voting status.

No organizations joined the committee at this meeting.

John noted that Emulex had acquired Vixel since the last meeting, so the total T10 voting membership had dropped to 38 organizations.

The T10 membership during the meeting was 38 organizations unchanged from the 38 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 - November 2003 Meeting - Austin, TX (T10/03-372r0)**

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 January 20, 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.

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*
- 557 Gary Robinson will forward 03-301r0 as a US contribution to JTC1/SC25 as a NWIP for Serial Bus Protocol -3, SBP-3, 1.25.13.11.39: 14776-233. *Complete*
- 558 Gary Robinson will report to INCITS that T10 recommended approval of FCD 14776-452 SPC-2 during the September meeting (minutes in 03-306r0). The approval was under agenda item 11.2.3 and the vote was 34:0:0:7=41. The September action item was incorrectly written for an FDIS instead of an FCD. *Complete*

## 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 report that INCITS is meeting the week after next in Orlando, FL. John reported that the INCITS TC officers symposium is on April 28 in Washington, DC.

#### 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 OSD revision 9 based on comments from the SNIA TWG and T10 editing meetings will be uploaded in time for the mailing and that a Letter Ballot approving forwarding of OSD will be requested for OSD revision 9.

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

John Lohmeyer reported that SMC-2 completed Public Review on 17 November with no comments received.

However, the ED and Media Type fields were omitted from one of the tables. Erich Oetting prepared a revision 7 correcting those errors.

John Lohmeyer moved that SMC-2 revision 7, containing substantive changes, be forwarded to INCITS for second public review. Roger Cummings seconded the motion. The motion passed on a roll call vote as follows.

Organization	Voter	Vote
Adaptec, Inc.	Tim Symons	Yes
Agilent Technologies	Pat Thaler	Yes
Amphenol Interconnect	Michael Wingard	Yes
Andiamo Systems, Inc.		(not present)
Brocade	Robert Snively	Yes
Crossroads Systems, Inc.		(not present)
Dallas Semiconductor	Titkwan Hui	Yes
Dell, Inc.		(not present)
EMC Corp.	Gary S. Robinson	Yes
Emulex	Robert H. Nixon	Yes
ENDL	Ralph O. Weber	Yes
FCI	Douglas Wagner	Yes
Fujitsu	Mike Fitzpatrick	Yes
General Dynamics		(not present)
Hewlett Packard Co.	Rob Elliott	Yes
Hitachi Cable Manchester	Zane Daggett	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.	Ashlie Fan	Yes
Maxtor Corp.	Mark Evans	Yes
Microsoft Corp.	Emily Hill	Yes
Molex Inc.	Jay Neer	Yes
Panasonic Technologies, Inc	Terence J. Nelson	Yes
Philips Electronics	William P. McFerrin	Yes
Pivot3, Inc.	Bill Galloway	Yes
QLogic Corp.	Craig W. Carlson	Yes
Quantum Corp.	Paul Entzel	Yes
SBS Technologies		(not present)
Seagate Technology	Jim Coomes	Yes
Storage Technology Corp.		(not present)
Sun Microsystems, Inc.	Vit Novak	Yes
Texas Instruments	Robert Kando	Yes
Toshiba	Hiroshi Suzuki	Yes
UNISYS	Phil Shelton	Yes
Veritas Software	Roger Cummings	Yes

2/3rds vote passed (32:0:0:6=38)

John Lohmeyer took an action item to forward SMC-2 revision 7 to INCITS for processing towards second Public Review.

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

Ralph Weber reported that SPC-3 revision 17 will be prepared based on proposals approved by this meeting and will be posted before the next meeting. He stated that SPC-3 revision 17 most likely will not be available in time for the January mailing.

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

Rob Elliott reported that there will be an editing meeting for SBC-2 after this meeting. Revision 12 will incorporate proposals approved by this meeting and the results of the editing meeting and will be available in time for the mailing.

**8.6 SCSI Stream Commands - 2 (SSC-2) {Project 1434-D} [Peterson]**

John Lohmeyer reported that SSC-2 had been published as ANSI INCITS.380:2003. He congratulated Dave Peterson, the project editor.

