Accredited Standards Committee*
InterNational Committee for Information Technology Standards (INCITS)

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Date:	October 1, 2007
Reply to:	John Lohmeyer

To: T10 Membership
From: Ralph Weber / John Lohmeyer
Subject: Minutes of T10 Plenary Meeting #81 -- September 20, 2007
         Vancouver, BC Canada

Agenda

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Results of Meeting

1.   Opening Remarks

John Lohmeyer, the T10 Chair, called the meeting to order at 1:30 p.m., Thursday September 20, 2007. He thanked Tim Symons of PMC-Sierra 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 mem-

bership 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 in 2007 and $1200 per year beginning in 2008).

John briefly discussed the mailing fees. Complete pricing information is contained in the 2007 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 4 people from 3 organizations informing them that the organization's membership was in jeopardy due to non-attendance (see 07-345r0) and that their membership would be terminated if they did not attend this meeting. The following organizations were in attendance jeopardy:

    General Dynamics
    Iomega
    KnowledgeTek

All organizations in attendance jeopardy were present. If an organization had not been present, their representatives would have been changed to Advisory (non-voting) status.

John called for requests to join the committee. Finisar joined at this meeting.

The T10 membership during the meeting was 42 organizations, up from the 41 member organizations extant at the time the meeting was convened. Enclosure (1) is the list of the people present at the meeting and enclosure (3) 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. Accelerated and personnel letter ballots are not included in letter ballot jeopardy calculations. The current letter ballot jeopardy status is as shown:

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T10 Letter Ballot Jeopardy Report -- 2007/09/13


                         Ballot:  06-184r0      06-446r0      07-352r0
                         Report:  06-185r0      06-447r0      07-353r0
Organization            Acronym:  MMC-5         ADC-2         RBC NWIP
-------------------------------   ------------  ------------  ------------
Iomega Corp.                          Yes           DNV           Yes
Nvidia Corp.                          Yes           DNV           Yes
Vitesse Semiconductor                 Abs           DNV           Yes


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
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4.   Approval of Minutes - July 2007 - Colorado Springs, CO (T10/07-316r3)

John Lohmeyer moved and Ralph Weber seconded that the minutes be approved as revised. 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 Barbara Bennett (bbennett@itic.org) (202) 626-5743. 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. Mountain time on Thursday September 27, 2007. 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 Portable Document Format (PDF) and/or native-format electronic originals with proper identification must be submitted.

People can obtain T10 document numbers for new and revised T10 documents 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.

Mark Seidel 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

661   John Lohmeyer will forward ADC-2 revision 8 to INCITS for further processing toward first public review. *Complete.*

662   Gary Robinson will notify the JTC1 TAG that T10 recommends a vote to Approve FDIS ballot 25 N 1352 Subject: Imminent FDIS (two-months only) letter ballot, ISO/IEC FDIS 14776-121, Information technology - Small Computer System Interface (SCSI) - Part 121: Passive interconnect performance (PIP). *Complete.*

663   Gary Robinson will notify the JTC1 TAG that T10 recommends a vote to Approve FCD ballot SC: 25 N 1337 Date Due to TAG Administrator: 2007-08-30 Subject: For 1st FCD Letter Ballot, ISO/IEC CD 14776-453: Information technology - Small Computer System Interface (SCSI) - Part 453:SCSI Primary Commands - 3 (SPC-3). *Complete.*

664   Gary Robinson will notify the JTC1 TAG that T10 recommends a vote to Withdraw 14776-113:2002 Information technology -- Small Computer System Interface (SCSI) -- Part 113:2002 Parallel Interface-3 (SPI-3). *Complete.*

665   Gary Robinson will notify the JTC1 TAG that T10 recommends a vote to Revise 14776-326:2003 Information technology -- Small Computer System Interface (SCSI) -- Part 326:2002 Reduced Block Commands (RBC). *Complete.*

666   Gary Robinson will notify the JTC1 TAG that T10 recommends a vote to Reaffirm 14776-331: Information technology -- Small Computer System Interface (SCSI) -- Part 331:2002 Stream Commands (SSC). *Complete.*

667   Gary Robinson will notify the JTC1 TAG that T10 recommends a vote to Reaffirm 14776-112: Information technology -- Small Computer System Interface (SCSI) -- Part 112:2002 Parallel Interface-2 (SPI-2). *Complete.*

668   Gary Robinson will notify the JTC1 TAG that T10 recommends a vote to Reaffirm 14776-321: Information technology -- Small Computer System Interface-3 (SCSI-3) -- Part 321:2002 SCSI-3 Block Commands (SBC). *Complete.*

669   John Lohmeyer will forward 07-264r1 to INCITS for further processing as a new project proposal for ADC-3. *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.

