

Accredited Standards Committee*

InterNational Committee for Information Technology Standards (INCITS)

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Reply to: John Lohmeyer

To: T10 Membership
From: Ralph Weber / John Lohmeyer
Subject: Minutes of T10 Plenary Meeting #73 -- May 11, 2006
San Jose, CA

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Results of Meeting

1. Opening Remarks

John Lohmeyer, the T10 Chair, called the meeting to order at 9:00 a.m., Thursday May 11, 2006. He thanked Mark Overby of Nvidia Corp. 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.

No items were added or modified in the agenda during the course of the meeting.

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 membership the second meeting via a letter to the Chair of T10. The individual may begin voting at the beginning of his/her second meeting. People who continue to attend T10 meetings are expected to join T10 and to pay INCITS Service Fees.

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

John briefly discussed the mailing fees. Complete pricing information is contained in the 2006 membership form (available at http://www.t10.org/ftp/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 emails to 10 people from 4 organizations informing them that their membership was in jeopardy due to non-attendance (see 06-153r0) and that their membership would be terminated if they did not attend this meeting. The following organizations were in attendance jeopardy:

Dallas Semiconductor
 General Dynamics
 Hitachi Cable Manchester
 QLogic Corp.

All organizations in attendance jeopardy were present.

Had any organizations not been present, their representatives would have been changed to Advisory (non-voting) status.

John Lohmeyer called for requests to join the committee.

Dennis Moore of KnowledgeTek and Gideon Avida of Decru requested membership at this meeting.

The T10 membership during the meeting was 48 organizations, up from the 46 member organizations extant at the time the meeting was convened. 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. The current letter ballot jeopardy status is as shown:

T10 Letter Ballot Jeopardy Report -- 2006/05/05

Ballot:	05-134r0	06-080r0	06-184r0
Report:	05-135r0	06-081r0	06-185r0
Acronym:	FCP-3	SAT	MMC-5

Organization

Key:

- Yes Organization voted Yes
- No Organization voted No
- Abs Organization voted Abstain
- DNV Organization failed to return letter ballot
- Organization was not a voting member for the letter ballot
- (*) Organization is in letter ballot jeopardy

4. Approval of Minutes - March 2006 - Hilton Head, SC (T10/06-127r0)

John Lohmeyer moved and Ralph Weber seconded that the minutes be approved as written. 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) (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 May 18, 2006. 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 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.

For additional information on ANSI procedures and the ANSI patent policy, please see the INCITS web page at <http://www.incits.org/call.htm>. The contact for INCITS patent issues is Lynn Barra (lbarra at itic dot org) or (202) 626-5739. 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

- 625 Bill McFerrin will prepare an MMC-5 revision for Letter Ballot. *Complete.*
- 626 John Lohmeyer will conduct a Letter Ballot on the MMC-5 revision prepared by Bill McFerrin. *Complete.*
- 627 John Lohmeyer will forward 06-032r1 to INCITS for further processing as a new project proposal for FCP-4. *Complete.*
- 628 John Lohmeyer will communicate the five-year recommendations to INCITS. *Complete.*
- 629 Gary Robinson will report to INCITS that T10 recommends that the SC25 TAG contribute a NWIP to SC25 for FCP-3, T10/06-045r1, as project 1.25.13.11.nn, 14776-223, to mark YES on each of the 6 questions, define Gary S Robinson as Project Editor in question 4, normal standard development track is proposed in question 7. *Complete.*
- 630 Gary Robinson will report to INCITS that T10 recommends that the SC25 TAG request SC25 to remove project 1.25.13.11.37, SCSI Signal Modeling, SSM-214776-132 from its Program of Work. *Complete.*
- 631 Gary Robinson will report to INCITS that T10 recommends that the SC25 TAG vote to approve 25N 1137, FCD ISO/IEC 14776-413 Information technology Small Computer System Interface Part 413: SCSI Architecture Model 3 (SAM-3). *Complete.*
- 632 Roger Cummings will report to the TCG that the T10 CAP working group is beginning several projects that may conflict with TCG projects. *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.

John reported that INCITS discussions regarding TC document access policies have begun to turn toward at least allowing the more open approach favored by the T10, T11, and T13 TCs. It was noted that T10 members who also have INCITS board members should contact their organization's INCITS board member and ensure they are aware of the benefits of open access to their organization and T10.