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

John Lohmeyer reported that the second Public Review on SBP-3 closed on November 17. Peter Johansson later requested that John investigate whether additional changes would require a third Public Review. Debbie Spittle has ruled that the changes are substantive. Peter has not responded to requests from John regarding what to do next.

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

In the absence of Cris Simpson, no report was available.

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

George Penokie reported that a teleconference was held in December and another is anticipated in February. Consideration of an MSC proposal is proceeding in the CAP working group (minutes in 04-038).

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

Bill McFerrin reported on the activities of the MMC-4 working group. Several open technical issues have been resolved and worked into the draft. The working group believes that it is about time to forward MMC-4 to T10. He expects to request a Letter Ballot.

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

Paul Entzel reported on the activities of the ADI working group (minutes in 04-034). The current ADT revision is 9 and revision 10 will be prepared in the next few weeks but not in time for the mailing.

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

Paul Entzel reported that the ADC Letter Ballot resolution document is 03-385r0, with r1 anticipated in the next few weeks. Work is underway to develop a list of critical issues for discussion during the telephone conference calls and during the March meeting.

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

Rob Elliott reported on the SES-2 activities undertaken in the CAP working group (minutes in 04-038). Revision 6 will be prepared including proposals approved by this meeting and will be available in time for the mailing.

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

John Lohmeyer reported that time has been scheduled for the FCP-3 working group on Tuesday morning of the March meeting week.

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

Ralph Weber reported that revision 11 will be prepared following this meeting and will contain all proposals approved by this meeting. Revision 11 may not be available in time for the mailing.

The committee discussed holding a Letter Ballot on SAM-3 and putting the UML model in SAM-4. It was agreed that an editing meeting should be held in March preparatory to a SAM-3 Letter Ballot following the March meeting week. George Penokie noted that anyone with SAM-3 issues they should bring them to the March meeting.

Ralph Weber took an action item to prepare a project proposal for SAM-4.

#### **8.16 Serial Attached SCSI (SAS) {Project 1562-D} [Elliott]**

John Lohmeyer reported that SAS had been published as ANSI INCITS.376:2003. He congratulated Rob Elliott, the project editor.

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

Rob Elliott reported on the activities related to SAS-1.1 of the SAS Protocol working group (minutes in 04-037). Revision 3 will incorporate all the proposals approved by this meeting and will be available in time for the mailing.

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

In the absence of Dave Peterson, no report was available.

### **9. Old Business**

There was no old business.

### **10. New Business**

#### **10.1 MMC-5 Project Proposal (03-358) [McFerrin]**

Bill McFerrin moved that 03-358r0 be approved as a new project proposal for MMC-5. Bill Galloway seconded the motion. The motion passed on a two-thirds vote of 32:0:0:6=38.

John Lohmeyer took an action item to forward 03-358r0 to INCITS for further processing as a new project proposal for MMC-5.



## 10.2 Actions on SAS Protocol Working Group Recommendations

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

- 03-186r5 (SAS-1.1: Transport Layer Retries) [Elliott/Jones]
- 03-334r3 (SAS-1.1 ALIGN insertion clarifications) [Elliott]
- 04-027r1 (SAS 1.1 READY LED signal behavior) [Cox]
- 04-028r1 (SAS-1.1:Clarify phy disable in route-table initialization) [Sheffield]
- 04-036r1 (SAS-1.1:AIP clarifications and XL state transition) [Hoglund]

Rob Elliott moved that 03-186r5, 03-334r3, 04-027r1, 04-028r1, and 04-036r1 be approved for inclusion in SAS-1.1. Bill Galloway seconded the motion. The motion passed on a vote of 30:0:1:7=38.

## 10.3 Actions on CAP Working Group Recommendations

George Penokie reviewed the 03-368r2 (SAM-3 SPC-3 Status precedence) proposal recommended for inclusion in SAM-3.

Rob Elliott moved that 03-368r2 be approved for inclusion in SAM-3. Bill Galloway seconded the motion. The motion passed on a vote of 30:0:1:7=38.

George Penokie reviewed the 03-351r2 (SAM-3 SPC-3 Task Attributes VPD page) proposal recommended for inclusion in SAM-3 and SPC-3.