8.1.1 INCITS Antitrust Guidelines

All T10 members should be aware of the INCITS antitrust guidelines available at http://www.incits.org/inatrust.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 SES-2 r18 is the latest revision available and no proposals were approved this week. Therefore, no new revision will be prepared before November.

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

Dave Peterson reported on the activities of the SSC-3 working group (minutes in 07-413). He noted that last technical input on SSC-3 was reached at this meeting. Dave Peterson supplemented his presentation with an electronic report in 07-420r0.

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

John Lohmeyer reported that MMC-5 (INCITS 430-2007) was approved by ANSI BSR on 9 Aug 2007. It should be published soon.

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

George Penokie reported that SAM-4 r13 will be posted in time for the mailing and will incorporate all the proposals accepted at this meeting. He requested that the chair conduct a letter ballot on SAM-4 r13 as soon as it is posted.

George Penokie took an action item to generate SAM-4 r13. John Lohmeyer took an action item to conduct a letter ballot on SAM-4 r13 as soon as it is posted.

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

John Lohmeyer reported that SAT (INCITS 431-2007) was approved by ANSI BSR on 9 Aug 2007. It should be published soon.

John noted that Mark Overby had requested a document number (07-349r0) for a project proposal to create amendment #1 for SAT, but had not yet uploaded the document.

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

Ralph Weber reported that OSD-2 r03 incorporating all proposals approved by this meeting will be posted late in December. Ralph asked that the target date for forwarding OSD-2 to INCITS be changed to July 2008.

8.9   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 07-407) and provided an electronic report in 07-406r0. Michael noted that Curtis Ballard will become chair after the January meeting.

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

Ralph Weber apologized for not preparing an SPC-4 revision since the July meeting and stated that SPC-4 r12 incorporating all approved proposals from the July and September meeting weeks will be posted before the November meeting, but may not be available in time for the mailing.

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

Rob Elliott noted that there has been no activity on this project. John Lohmeyer noted that, in July, Mark Overby asked that the project be kept open at least until November.

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

Paul Suhler reported on the activities of the ADI working group (minutes in 07-405) and provided an electronic report in 07-404r1.

John Lohmeyer announced that the ADC-2 first public review closed on Monday, September 17th with no comments received. However, the INCITS Secretariat asked T10 to confirm that a change made during the ANSI pre-edit is indeed editorial (non-substantive). Please refer to the ADI electronic report (07-404r1) for details of the change.

Paul Suhler moved and Kevin Butt seconded that T10 approve the ADC-2 pre-edit changes summarized in 07-404r1 as non-substantive, editorial changes. The motion passed 28:0:0:14=42.

John Lohmeyer will tell the INCITS Secretariat that T10 has judged the ADC-2 pre-edit changes summarized in 07-404r1 to be non-substantive by a vote of 28:0:0:14=42.

John stated that ADC-2 should now go to INCITS for management review and INCITS letter ballot.

8.13   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 07-405) and provided an electronic report in 07-404r1. Paul noted that the last technical input cutoff for ADT-2 will occur during the November meeting week.

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

Rob Elliott reported that several proposals have been recommended by the SAS protocol working group (minutes in 07-394). See agenda item 10.2. The SAS-2 physical working group (minutes in 07-367 and 07-418) did not recommend any SAS-2 proposals.

Rob asked that the target date for forwarding SAS-2 to INCITS be changed to July 2008.

SAS-2 revision 12 will be posted containing all approved proposals, probably in time for the mailing.

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

George Penokie reported that SBC-3 r11 is current and no proposals were received this week. Therefore, no new revision will be generated before November.

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

In the absence of Mark Overby, John Lohmeyer reported that a SAT-2 working group meeting was held August 20 (minutes in 07-369). A SAT-2 conference call is planned for Wednesday, October 17th and SAT-2 plans to meet with T10 again in November. Mark has requested that the cutoff date for new technical proposals be in November 2007 and that the group plans to go to T10 letter ballot following the May 2008 meeting.

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

In the absence of Dave Peterson, discussion of the activities of the FCP-4 working group (minutes in 07-410) was limited to an electronic report provided in 07-419r0.