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 are 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 Bridge Controller Commands (BCC) Project 1528-D [Elliott]

Rob Elliott reported that there has been no activity on BCC.

8.3 SCSI Enclosure Services - 2 (SES-2) Project 1559-D [Elliott]

Rob Elliott reported that a new revision will be posted in time for the mailing containing the changes approved at this meeting.

8.4 Fibre Channel Protocol - 3 (FCP-3) Project 1560-D [Peterson]

John Lohmeyer reported that FCP-3 had completed first public review with no comments received. Management review has been completed and the INCITS letter ballot will close May 26th.

8.5 Serial Attached SCSI - 1.1 (SAS-1.1) Project 1601-D [Elliott]

John Lohmeyer reported that SAS-1.1 had completed first public review with no comments received. Management review has been completed and the INCITS letter ballot will close May 26th.

8.6 SCSI Stream Commands - 3 (SSC-3) Project 1611-D [Peterson]

No report was provided for the SSC-3 working group activities. John Lohmeyer noted that the group's minutes can be found in 06-244.

8.7 MultiMedia Command Set - 5 (MMC-5) Project 1675-D [McFerrin]

John Lohmeyer reported that the MMC-5 forwarding letter ballot had passed 32:4:10:0=46, with comments received from 15 organizations. The MMC working group is now resolving those comments.

Bill McFerrin reported that the working group had reviewed all the letter ballot comments and responses had been proposed for all of them (minutes in 06-249). He noted that one of the proposals (06-248r1) recommended by the CAP working group is intended to resolve several of the no letter ballot votes.

8.8 SCSI Architecture Model - 4 (SAM-4) Project 1683-D [Penokie]

George Penokie reported that new revision will be posted containing changes approved at this meeting; however the new revision may not be posted in time for the mailing.

8.9 SCSI / ATA Translation (SAT) Project 1711-D [Sheffield]

Bob Sheffield reported on the working group's progress in resolving the comments which are listed in 06-121r1 (minutes in 06-231). He noted that teleconferences have been and will continue to be held for the purpose of resolving the letter ballot comments.

He stated that SAT r08a will be posted before the next meeting but not in time for the mailing. The goal is to forward SAT to first public review in July.

8.10 Object-Based Storage Devices - 2 (OSD-2) Project 1729-D [Weber]

Ralph Weber reported that he is unaware of progress toward developing new OSD-2 proposals by the SNIA TWG.

8.11 SCSI Media Changer Command Set - 3 (SMC-3) Project 1730-D [Banther]

Michael Banther reported on the activities of the SMC-3 working group (minutes in 06-239) and provided an electronic report in 06-247.

Michael Banther asked that the project forwarding date be changed to November 2007.

8.12 SCSI Primary Commands - 4 (SPC-4) Project 1731-D [Weber]

Ralph Weber reported that SPC-4 r05 will be posted before the end of May but not in time for the mailing and will incorporate all approved proposals approved.

8.13 Serial Attached SCSI Driver Interface (SDI) Project 1740-D [Elliott]

Rob Elliott noted that any changes to the SDI will be handled in the CAP working group and that no changes are currently proposed. The new target date for forwarding to first public review is November 2007.

8.14 Automation/Drive Interface - Commands - 2 (ADC-2) Project 1741-D [Suhler]

Paul Suhler reported on the activities of the ADI working group (minutes in 06-228) and provided an electronic report in 06-238.

Michael Banther noted that the electronic report is inaccurate and the last month for technical input to ADC-2 was this month, but ADT-2 continues to be open to new technical input.

8.15 Automation/Drive Interface - Transport Protocol - 2 (ADT-2) Project 1742-D [Suhler]

Paul Suhler reported on the activities of the ADI working group (minutes in 06-228) and provided an electronic report in 06-238.

8.16 Serial Attached SCSI - 2 (SAS-2) Project 1760-D [Elliott]

Rob Elliott reported that several SAS-2 protocol proposals have been recommended (minutes in 06-230). The SAS-2 physical working group (minutes in 06-246) made one recommendation. A SAS-2 revision will be posted containing all approved proposals in time for the mailing.