Rob Elliott moved that 03-351r2 be approved for inclusion in SAM-3 and SPC-3. Bill Galloway seconded the motion. The motion passed on a vote of 30:0:1:7=38.

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

- 04-043r0 (SPC-3, New ASC/ASCQ for ESI data validation checksum error) [Coomes]
- 04-022r1 (Additional Sense Code requests for OSD r09) [Weber]
- 03-316r3 (SPC-3 Mode Page Policy VPD page) [Elliott]
- 03-167r2 (SPC-3: Remove Element Reservations (AI from SMC-2)) [Butt]
- 03-232r5 (Modified Reservation Handling Proposal) [Cummings]

Rob Elliott moved that 04-043r0, 04-022r1, 03-316r3, 03-167r2, and 03-232r5 be approved for inclusion in SPC-3. Bill Galloway seconded the motion. The motion passed on a vote of 30:0:1:7=38.

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

- 04-016r2 (SBC-2, SPC-3 Obsolete Third Party XOR Commands) [Coomes]
- 04-025r0 (SPC-3 and SBC-2 power conditions clarifications) [Evans]

Mark Evans moved that 04-016r2, and 04-025r0 be approved for inclusion in SPC-3 and SBC-2. Jim Coomes seconded the motion. The motion passed on a vote of 30:0:1:7=38.

George Penokie reviewed the 04-044r0 (OSD Error Handling Model and SPC-3 Sense Data Descriptors) proposal recommended for inclusion in SPC-3 and OSD.

Ralph Weber moved that 04-044r0 be approved for inclusion in SPC-3 and OSD. Bill Galloway seconded the motion. The motion passed on a vote of 30:0:1:7=38.

George Penokie reviewed 04-007r0 (SES-2 SPC-3 Generation code for Help Text and String pages) proposal recommended for inclusion in SPC-3 and SES-2.

Ralph Weber moved that 04-007r0 be approved for inclusion in SPC-3 and SES-2. Bill Galloway seconded the motion. The motion passed on a vote of 30:0:1:7=38.

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

- 03-387r2 (SBC-2 Data protection usage detection) [Elliott]
- 04-024r1 (SBC-2 Data Protection Information for XPWRITE) [Coomes]
- 04-013r1 (SBC-2 List of Functions to Obsolete) [Penokie]

George Penokie moved that 03-387r2, 04-024r1, and 04-013r1 be approved for inclusion in SBC-2. Rob Elliott seconded the motion. The motion passed on a vote of 30:0:1:7=38.

#### 10.4 Actions on Other Working Group Recommendations

No recommendations from other working groups were brought to this meeting.

## 11. ISO/IEC

### 11.1 ISO/IEC Report [Robinson]

Gary Robinson presented the ISO/IEC report (04-040r2).

### 11.2 ISO/IEC Business [Robinson]

#### 11.2.1 T10 Recommendation on JTC 1/SC 25 FDIS 14776-115 (SPI-5)

Gary Robinson moved that T10 recommend the US national body vote be to approve JTC 1/SC 25 FDIS 14776-115 (SPI-5). John Lohmeyer seconded the motion.

The motion passed with a roll call vote as documented below:

Organization	Voter	Vote
Adapteq, Inc.	Tim Symons	Yes
Agilent Technologies	Pat Thaler	Yes
Amphenol Interconnect	Michael Wingard	Yes
Andiamo Systems, Inc.		(not present)
Brocade	Robert Snively	Yes
Crossroads Systems, Inc.		(not present)
Dallas Semiconductor	Titkwan Hui	Yes
Dell, Inc.		(not present)
EMC Corp.	Gary S. Robinson	Yes
Emulex	Robert H. Nixon	Yes
ENDL	Ralph O. Weber	Yes
FCI	Douglas Wagner	Yes
Fujitsu	Mike Fitzpatrick	Yes
General Dynamics		(not present)
Hewlett Packard Co.	Rob Elliott	Yes
Hitachi Cable Manchester	Zane Daggett	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.	Ashlie Fan	Yes