8.18   MultiMedia Command Set - 6 (MMC-6) Project 1836-D [McFerrin]

Bill McFerrin reported that the MMC-6 working group (minutes in 07-421) is beginning to lurch forward. Work is progressing on BlueRay disk initiated changes in the command set. USB-related issues were discussed, particularly making an old USB usage class obsolete. Bill summarized the efforts to coordinate CD/DVD devices/media security with the TCG storage spec.

8.19   Automation/Drive Interface - Commands - 3 (ADC-3) Project 1895-D [Suhler]

Paul Suhler reported on the activities of the ADI working group (minutes in 07-405) and provided an electronic report in 07-404r1.

9.   Old Business

There was no old business.

10.   New Business

10.1   2008 National Standards Maintenance Recommendations (07-387) [Bennett]

John Lohmeyer noted that 15 standards and amendments are up for maintenance review as documented in 07-387r0. Rob Elliott recommended that INCITS 376-2003 (SAS) be withdrawn in favor of INCITS 417-2006 (SAS-1.1).

Bill Martin moved and Mark Seidel seconded that T10 recommend:

> that INCITS 376-2003 (SAS) be withdrawn; and
> that the following standards be reaffirmed:
> > INCITS 306-1998 [R2003] (SBC),
> > INCITS 314-1998 [R2003] (SMC),
> > INCITS 302-1998 [R2003] (SPI-2),
> > INCITS 350-2003 (FCP-2),
> > INCITS 325-1998 [R2003] (SBP-2),
> > INCITS 366-2003 (SAM-2),
> > INCITS 305-1998 [R2003] (SES),
> > INCITS 305-1998/AM1-2000 [R2003] (SES AM1),
> > INCITS 318-1998 [R2003] (SCC-2),
> > INCITS 330-2000/AM1-2003 [R2005] (RBC AM1),
> > INCITS 380-2003 (SSC-2),
> > INCITS 368-2003 (PIP),
> > INCITS 369-2003 (SSM-2), and
> > INCITS 367-2003 (SPI-5).

The motion passed 29:0:1:12=42. Details of the roll call vote were as follows:

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Organization                    Voter                   Vote
Adaptec, Inc.                                           (not present)
AMCC                                                    (not present)
Amphenol Interconnect                                   (not present)
ATL Technology                                          (not present)
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Brocade                                                    (not present)
Dell, Inc.                    Kevin Marks                  Yes
EMC Corp.                     David Black                  Yes
Emulex                        William Martin               Yes
ENDL                          Ralph O. Weber               Yes
FCI                           Douglas Wagner               Yes
Finisar Corp.                 Monica Li                    Abstain
Foxconn Electronics           Elwood Parsons               Yes
Fujitsu                       Mike Fitzpatrick             Yes
General Dynamics              Nathan Hastad                Yes
Hewlett Packard Co.           Rob Elliott                  Yes
Hitachi Global Storage Tech.  Dan Colegrove                Yes
IBM Corp.                     George O. Penokie            Yes
Intel Corp.                   Mark Seidel                  Yes
Iomega Corp.                  Robert Payne                 Yes
Kawasaki Microelectronics Am  Joel Silverman               Yes
KnowledgeTek, Inc.            Dennis Moore                 Yes
Lexar Media, Inc.             John Geldman                 Yes
LSI Corp.                     John Lohmeyer                Yes
Marvell                                                    (not present)
Maxim Integrated Products                                  (not present)
Microsoft Corp.                                            (not present)
Molex Inc.                    Jay Neer                     Yes
NeoScale Systems Inc.         Landon Noll                  Yes
Network Appliance             Frederick Knight             Yes
Nvidia Corp.                                               (not present)
Panasonic Technologies, Inc   Takaharu Ai                  Yes
PMC-Sierra                    Tim Symons                   Yes
Quantum Corp.                 Paul Suhler                  Yes
Samsung                                                    (not present)
SanDisk Corporation                                        (not present)
Seagate Technology            Gerald Houlder               Yes
STMicroelectronics, Inc.      Stephen Finch                Yes
Sun Microsystems, Inc.        Erich Oetting                Yes
Symantec                      Roger Cummings               Yes
TycoElectronics               Dan Gorenc                   Yes
Vitesse Semiconductor                                      (not present)
Western Digital               Mark Evans                   Yes
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This two-thirds roll call vote passed (29:0:1:12=42).
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John Lohmeyer took an action item to communicate the 2008 standards maintenance recommendations to INCITS.