8.17 SCSI Block Commands - 3 (SBC-3) Project 1799-D [Penokie]

George Penokie reported that a new revision will be posted in time for the mailing containing changes approved at this meeting.

8.18 SCSI / ATA Translation - 2 (SAT-2) Project 1826-D [Overby]

Mark Overby reported that work will not begin on SAT-2 until the SAT Letter Ballot comments (see agenda item 8.9) are mostly processed. New proposals for SAT-2 changes, if any, will be reviewed by the SAT working group.

8.19 Fibre Channel Protocol - 4 (FCP-4) Project 1828-D [Peterson]

A report prepared by Dave Peterson was read to the committee regarding the FCP-4 Working Group activities (minutes in 06-243).

9. Old Business

9.1 Project Proposal for MultiMedia Command Set - 6 (MMC-6) (06-115) [McFerrin]

Bill McFerrin and John Lohmeyer led a review of the MMC-6 project proposal (06-115r1).

Bill McFerrin moved that T10 approve 06-115r1 as a new project proposal for MultiMedia Command Set - 6 (MMC-6). Bob Snively seconded the motion. The motion passed a two-thirds vote of 39:0:0:9=48.

John Lohmeyer took an action item to forward 06-115r1 to INCITS for further processing as a new project proposal for MMC-6.

10. New Business

10.1 Actions on SAS Protocol Working Group Recommendations

The recommendations from the SAS protocol working group (minutes in 06-230) were presented to the committee.

Rob Elliott and George Penokie reviewed the following proposals recommended for inclusion in SAS-2:

- 06-181r2 (Zone group values after a link reset sequence) [Marks]
- 06-165r0 (Change SMP ZONE VIOLATION code value) [Elliott]
- 06-167r1 (Filtering OPEN content based on ZONE PARTICIPATING bit) [Elliott]
- 06-168r1 (OPEN address frame SOURCE ZONE GROUP field definition) [Elliott]
- 06-166r4 (Restrict access to SMP ZONED BROADCAST function) [Elliott]
- 06-176r2 (Add phy zone information to SMP DISCOVER) [Elliott and Symons]
- 06-161r0 (Alternate icon) [Elliott]
- 06-119r2 (BREAK_REPLY) [Hoglund]
- 06-164r2 (Require expanders transmit three AIPs) [Elliott]
- 06-199r1 (No BROADCASTs before link reset sequence completes) [Tuikov, Elliott]
- 06-044r3 (BROADCAST (ASYNCHRONOUS EVENT)) [Fairchild]
- 06-177r3 (BROADCAST processing clarifications) [D'Avignon/Elliott]
- 06-097r4 (Configuring bit) [Symons]
- 06-212r1 (Zone Group of an Expander's SMP) [D'Avignon]

Curtis Stevens moved that 06-181r2, 06-165r0, 06-167r1, 06-168r1, 06-166r4, 06-176r2, 06-161r0, 06-119r2, 06-164r2, 06-199r1, 06-177r3, 06-097r4, and 06-212r1 be approved for inclusion in SAS-2. Bill Martin seconded the motion. The motion passed on a vote of 31:0:6:11=48.

Rob Elliott moved that 06-044r3 be approved for inclusion in SAS-2. Gerry Houlder seconded the motion. The motion passed on a vote of 15:4:17:12=48.

10.2 Actions on SAS PHY Working Group Recommendations

The recommendation made by the SAS physical working group (minutes in 06-246) was presented to the committee.

George Penokie reviewed 06-169r1 (Correct receiver device jitter table DJ footnotes) [Elliott] a proposal recommended for inclusion in SAS-2.

Rob Elliott moved that 06-169r1 be approved for inclusion in SAS-2. Gerry Houlder seconded the motion. The motion passed on a vote of 31:0:6:11=48.

10.3 Actions on SAT Working Group Recommendations

No recommendations were presented from the SAT working group (minutes in 06-231).

10.4 Actions on CAP Working Group Recommendations

The recommendations from the CAP working group (minutes in 06-232) were presented to the committee.