Maxtor Corp.	Mark Evans	Yes
Microsoft Corp.	Emily Hill	Yes
Molex Inc.		(not present)
Panasonic Technologies, Inc	Terence J. Nelson	Yes
Philips Electronics	William P. McFerrin	Yes
Pivot3, Inc.		(not present)
QLogic Corp.	Craig W. Carlson	Yes
Quantum Corp.	Paul Entzel	Yes
SBS Technologies		(not present)
Seagate Technology	Jim Coomes	Yes
Storage Technology Corp.		(not present)
Sun Microsystems, Inc.	Vit Novak	Yes
Texas Instruments	Robert Kando	Yes
Toshiba	Hiroshi Suzuki	Yes
UNISYS	Phil Shelton	Yes
Veritas Software	Roger Cummings	Yes

2/3rds vote passed (30:0:0:8=38)

John Lohmeyer took an action item to communicate the recommendation to approve JTC 1/SC 25 FDIS 14776-115 to INCITS.

#### **11.2.2 FCD Ballot for FCD 14776-222: IT - Small Computer System Interface - Part 222: Fibre channel protocol for SCSI, second version (FCP-2)**

Gary Robinson moved to report that T10 has reviewed FCD 14776-222: IT - Small Computer System Interface (SCSI) - Part 222: Fibre channel protocol for SCSI, second version (FCP-2) and recommends that the JTC1/SC25 TAG vote to approve said FCD. John Lohmeyer seconded the motion.

The motion passed with a roll call vote as documented in item 11.2.1.

Gary Robinson took an action item to communicate the recommendation to approve FCD 14776-222 to INCITS.

#### **11.2.3 FDIS Ballot for FDIS 14776-150: IT - Small Computer System Interface - Part 150: Serial Attached SCSI (SAS)**

Gary Robinson moved to report that T10 has reviewed FDIS 14776-150: IT - Small Computer System Interface - Part 150: Serial Attached SCSI (SAS) and recommends that the JTC1/SC25 TAG vote to approve said FDIS. John Lohmeyer seconded the motion.

The motion passed with a roll call vote as documented in item 11.2.1.

Gary Robinson took an action item to communicate the recommendation to approve FDIS 14776-150 to INCITS.

#### **11.2.4 Approval of list of delegates [Robinson]**

Gary Robinson moved that T10 recommend Gary Robinson, Bob Snively, and Roger Cummings as delegates to the JTC1/SC25 meeting for 2004. John Lohmeyer seconded the motion.

The motion passed with a roll call vote as documented in item 11.2.1.

Gary Robinson took an action item to communicate the T10 JTC1/SC25 delegation recommendation to the INCITS Executive Board.

## 12. Liaison Reports

### 12.1 T11 Liaison Report [Snively]

Bob Snively presented the T11 liaison report contained in T10/04-041.

### 12.2 T13 Liaison Report [Colegrove]

Dan Colegrove provided an oral report to the committee on the activities of T13. The T13 committee plans to complete Letter Ballot comment resolution on ATA/ATAPI-7 by April. The plan for ATA/ATAPI-8 is to remove parallel ATA.

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, Alvin Cox reported on the activities of the SFF group.

### 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 that can be found in 04-047r0.

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

In the absence of David Black, no report was available.

### 12.7 SNIA [Cummings]

Roger Cummings reported orally to the committee and provided an electronic report in 04-045r0.

### 12.8 SATA II [Cox/open]

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

Alvin Cox reported that there will be a face-to-face meeting during the first week of February. There may still be some technical issues related to voltage levels. Work is continuing on SATA/SAS connectors.

## 13. Review of Action Items

- 545 David Black will ensure that RFCs are written defining URLs for SNMP, CIM over HTTP/HTTPS, and SSH.
- 559 John Lohmeyer will forward SMC-2 revision 7 to INCITS for processing towards second Public Review.
- 560 Ralph Weber will prepare a project proposal for SAM-4.
- 561 John Lohmeyer will forward 03-358r0 to INCITS for further processing as a new project proposal for MMC-5.
- 562 John Lohmeyer will communicate the recommendation to approve JTC 1/SC 25 FDIS 14776-115 (SPI-5) to INCITS.
- 563 Gary Robinson will communicate the recommendation to approve FCD 14776-222 (FCP-2) to INCITS.
- 564 Gary Robinson will communicate the recommendation to approve FDIS 14776-150 (SAS) to INCITS.