10.2   Actions on SAS Protocol Working Group Recommendations

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

    07-317r2 ((Target) Transport layer write flowcharts) [Penokie]
    07-334r2 (Add minimum number of dwords after Identify Frame) [Houlder]
    07-388r1 (Only issue BROADCAST(CHANGE) for initial Spinup Hold) [Day]
    07-401r0 (SMP Discovery List Field Alignment) [Besmer]
    07-305r3 (Zone phy information clarifications) [Elliott]

Rob Elliott moved that 07-317r2, 07-334r2, 07-388r1, 07-401r0, and 07-305r3 be approved for inclusion in SAS-2. Kevin Marks seconded the motion. The motion passed on a vote of 25:0:2:15=42.

10.3   Actions on SAS PHY Working Group Recommendations

George Penokie reported that no recommendations were made by the SAS PHY working group.

10.4   Actions on SAT Working Group Recommendations

John Lohmeyer reported that no recommendations were made by the SAT working group.

10.5   Actions on CAP Working Group Recommendations

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

> 07-157r4 (Changes requested from 03/2007 editing session) [Penokie]
> 07-263r1 (SCSI Initiator and Target Port capability attributes) [Elliott]

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

> 07-262r6 (Command Security Model) [Weber/Penokie]
> 07-029r3 (Extended SCSI Commands) [Weber]
> 07-389r1 (Persistent Reservation Clarification) [Knight]
> 07-390r1 (Target Port Groups & Logical Unit Groups) [Knight]

George Penokie reviewed 07-357r0 (Correct an OSD-2 defined attributes bug) [Weber] a proposal recommended for inclusion in OSD-2.

Fred Knight moved that 07-263r1 be approved for inclusion in SAM-4; that 07-262r6, 07-029r3, 07-389r1, and 07-390r1 be approved for inclusion in SPC-4; and that 07-357r0 be approved for inclusion in OSD-2. Bill Martin seconded the motion. The motion passed on a vote of 26:0:0:18=42.

George Penokie moved that 07-157r4 be approved for inclusion in SAM-4. Mark Evans seconded the motion. The motion passed on a vote of 24:1:1:18=42.

10.6   Actions on Other Working Group Recommendations

No recommendations were presented from other working groups.

10.7   Project Proposal: USB Queuing Transport (07-400) [Stevens]

John Lohmeyer said that this project proposal did not meet the automatic two-week rule and action on it would be deferred until the November meeting. The draft project proposal (07-400r1) was reviewed briefly.

11.   ISO/IEC

11.1   ISO/IEC Report [Robinson]

Gary Robinson presented the ISO/IEC report (see enclosure (2)).

11.2   ISO/IEC Business [Robinson]

11.2.1   FDIS ballot for ATA/ATAPI-7 – Part 1

Gary Robinson moved and Erich Oetting seconded that T10 recommends that the JTC1 TAG vote to Approve FDIS ballot 25 N 1260 Subject: ISO/IEC 24739-1: Information technology - AT Attachment with Packet Interface – 7 - Part 1 - Register Delivered Command Set, Logical Register Set, (ATA/ATAPI-7 V1) project 1.25.13.18-1.

The motion passed on a roll call vote of 27:0:1:14=42. The details of the roll call vote were as follows:

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Organization                   Voter                    Vote
Adaptec, Inc.                                           (not present)
AMCC                                                    (not present)
Amphenol Interconnect                                   (not present)
ATL Technology                                          (not present)
Brocade                                                 (not present)
Dell, Inc.                     Kevin Marks              Yes
EMC Corp.                      Gary S. Robinson         Yes
Emulex                         William Martin           Yes
ENDL                           Ralph O. Weber           Yes
FCI                                                     (not present)
Finisar Corp.                  Monica Li                Abstain
Foxconn Electronics            Elwood Parsons           Yes
Fujitsu                        Mike Fitzpatrick         Yes
General Dynamics               Nathan Hastad            Yes
Hewlett Packard Co.            Rob Elliott              Yes
Hitachi Global Storage Tech.   Dan Colegrove            Yes
IBM Corp.                      George O. Penokie        Yes
Intel Corp.                    Mark Seidel              Yes
Iomega Corp.                   Robert Payne             Yes
Kawasaki Microelectronics Am   Joel Silverman           Yes
KnowledgeTek, Inc.                                      (not present)
Lexar Media, Inc.              John Geldman             Yes
LSI Corp.                      John Lohmeyer            Yes
Marvell Semiconductor, Inc.                             (not present)
Maxim Integrated Products                               (not present)
Microsoft Corp.                                         (not present)
Molex Inc.                     Jay Neer                 Yes
NeoScale Systems Inc.          Landon Noll              Yes
Network Appliance              Frederick Knight         Yes
Nvidia Corp.                                            (not present)
Panasonic Technologies, Inc    Takaharu Ai              Yes
PMC-Sierra                     Tim Symons               Yes
Quantum Corp.                  Paul Suhler              Yes
Samsung                                                 (not present)
SanDisk Corporation                                     (not present)
Seagate Technology             Gerald Houlder           Yes
STMicroelectronics, Inc.       Stephen Finch            Yes
Sun Microsystems, Inc.         Erich Oetting            Yes
Symantec                       Roger Cummings           Yes
TycoElectronics                Dan Gorenc               Yes
Vitesse Semiconductor                                   (not present)
Western Digital                Mark Evans               Yes
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This two-thirds international roll call vote passed (27:0:1:14=42).
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Gary Robinson took an action item to notify the JTC1 TAG that T10 recommends a vote to Approve FDIS ballot 25 N 1260 Subject: ISO/IEC 24739-1: Information technology - AT Attachment with Packet Interface – 7 - Part 1 - Register Delivered Command Set, Logical Register Set, (ATA/ATAPI-7 V1) project 1.25.13.18-1.

11.2.2   FCD ballot for ATA/ATAPI-7 – Part 2

Gary Robinson moved and Erich Oetting seconded that T10 recommends that the JTC1 TAG vote to Approve FCD ballot ISO/IEC 24739-2: Information technology - AT Attachment with Packet Interface – 7 - Part 2 - Parallel Transport Protocols and Physical Interconnect project 1.25.13.18-2.

The motion passed on a roll call vote of 27:0:1:14=42. The details of the roll call vote were the same as in 11.2.1.

Gary Robinson took an action item to notify the JTC1 TAG that T10 recommends a vote to Approve FCD ballot ISO/IEC 24739-2: Information technology - AT Attachment with Packet Interface – 7 - Part 2 - Parallel Transport Protocols and Physical Interconnect project 1.25.13.18-2.

11.2.3   FDIS ballot for Responsive Link

Gary Robinson moved and Erich Oetting seconded the motion that T10 recommends that the JTC1 TAG vote to Approve FDIS ballot Subject: ISO/IEC RL 24740: Information technology - Responsive Link, project 1.25.13.10.14.

The motion passed on a roll call vote of 27:0:1:14=42. The details of the roll call vote were the same as in 11.2.1.

Gary Robinson took an action item to notify the JTC1 TAG that T10 recommends that the JTC1 TAG vote to Approve FDIS ballot Subject: ISO/IEC RL 24740: Information technology - Responsive Link, project 1.25.13.10.14.

11.2.4   FCD ballot for FCP-3

Gary Robinson moved and Erich Oetting seconded the motion that T10 recommends that the JTC1/SC25 TAG vote to Approve FCD ballot on Subject: ISO/IEC 14776-223: Information technology - Fibre Channel Protocol-3, FCP-3, project 1.25.13.11.47.

The motion passed on a roll call vote of 27:0:1:14=42. The details of the roll call vote were the same as in 11.2.1.

Gary Robinson took an action item to notify the JTC1 TAG that T10 recommends that the JTC1/SC25 TAG vote to Approve FCD ballot on Subject: ISO/IEC 14776-223: Information technology - Fibre Channel Protocol-3, FCP-3, project 1.25.13.11.47.

12.   Liaison Reports

12.1   T11 Liaison Report [Snively]

John Lohmeyer briefly presented the T11 electronic liaison report that Bob Snively had prepared (07-375r0).

12.2   T13 Liaison Report [Colegrove]

Dan Colegrove provided an oral report to the committee on the activities of T13. The first ATA-8/ACS letter ballot failed to pass and extraordinary efforts are underway to remedy the situation. 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   SCSI Trade Association (STA) [Czekalski]

Marty Czekalski provided an electronic report (07-412r0) on the activities of the SCSI Trade Association, which John Lohmeyer reviewed.

12.5   IETF SCSI over IP [Black]

David Black reported briefly on the status of the IPS working group.