George Penokie reviewed the following proposals recommended for inclusion in SPC-4:

- 06-113r2 (Log Page-Subpages) [Butt]
- 06-108r3 (Add security protocol and additional sense for tape encryption) [Entzel]
- 06-224r1 (Change 'medium changer' to 'media changer') [Entzel]
- 06-195r1 (Persistent Reservation additional sense code changes) [Elliott]
- 06-196r0 (Persistent Reservation REGISTER AND MOVE from unregistered I_T nexus) [Elliott]
- 06-219r1 (New ASC/ASCQ for LOGICAL UNIT ACCESS NOT AUTHORIZED) [Shimor]
- 06-191r2 (Request for the reservation/assignment of Security Protocol value) [Shimor]

Ralph Weber moved that 06-113r2, 06-224r1, 06-195r1, 06-196r0, and 06-191r2 be approved for inclusion in SPC4. Roger Cummings seconded the motion. The motion passed on a vote of 32:0:4:12=48.

Paul Suhler moved that 06-108r3 be approved for inclusion in SPC-4. David Black seconded the motion. The motion passed on a vote of 18:2:17:11=48.

Curtis Stevens moved that 06-219r1 be approved for inclusion in SPC-4. Bob Sheffield seconded the motion. The motion passed on a vote of 16:3:20:9=48.

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

- 05-011r2 (Display element enhancements) [Elliott]
- 06-200r1 (Internal/External Vendor Specific connectors) [Penokie]

Rob Elliott moved that 05-011r2 and 06-200r1 be approved for inclusion in SES-2. Vit Novak seconded the motion. The motion passed on a vote of 18:0:22:8=48.

George Penokie reviewed 06-248r1 (Proposal to remove the PREVENT ALLOW MEDIUM REMOVAL command from SPC-4) a proposal recommended for inclusion in SPC-4, SBC-3, SSC-3, SMC-3, and OSD-2.

Bill McFerrin moved that 06-248r1 be approved for inclusion in SPC-4, SBC-3, SSC-3, SMC-3, and OSD-2. Mark Overby seconded the motion. The motion passed on a vote of 19:0:20:9=48.

George Penokie reviewed 06-116r2 (Converting to UML part 1) [Penokie] a proposal recommended for inclusion in SAM-4.

George Penokie reviewed 06-198r0 (Making the basic task management model obsolete) [Evans] a proposal recommended for inclusion in SAM-4 and SPC-4.

Mark Evans moved that 06-116r2 be approved for inclusion in SAM-4 and 06-198r0 be approved for inclusion in SAM-4 and SPC-4. Gerry Houlder seconded the motion. The motion passed on a vote of 27:0:12:9=48.

George Penokie reviewed 06-223r1 (Vendor-specific service actions for MAINTENANCE IN/OUT) [Banther] and noted that the r0 version of the proposal had failed to receive a CAP recommendation. Michael Banther stated that the proposal had been revised to reduce the number of vendor specific code values from eight to one.

Michael Banther moved that 06-223r1 be approved for inclusion in SPC-4. Robert Payne seconded the motion. Bob Snively stated that vendor specific codes should not be assigned without good cause and that no such justification had been provided for this proposal. Ralph Weber countered that a single vendor specific code was needed to allow new functions to be prototype tested before their introduction into the standards. The motion passed on a vote of 20:2:16:10=48.

10.5 Actions on Other Working Group Recommendations

No actions from other working groups were brought before the committee.

11. ISO/IEC

11.1 ISO/IEC Report [Robinson]

Gary Robinson presented the ISO/IEC report (06-217).

11.2 ISO/IEC Business [Robinson]

Gary Robinson moved and Larry Lamers seconded that T10 recommend to the SC 25 TAG that ISO/IEC 9316:1995 JTC 1/SC 25 Information technology -- Small Computer System Interface-2 be reaffirmed and that the 4 questions be answered as follows:

Question 1: Confirmation of the International Standard for a further period of five years? YES

Question 2: Are you prepared to participate in the development of the project? na

Question 3: Has this ISO/IEC standard been implemented as a national standard or is it used per se by your national industry? YES

Question 4: If the response to question 3 is affirmative, is the standard implemented or used without change? YES

The roll call vote passed 37:3:0:8=48 as documented below:

Organization	Voter	Vote
Adaptec, Inc.	Lawrence J. Lamers	Yes
AMCC	Paul von Stamwitz	Yes
Amphenol Interconnect	Michael Wingard	Yes
Broadcom Corp.		(not present)
Brocade	Robert Snively	Yes
Dallas Semiconductor	James A. Lott, Jr.	Yes
Decru	Gideon Avida	Yes
Dell, Inc.		(not present)
EMC Corp.	Gary S. Robinson	Yes
Emulex	Kenneth Hirata	Yes
ENDL	Ralph O. Weber	Yes
FCI	Douglas Wagner	Yes
Foxconn Electronics	Elwood Parsons	Yes
Fujitsu	Mike Fitzpatrick	Yes
General Dynamics	Nathan Hastad	Yes
Hewlett Packard Co.	Rob Elliott	No
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.	Robert Payne	Yes
KnowledgeTek, Inc.	Dennis Moore	Yes
Lexar Media, Inc.	John Geldman	Yes
LSI Logic Corp.	John Lohmeyer	Yes
M-Systems		(not present)
Marvell Semiconductor, Inc.	Paul Wassenberg	Yes
Maxtor Corp.	Mark Evans	Yes
McDATA		(not present)
Microsoft Corp.		(not present)
Molex Inc.	Jay Neer	Yes
Nvidia Corp.	Mark Overby	Yes
Oracle	James Williams	Yes
Panasonic Technologies, Inc	Takaharu Ai	Yes
Philips Electronics	William P. McFerrin	Yes
Pivot3, Inc.		(not present)
PMC-Sierra	Tim Symons	Yes
QLogic Corp.	Craig W. Carlson	Yes
Quantum Corp.	Paul Suhler	Yes
Seagate Technology	Gerald Houlder	Yes
Sierra Logic, Inc.	William Martin	Yes
Sun Microsystems, Inc.	Vit Novak	Yes
Symantec	Roger Cummings	No
Texas Instruments		(not present)
TycoElectronics	Dan Gorenc	Yes
Vitesse Semiconductor		(not present)
Western Digital	Curtis Stevens	No
Xiotech Corp.	Jeff Williams	Yes
Xyratex	Rich Ramos	Yes

This two-thirds roll call vote passed (37:3:0:8=48).

Gary Robinson took an action item to notify INCITS of the T10 recommendation that ISO SCSI-2 be reaffirmed.

Gary Robinson moved and Roger Cummings seconded that T10 recommend the following delegation for the SC 25 meeting in September: Robert Snively (Head of Delegation), Roger Cummings, Claudio DeSanti, Horst Truestedt, and Mark Overby. The motion passed 31:0:0:17=48.

Gary Robinson took an action item to notify INCITS that T10 recommends the September SC 25 delegation be: Robert Snively (Head of Delegation), Roger Cummings, Claudio DeSanti, Horst Truestedt, and Mark Overby.

George Penokie moved that T10 recommends that ANSI replace the ANSI version of SPC-2 with the ISO version. Bob Snively seconded the motion.

It was noted that the ISO version of SPC-2 contains a correction to the Reserve/Release commands definition that is not present in the ANSI version. Processing SPC-2 in this way permitted the committee to make the Reserve/Release reservations method obsolete in SPC-3, a change which would otherwise not have been possible.

The motion passed on a two-thirds roll call vote of 34:1:1:12=48.

Organization	Voter	Vote
Adaptec, Inc.	Lawrence J. Lamers	Yes
AMCC	Paul von Stamwitz	Yes
Amphenol Interconnect		(not present)