565 Gary Robinson will communicate the T10 JTC1/SC25 delegation recommendation to the INCITS Executive Board.

### 14. Meeting Schedule

The next plenary meeting of T10 will be Thursday March 11, 2004 in Dana Point, CA at Laguna Cliffs Marriott Hotel (949-661-5000), hosted by QLogic Corp. The meeting will begin at 9:00 a.m. on Thursday.

The meeting list for the next plenary week is:

		March 2004 Meeting Map												
		(2004/01/15 Version)												
Monday 3/08		9	10	11	12	1	2	3	4	5	6	7	8	
		+-----+												
			ADI WG											(15)
		+-----+												
			SAS Protocol WG											(40)
		+-----+												
Tuesday 3/09	8	9	10	11	12	1	2	3	4	5	6	7	8	
		+-----+												
			SCSI Commands, Arch., & Protocol WG											(40)
		+-----+												
			MMC WG											(15)
		+-----+												
			ADI WG		FCP WG		T11.5 FAIS WG							(30)
		+-----+												
			Plugfest Adm *		STA Marcom *									(20)
		+-----+												
Wednesday 3/10		9	10	11	12	1	2	3	4	5	6	7	8	
		+-----+												
			SCSI Commands, Arch., & Protocol WG											(35)
		+-----+												
			MMC WG											(15)
		+-----+												
			T11.5 FAIS WG					SFF						(30)
		+-----+												
			STA Plenary *			/	Plugfest TCC *							(20)
		+-----+												
Thursday 3/11	8	9	10	11	12	1	2	3	4	5	6	7	8	
		+-----+												
			T10 Plenary				SAM-3 Edit							(45/10)
		+-----+												
Friday 3/12	8	9	10	11	12	1	2	3	4	5	6	7	8	
		+-----+												
			SAM-3 Edit											(10)
		+-----+												

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

## Other T10-authorized meetings:

Meeting	Date	Location / Contact
ADI Call	Jan 26 8:00a PST	To be announced via T10 reflector
ADI Call	Feb 9 8:00a PST	To be announced via T10 reflector
ADI Call	Feb 23 8:00a PST	To be announced via T10 reflector
MSC Call	Feb ??, 2004	To be announced via T10 reflector
SAS Prot Calls	TBD	To be announced via T10 reflector
SAS PHY Calls	TBD	To be announced via T10 reflector
3rd party persistent reservations	TBD	To be announced via T10 reflector

## 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:

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SBC-2, SES-2, SAS, SAS-1.1	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
MSC	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-2, SSC-3, FCP-2, FCP-3	Dave Peterson	(612) 802-3299 dap@sbs.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
Mar 8-12, 2004	Dana Point, CA	QLogic
May 3-7, 2004	Monterey, CA	Brocade
Jul 12-16, 2004	Colorado Springs, CO	LSI Logic
Sep 13-17, 2004	Nashua, NH	Hitachi Cable
Nov 8-12, 2004	Austin, TX	Crossroads
Approved 2005 dates, tentative hosts and locations:		
Jan 17-21, 2005		
Mar 7-11, 2005	Dana Point, CA	QLogic
May 2-6, 2005		
Jul 11-15, 2005	Colorado Springs, CO	LSI Logic
Sep 12-16, 2005		
Nov 7-11, 2005	Austin, TX	Crossroads

John Lohmeyer asked organizations interested hosting one of the meetings in 2005 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.

John Lohmeyer moved that T10 authorize the T10-related meetings and events in the list above that had not previously been approved through the end of February 2004. Bob Snively 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 January 15, 2004.



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

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Mr. Michael Wingard	P	Amphenol Interconnect	mike.wingard@aipce.com
Mr. Robert Snively	P	Brocade Comm. Systems, Inc.	rsnively@brocade.com
Mr. Titkwan Hui	A	Dallas Semiconductor	tk.hui@dalsemi.com
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Mr. William P. McFerrin	P	Philips Electronics/CD Edge	billmc@tstar.net
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Mr. Phil Shelton	A	UNISYS Corporation	phil.shelton@unisys.com
Mr. Roger Cummings	P	Veritas Software	roger.cummings@veritas.com

40 People Present

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

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

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