12.6   SNIA [open]

David Black reported that SNIA is working on transmitting CIM over SCSI using the Management In/Out commands and this work may eventually affect T10.

12.7   Trusted Computing Group [Fitzpatrick]

Mike Fitzpatrick reported that TCG face-to-face meeting will be the same week T11 meets but in Los Angeles.

12.8   MIPI Alliance [Shimor]

In the absence of Avraham Shimor, no report was made.

12.9   IEEE P1619 [Ball]

Matt Ball prepared an electronic report (07-411r0), which Landon Noll presented.

13.   Review of Action Items

670   John Lohmeyer will tell the INCITS Secretariat that T10 has judged the ADC-2 pre-edit changes summa-
         rized in 07-404r1 to be non-substantive by a vote of 28:0:0:14=42.
671   George Penokie will generate SAM-4 r13.
672   John Lohmeyer will conduct a letter ballot on SAM-4 r13 as soon as it is posted.
673   John Lohmeyer will communicate the 2008 standards maintenance recommendations to INCITS.
674   Gary Robinson will notify the JTC1 TAG that T10 recommends a vote to Approve FDIS ballot 25 N 1260
         Subject: ISO/IEC 24739-1: Information technology - AT Attachment with Packet Interface -- 7 - Part 1 -
         Register Delivered Command Set, Logical Register Set, (ATA/ATAPI-7 V1) project 1.25.13.18-1.
675   Gary Robinson will notify the JTC1 TAG that T10 recommends a vote to Approve FCD ballot ISO/IEC
         24739-2: Information technology - AT Attachment with Packet Interface -- 7 - Part 2 - Parallel Transport
         Protocols and Physical Interconnect project 1.25.13.18-2.
676   Gary Robinson will notify the JTC1 TAG that T10 recommends that the JTC1 TAG vote to Approve FDIS
         ballot Subject: ISO/IEC RL 24740: Information technology - Responsive Link, project 1.25.13.10.14.
677   Gary Robinson will notify the JTC1 TAG that T10 recommends that the JTC1/SC25 TAG vote to Approve
         FCD ballot on Subject: ISO/IEC 14776-223: Information technology - Fibre Channel Protocol-3, FCP-3,
         project 1.25.13.11.47.

14.   Meeting Schedule

The next plenary meeting of T10 will be Thursday November 8, 2007 in Las Vegas, NV at the Atrium Suites
Las Vegas Hotel (Reservations: (866) 404-5286) hosted by Hitachi GST. The meeting will begin at 1:30 p.m. on
Thursday.