Broadcom Corp.		(not present)
Brocade	Robert Snively	Yes
Dallas Semiconductor	James A. Lott, Jr.	Yes
Decru	Gideon Avida	Abstain
Dell, Inc.		(not present)
EMC Corp.	Gary S. Robinson	Yes
Emulex	Kenneth Hirata	Yes
ENDL	Ralph O. Weber	Yes
FCI	Douglas Wagner	Yes
Foxconn Electronics	Elwood Parsons	Yes
Fujitsu		(not present)
General Dynamics	Nathan Hastad	Yes
Hewlett Packard Co.	Rob Elliott	Yes
Hitachi Cable Manchester		(not present)
Hitachi Global Storage Tech.	Dan Colegrove	Yes
IBM Corp.	George O. Penokie	Yes
Intel Corp.	Robert Sheffield	Yes
Iomega Corp.	Robert Payne	Yes
KnowledgeTek, Inc.	Dennis Moore	Yes
Lexar Media, Inc.	John Geldman	Yes
LSI Logic Corp.	John Lohmeyer	Yes
M-Systems		(not present)
Marvell Semiconductor, Inc.	Paul Wassenberg	Yes
Maxtor Corp.	Mark Evans	Yes
McDATA		(not present)
Microsoft Corp.		(not present)
Molex Inc.	Jay Neer	Yes
Nvidia Corp.	Mark Overby	Yes
Oracle	James Williams	Yes
Panasonic Technologies, Inc	Takaharu Ai	Yes
Philips Electronics	William P. McFerrin	Yes
Pivot3, Inc.		(not present)
PMC-Sierra	Tim Symons	Yes
QLogic Corp.	Craig W. Carlson	Yes
Quantum Corp.	Paul Suhler	Yes
Seagate Technology	Gerald Houlder	Yes
Sierra Logic, Inc.	William Martin	Yes
Sun Microsystems, Inc.	Vit Novak	Yes
Symantec	Roger Cummings	Yes
Texas Instruments		(not present)
TycoElectronics	Dan Gorenc	Yes
Vitesse Semiconductor		(not present)
Western Digital	Curtis Stevens	No
Xiotech Corp.		(not present)
Xyratex	Rich Ramos	Yes

This two-thirds roll call vote passed (34:1:1:12=48).

John Lohmeyer took an action item to notify INCITS that T10 recommends that ANSI replace the ANSI version of SPC-2 with the ISO version.

12. Liaison Reports

12.1 T11 Liaison Report [Snively]

Bob Snively presented an electronic liaison report (06-220).

12.2 T13 Liaison Report [Colegrove]

Dan Colegrove provided an oral report to the committee on the activities of T13. ATA-8 has been substantially delayed due to work integrating SATA. For details regarding T13 activities see www.t13.org.

12.3 SFF Industry Group [Allan]

In the absence of Dal Allan, no SFF Industry Group liaison report was available.

12.4 IEEE 1394 [Johansson]

Ralph Weber requested that this topic be removed from future agendas.

12.5 SCSI Trade Association (STA) [Czekalski]

Marty Czekalski presented an electronic report (06-251) on the activities of the SCSI Trade Association.

12.6 IETF SCSI over IP [Black/Robinson]

In the absence of David Black, Roger Cummings reported that the SCSI MIB has been published as RFC 4455.

12.7 SNIA [open]

No report was made.

12.8 Trusted Computing Group [Cummings/Fitzpatrick]

Roger Cummings reported on the TCG activities and provided an electronic report in 06-240.

13. Review of Action Items

- 633 John Lohmeyer will forward 06-115r1 to INCITS for further processing as a new project proposal for MMC-6.
- 634 Gary Robinson will notify INCITS of the T10 recommendation that ISO SCSI-2 be reaffirmed.
- 635 Gary Robinson will notify INCITS that T10 recommends the September SC 25 delegation be: Robert Snively (Head of Delegation), Roger Cummings, Claudio DeSanti, Horst Truedstedt, and Mark Overby.
- 636 John Lohmeyer will notify INCITS that T10 recommends that ANSI replace the ANSI version of SPC-2 with the ISO version.

14. Meeting Schedule

The next plenary meeting of T10 will be Thursday July 13, 2006 in Colorado Springs, CO at the Antlers Hilton Hotel (1-719-955-5600) hosted by LSI Logic Corp. The meeting will begin at 9:00 a.m. on Thursday.

The meeting list for the next plenary week is:

July 2006 Meeting Map
(2006/05/15 Version)

Monday 7/10	9	10	11	12	1	2	3	4	5	6	7	8			
	+=====+														
		ADI-2 WG / SMC-3 WG											(15)		
	+=====+														
		SAS Prot WG											(40)		
	+=====+														
		TCG *									(20)				
	+-----+														
		Mt Fuji? *									(25)				
	+-----+														
Tuesday 7/11	9	10	11	12	1	2	3	4	5	6	7	8			
	+=====+														
		SAS Physical WG											(45)		
	+=====+														
		SAT WG											(25)		
	+=====+														
								STA Marcom *					(35)		
	+-----+														
		FCP-4 WG/ SSC-3 WG											(25)		
	+=====+														
									SFF-8454				(15)		
	+-----+														
Wednesday 7/12	9	10	11	12	1	2	3	4	5	6	7	8			
	+=====+														
		CAP WG											(40)		
	+=====+														
		MMC WG											(25)		
	+-----+														
								SFF					(30)		
	+-----+														
		STA Plenary * / TCC*											(20)		
	+-----+														
Thursday 7/13	9	10	11	12	1	2	3	4	5	6	7	8			
	+=====+														
		T10 Plenary											(50/25)		
														SAS-2 Zone Mgmt WG	
	+=====+														
Friday 7/14	9	10	11	12	1	2	3	4	5	6	7	8			
	No meetings planned for Friday.														