The meeting list for the next plenary week is:

```
                    November 2007 Meeting Map
                      (2007/09/20 Version)

Monday 11/5          9   10  11  12  1   2   3   4   5   6   7   8
                     +===============+=====================+
                     | ADI-2 WG      / SMC-3 WG            |          (15)
                     +===============+=====================+
```

```
                       | SAS Protocol WG                     |        (40)
                       +==============+==================+===+
                                      | IEEE P1619       |           (25)
                                      +------------------+

Tuesday 11/6           9   10  11  12  1   2   3   4   5   6   7   8
                       +===================================+
                       | SAS Physical WG                   |          (45)
                       +============+=+--------------+===+
                       | SAT WG     | | STA Marcom * |              (20)
                       +============+-+--------------+
                       | TCG KMSS * | | TCG SIIF *    |             (20)
                       +------+------+=+==============+===+
                       |FCP-4 / SSC-3 WG                   |          (25)
                       +======+========================+===+
                       | Mt Fuji                           |          (25)
                       +-----------------------------+

Wednesday 11/7         9   10  11  12  1   2   3   4   5   6   7   8
                       +======================================+
                       | CAP WG                              |        (45)
                       +========================+==========+===+
                                                | SFF      |         (25)
                       +==============+-------+-------+---+
                       | MMC WG        / Mt Fuji       |             (25)
                       +==============+--------------+
                       | STA Plenary * / TCC*          |            (20)
                       +--------------+--------------+

Thursday 11/8          9   10  11  12  1   2   3   4   5   6   7   8
                       +===========+====+===========+==========+
                       | CAP WG    |////| T10 Plenary/SAM LB cmt|    (45/50/10)
                       +===========+====+===========+==========+

Friday 11/9            9   10  11  12  1   2   3   4   5   6   7   8
                       No meetings are 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
--------------   -----------------   -------------------------------------
SAS Protocol     TBA                 TBA via T10 reflector / Elliott
Call(s)
SAS PHY Calls    Weekly Thu 10a CDT  TBA via T10 reflector / Cox
Security Calls   TBA                 TBA via T10 reflector / Penokie
ADI Call         Sep 26 8a-10a PDT   TBA via T10 reflector / Suhler
ADI Call         Oct 10 8a-10a PDT   TBA via T10 reflector / Suhler
SAT Call         Oct 17 1p-4p PDT    TBA via T10 reflector / Overby
ADI Call         Oct 31 8a-10a PDT   TBA via T10 reflector / Suhler
```

```
   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
FCP-4:       Fibre Channel Protocol - 4
IEEE P1619:  IEEE Security in Storage Working Group
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
PH or PHY:   Physical (Connectors, Cables, Transceivers, etc.)
Prot:        Protocol
Plenary:     Full Committee Meeting
Res:         Resolution
SAS:         Serial Attached SCSI
SAT-2:       SCSI / ATA Translation - 2
SBC-3:       SCSI Block Commands - 3
SCSI:        Small Computer System 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)
T10:         SCSI Storage Interfaces Technical Committee
T11:         Fibre Channel Interfaces Technical Committee
T13:         ATA Storage Interface
TCG:         Trusted Computing Group
TCG SIIF:    Trusted Computing Group Storage Interface Interactions Forum
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,    Rob Elliott      (281) 518-5037
BCC,SDI                                        Elliott@hp.com
MMC-5, MMC-6                  Bill McFerrin    (325) 423-1560
                                               billmc37@ctesc.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-2                         Mark Overby      (425) 417-9412
                                               moverby@nvidia.com
SMC-2                         Erich Oetting    (303) 673-2178
                                               Erich_Oetting@Stortek.com
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@mcdata.com
Other Activities              John Lohmeyer    (719) 533-7560
                                               lohmeyer@t10.org
```

The long-term T10 meeting week schedule is:

```
Date             Location                 Host/Comments
---------------- ------------------------ -----------------------------
Approved dates, locations, and hosts for 2007:
Nov 5-9, 2007    Las Vegas, NV            Hitachi GST
Approved dates, locations, and hosts for 2008:
Jan 14-18, 2008  Santa Ana, CA            Western Digital
Mar 10-14, 2008  Raleigh, NC              Network Appliance
May 5-9, 2008    Santa Clara, CA          Nvidia
Jul 14-18, 2008  Anchorage, AK            Emulex
Sep 8-12, 2008   Colorado Springs, CO     LSI
Nov 3-7, 2008    Orlando, FL              Symantec
Proposed dates and tentative locations and hosts for 2009:
Jan 12-16,2009
Mar 9-13, 2009
May 4-8, 2009    Seattle, WA              Microsoft
Jul 13-17, 2009  Colorado Springs, CO     LSI
Sep 7-11, 2009   Boston, MA               EMC
Nov 9-13, 2009   Las Vegas, NV            Hitachi GST
```

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.

Kevin Marks moved that T10 authorize the T10-related meetings and events in the list above that had not previously been approved through the end of October 2007. Erich Oetting 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 3:20 p.m. on Thursday September 20, 2007.

Enclosure(1) -- Meeting Attendees

```
            Name                    S         Organization
------------------------------------ -- ------------------------------------
Mr. Jaremy Flake                     P  ATL Technology
Mr. David Peterson                   P  Brocade
Mr. William McFerrin                 V  DataPlay
Mr. Kevin Marks                      P  Dell, Inc.
Mr. David Black                      A  EMC Corp.
Mr. Gary S. Robinson                 P  EMC Corp.
Mr. William Martin                   P  Emulex
Mr. Ralph O. Weber                   P  ENDL Texas
Mr. Douglas Wagner                   P  FCI
Ms. Monica Li                        A# Finisar Corp.
Mr. Elwood Parsons                   P  Foxconn Electronics
Mr. Mike Fitzpatrick                 P  Fujitsu
Mr. Nathan Hastad                    P  General Dynamics
Mr. Michael Banther                  A  Hewlett Packard Co.
Mr. Rob Elliott                      P  Hewlett Packard Co.
Mr. Dan Colegrove                    P  Hitachi Global Storage Tech.
Mr. Kevin Butt                       A  IBM Corp.
Mr. George O. Penokie                P  IBM Corp.
Dr. Mark Seidel                      P  Intel Corp.
Mr. Robert Payne                     P  Iomega Corp.
Mr. Joel Silverman                   P  Kawasaki Microelectronics Am
Mr. Dennis Moore                     P  KnowledgeTek, Inc.
Mr. John Geldman                     P  Lexar Media, Inc.
Mr. Walt Hubis                       V  LSI Corp.
Mr. John Lohmeyer                    P  LSI Corp.
Mr. Jay Neer                         P  Molex Inc.
Mr. Landon Noll                      A  NeoScale Systems Inc.
Mr. Frederick Knight                 P  Network Appliance
Mr. Takaharu Ai                      A  Panasonic AVC Networks Co.
Mr. Tim Symons                       P  PMC-Sierra
Dr. Paul Suhler                      A  Quantum Corp.
Mr. Alvin Cox                        A  Seagate Technology
Mr. Gerald Houlder                   P  Seagate Technology
Mr. Stephen Finch                    P  STMicroelectronics, Inc.
Mr. Erich Oetting                    P  Sun Microsystems, Inc.
Mr. Roger Cummings                   P  Symantec
Mr. Georg Boasson                    V  Tandberg Storage
Mr. Dan Gorenc                       A  TycoElectronics
Mr. Mark Evans                       P  Western Digital
Mr. Curtis Stevens                   A  Western Digital


40 People Present

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

Enclosure(2) -- ISO Status

T10 ISO Status Report - 09/20/2007

ISO Proj.	Acronym	Part Num.	Last Step Completed	Comments
1.25.13.10.14	RL	24740	S5: TC motion on FDIS	FCD Approved, 25n1257, Japan has supplied FDIS text, T10 must ballot
1.25.13.11.13	SMC	14776-351	S7: IS Published	Published
1.25.13.11.19	SAM-2	14776-412	S7: IS Published	Published
1.25.13.11.22	SES-2	14776-372	S2: NWIP Approved	Waiting for FCD text
1.25.13.11.28	SPI-4	14776-114	S8: WITHDRAWAL, INCITS as JTC1 TAG votes	INCITS Approved Withdrawal
1.25.13.11.31	SBC-2	14776-322	S7: IS Published	
1.25.13.11.33	SPC-3	14776-453	S3: FCD Ballot completed	FCD Ballot (25n1337) Completed
1.25.13.11.37	SSM-2	14776-132	S8: WITHDRAWAL, SC25 Resolution	Voted to remove from SC25 Program of Work., Resolution BL-WG4-11
1.25.13.11.38	PIP	14776-121	S5: FDIS Motion sent to INCITS	FDIS Ballot in process 25N1352
1.25.13.11.39	SBP-3	14776-233	S8: WITHDRAWAL, SC25 Resolution	Voted to remove from SC25 Program of Work, Resolution BL-WG4-13
1.25.13.11.45	SAM-3	14776-413	S6: SC25 sends FDIS to JTC1 for publishing	Sent for publication
1.25.13.11.46	SAS-1.1	14776-151	S2: NWIP Approved	CD was approved, text needed for FCD
1.25.13.11.47	FCP-3	14776-223	S3: TC motion on FCD	FCD Ballot in process 25n1367, Will need T10 ballot
1.25.13.18-1	ATAPI-7-1	24739-1	S5: SC25 requests JTC1 to start FDIS ballot	FCD Approved. 25n1260, Sent FDIS text. Need T10 vote on FDIS This is volume 1 of 3.
1.25.13.18-2	ATAPI-7-2	24739-2	S3: SC25 started FCD ballot	FCD text sent to SC25, ready for FCD ballot, T10 should vote
1.25.13.18-3	ATAPI-7-3	24739-3	S2: SC25 TAG sent FCD to SC25	FCD text sent to SC25
1.25.13.__.___ _	RBC-2	14776-326	S1: SC25 TAG sent NWIP to SC25	Integrate US RBC amendment into base document

T10 ISO Status Report - 09/20/2007

ISO Proj.	Acronym	Part Num.	Last Step Completed	Comments
1.25.13.__.__ _	SPC	14776-311/451	S8: WITHDRAWAL, INCITS as JTC1 TAG votes	INCITS Approved Withdrawal

Enclosure(3) -- T10 Attendance Database
     Generated on 2007/09/24 at 15:01:05

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                                    Fax: (978) 470-0321
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```
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```

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                                          com
Bloomington, MN 55431

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```
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