/ means the next meeting starts when the previous meeting concludes
 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
SAT LB Call	Thur noon-3p PT 5/18	TBA via T10 reflector / Sheffield
SAS Zoning Calls	Wednesdays noon-2p PT	TBA via T10 reflector / Lohmeyer
SSC-3 Call	Wed May 31 8:00a - 10:00p PT	TBA via T10 reflector / Peterson
SMC Call	Monday Jun 5 8:00a-10:00a PT	TBA via T10 reflector / Banther
SAT LB WG	6/7 9:00a-7:00p 6/8 8:00a-noon	Phoenix area / Sheffield
SAS PHY Calls	Biweekly beginning 6/1	TBA via T10 reflector / Cox
SAS-2 Zoning Management WG	Tuesday June 20 9:30a - 4:00p	Denver (near DIA) / lohmeyer
SSC-3 Call	Wed Jun 21 8:00a - 10:00p PT	TBA via T10 reflector / Peterson

Map Abbreviation Key:

ad hoc: a.k.a., working group
 ADI: Automation Drive Interface (tape library interface)
 Amnd: Amendment
 CAP: Commands, Architecture, and Protocols
 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
 Lock SG: Study Group to examine need for Locking removable storage devices
 MMC: Multimedia Commands (CD-ROM, DVD, etc.)
 OSD: Object-based Storage Device
 PH or PHY: Physical (Connectors, Cables, Transceivers, etc.)
 Prot: Protocol
 Plenary: Full Committee Meeting
 Res: Resolution
 SAS: Serial Attached SCSI
 SAT: SCSI / ATA Translation
 SBC-2: SCSI Block Commands - 2
 SCSI: Small Computer System Interface
 SDI: Serial Attached SCSI Driver Interface
 SES: SCSI Enclosure Services
 SFF: SFF Industry Group (not an INCITS activity)
 SG: Study Group
 SMC-3: SCSI Medium Changer - 3 Commands
 SPC-4: SCSI Primary Commands - 4 (4th generation)
 SSC-3: SCSI Stream Commands - 2 (includes Tape)
 STA: SCSI Trade Association (Closed meeting -- not an INCITS activity)
 STA Marcom: STA Marketing Communications (Closed meeting -- not an INCITS activity)
 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, ADC, ADT-2, ADC-2	Paul Entzel	(720) 406-5782 paul.entzel@quantum.com
SBC-2, SES-2, SAS-1.1, SAS-2, BCC, SDI	Rob Elliott	(281) 518-5037 Elliott@hp.com
MMC-4, MMC-5, MMC-6	Bill McFerrin	(325) 423-1560 billmc@tstar.net
SBP-3	Peter Johansson	(510) 527-3926 PJohansson@ACM.org
SAM-4, SBC-3	George Penokie	(507) 253-5208 gop@us.ibm.com
SAT	Bob Sheffield	(480) 554-8597 robert.l.sheffield@intel.com
SAT-2	Mark Overby	(425) 417-9412 moverby@nvidia.com
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SMC-3	Noud Snelder	+31408446108 Noud.snelder@bdt.de
SPC-3, SAM-3, SPC-4, OSD-2	Ralph Weber	(214) 912-1373 roweber@acm.org
SSC-3, FCP-3, FCP-4	Dave Peterson	(763) 268-6139 david.peterson@mcddata.com
Other Activities	John Lohmeyer	(719) 533-7560 lohmeier@t10.org

The long-term T10 meeting week schedule is:

Date	Location	Host/Comments
Jul 10-14, 2006	Colorado Springs, CO	LSI Logic
Sep 11-15, 2006	Nashua, NH	Hitachi Cable Manchester
Nov 6-10, 2006	Las Vegas, NV	Hitachi GST
Approved dates for 2007:		
Jan 15-19, 2007	Orlando, FL	Symantec
Mar 12-16, 2007		
May 7-11, 2007	Seattle, WA	Microsoft Corp.
Jul 9-13, 2007	Colorado Springs, CO	LSI Logic
Sep 17-21, 2007	Vancouver, BC Canada	PMC-Sierra
Nov 5-9, 2007		
Proposed dates for 2008:		
Jan 14-18, 2008		
Mar 10-14, 2008		
May 5-9, 2008		
Jul 14-18, 2008		
Sep 8-12, 2008		
Nov 3-7, 2008		

John Lohmeyer asked people interested hosting one of the above meetings 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. Working groups should strive to achieve consensus prior to bringing issues to T10.

Bill Martin moved that T10 authorize the T10-related meetings and events in the list above that had not previously been approved through the end of June 2006. Bob Sheffield 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 11:15 a.m. on Thursday May 11, 2006.

Enclosure(1) -- Meeting Attendees

Name	S	Organization
Mr. Lawrence J. Lamers	A	Adaptec, Inc.
Mr. Ziad Matni	AV	Agere Systems
Mr. Paul von Stamwitz	P	AMCC
Mr. Michael Wingard	P	Amphenol Interconnect
Mr. Robert Snively	P	Brocade Comm. Systems, Inc.
Mr. James A. Lott, Jr.	P	Dallas Semiconductor
Mr. Gideon Avida	P	Decru
Mr. David Black	A	EMC Corp.
Mr. Gary S. Robinson	P	EMC Corp.
Mr. Kenneth Hirata	A	Emulex
Mr. Ralph O. Weber	P	ENDL Texas
Mr. Douglas Wagner	P	FCI
Mr. Elwood Parsons	P	Foxconn Electronics
Mr. Mike Fitzpatrick	P	Fujitsu
Mr. Nathan Hastad	P	General Dynamics
Mr. Michael Banther	V	Hewlett Packard Co.
Mr. Rob Elliott	P	Hewlett Packard Co.
Mr. Mike Guzman	A	Hitachi Cable Manchester
Mr. Dan Colegrove	P	Hitachi Global Storage Tech.
Mr. George O. Penokie	P	IBM Corp.
Mr. Robert Sheffield	P	Intel Corp.
Mr. Robert Payne	P	Iomega Corp.
Mr. Dennis Moore	P	KnowledgeTek, Inc.
Mr. John Geldman	P	Lexar Media, Inc.
Mr. John Lohmeyer	P	LSI Logic Corp.
Mr. Paul Wassenberg	A	Marvell Semiconductor, Inc.
Mr. Martin Czekalski	A	Maxtor Corp.
Mr. Mark Evans	P	Maxtor Corp.
Mr. Jay Neer	P	Molex Inc.
Mr. Mark Overby	P	Nvidia Corp.
Mr. James Williams	P	Oracle
Mr. Takaharu Ai	A	Panasonic AVC Networks Co.
Mr. William P. McFerrin	P	Philips Electronics/CD Edge
Mr. Tim Symons	P	PMC-Sierra
Mr. Craig W. Carlson	A	QLogic Corp.
Dr. Paul Suhler	A	Quantum Corp.
Mr. Alvin Cox	V	Seagate Technology
Mr. Gerald Houlder	P	Seagate Technology
Mr. Gary D. Moorhead	V	Seagate Technology
Mr. William Martin	P	Sierra Logic, Inc.
Mr. Vit Novak	P	Sun Microsystems, Inc.
Mr. Roger Cummings	P	Symantec
Mr. Tom McGoldrick	AV	Toshiba
Mr. Dan Gorenc	A	TycoElectronics
Mr. Wayne Gentry	V	Unisys Corporation
Mr. Curtis Stevens	P	Western Digital
Mr. Jeff Williams	P	Xiotech Corp.
Mr. Rich Ramos	P	Xyratex

48 People Present

Status Key: P - Principal
 A,A# - Alternate
 AV - Advisory Member

L - Liaison
 V - Visitor

Enclosure(2) -- T10 Attendance Database

Generated on 2006/05/15 at 13:23:00

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