

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

**Doc. No.:** T10/08-277r0

**Date:** July 22, 2008

**Reply to:** John Lohmeyer

To: T10 Membership  
From: Ralph Weber / John Lohmeyer  
Subject: Minutes of T10 Plenary Meeting #86 -- July 17, 2008  
Anchorage, AK

## Agenda

1. Opening Remarks
2. Approval of Agenda
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4. Approval of Minutes - May 2008 - San Jose, CA (T10/08-211r0)
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    - 8.1.1 INCITS Antitrust Guidelines
  - 8.2 Bridge Controller Commands (BCC) Project 1528-D [Elliott]
  - 8.3 SCSI Enclosure Services - 2 (SES-2) Project 1559-D [Elliott]
  - 8.4 SCSI Stream Commands - 3 (SSC-3) Project 1611-D [Peterson]
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  - 8.6 Object-Based Storage Devices - 2 (OSD-2) Project 1729-D [Weber]
  - 8.7 SCSI Media Changer Command Set - 3 (SMC-3) Project 1730-D [Ballard]
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  - 8.9 Automation/Drive Interface - Commands - 2 (ADC-2) Project 1741-D [Suhler]
  - 8.10 Automation/Drive Interface - Transport Protocol - 2 (ADT-2) Project 1742-D [Suhler]
  - 8.11 Serial Attached SCSI - 2 (SAS-2) Project 1760-D [Elliott]
  - 8.12 SCSI Block Commands - 3 (SBC-3) Project 1799-D [Evans]
  - 8.13 SCSI / ATA Translation - 2 (SAT-2) Project 1826-D [Overby]
  - 8.14 Fibre Channel Protocol - 4 (FCP-4) Project 1828-D [Peterson]
  - 8.15 MultiMedia Command Set - 6 (MMC-6) Project 1836-D [McFerrin]
  - 8.16 Automation/Drive Interface - Commands - 3 (ADC-3) Project 1895-D [Suhler]
  - 8.17 USB Attached SCSI (UAS) Project 2095-D [Stevens]
  - 8.18 SCSI Architecture Model - 5 (SAM-5) Project 2104-D [Penokie]
9. ISO/IEC
  - 9.1 ISO/IEC Report [Robinson]
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    - 9.2.1 Delegation to SC25/WG4
    - 9.2.2 Numbering notes in ISO standards
10. Old Business
  - 10.1 Project Proposals for next generation SAS

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- 10.1.1 Project Proposal for Serial Attached SCSI - 2.1 (SAS-2.1) (08-110) [Elliott]
- 10.1.2 Project Proposal: Alternate Serial Attached SCSI 2.1 (08-117) [Butt]
- 10.1.3 Project Proposal: Serial Attached Protocol (SAP) (08-118) [Butt]
- 10.2 Project proposal for SSC-4 (08-136) [Peterson]
- 11. New Business
  - 11.1 Project Proposal for SAT-3 (08-224) [Overby]
  - 11.2 Actions on SAS Protocol Working Group Recommendations
  - 11.3 Actions on SAS PHY Working Group Recommendations
  - 11.4 Actions on SAT Working Group Recommendations
  - 11.5 Actions on CAP Working Group Recommendations
  - 11.6 Actions on Other Working Group Recommendations
- 12. Liaison Reports
  - 12.1 T11 Liaison Report [Snively]
  - 12.2 T13 Liaison Report [Colegrove]
  - 12.3 SCSI Trade Association (STA) [Czekalski]
  - 12.4 IEEE P1619 [Ball]
- 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 1:30 p.m., Thursday July 17, 2008. He thanked Bob Nixon and Anne McDonald of Emulex 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 (see enclosure 1) was taken electronically via the meeting web site.

On behalf of the INCITS leadership, the committee presented the INCITS Lifetime Achievement award to John Lohmeyer in recognition his 21 years of service as committee chair.

### 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 or modified in the agenda during the course of the meeting:

- 9.2.2 Numbering notes in ISO standards

### 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 (\$1200 per year).

John briefly discussed the mailing fees. Complete pricing information is contained in the 2008 membership form (available at [http://www.t10.org/ftp/t10/mem\\_form.txt](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 2 organizations informing them that the organization's membership was in jeopardy due to non-attendance (see 08-245r0) and that their membership would be terminated if they did not attend this meeting. The following organizations were in attendance jeopardy:

Amphenol Interconnect  
Molex Inc.

All organizations in attendance jeopardy were present except:

Amphenol Interconnect

The representatives of this organization had their membership changed to Advisory (non-voting) status.

John called for requests to join the committee. No organizations joined at this meeting.

The T10 membership during the meeting was 36 organizations, down from the 37 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:

T10 Letter Ballot Jeopardy Report -- 2008/05/01

Organization	Ballot: Report: Acronym:	07-513r0 07-514r0 SAM4 NWIP	08-092r0 08-093r0 SAS-2	08-096r0 08-097r0 SSC-3
Dell, Inc.		Yes	DNV	Yes
Intel Corp.		DNV	No	Yes
NeoScale Systems Inc.	(*)	DNV	--	DNV

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 - May 2008 - San Jose, CA (T10/08-211r0)**

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 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 July 24, 2008. 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](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 Corp. 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>. Questions about this policy are to be referred to the participant's legal counsel or the

ANSI General Counsel. No interpretation or explanation of the ISO/IEC/ITU patent policy was provided. The Chair showed the "three slides" from the INCITS pat\_slides.pdf.

The Chair issued a call for patents.

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

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

## 7. Review of Old Action Items

- 697 Rob Elliott will notify the T10 Reflector of plans to withdraw the BCC project in July. *Complete.*
- 698 John Lohmeyer will forward SES-2 revision 20 to INCITS for further processing toward first public review. *Complete.*
- 699 John Lohmeyer will forward SAM-4 revision 14 to INCITS for further processing toward first public review. *Complete.*
- 700 Gary Robinson will generate a NWIP for SAM-4. *Complete.*
- 701 John Lohmeyer will transmit FCD recommendation on RBC to INCITS for further processing. *Complete.*
- 702 John Lohmeyer will transmit FCD recommendation on SAT to INCITS for further processing. *Complete.*
- 703 John Lohmeyer will transmit FDIS recommendation on ATAPI-7-2 to INCITS for further processing. *Complete.*
- 704 John Lohmeyer will transmit FDIS recommendation on ATAPI-7-3 to INCITS for further processing. *Complete.*
- 705 John Lohmeyer will report to INCITS that \$5,000 of the T10 editing fund has been approved for payment for editing services on ENDL Texas. *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. He had posted a message to the T10 reflector announcing the intention to withdraw the BCC project at the July meeting. There was no response to this message.

Rob Elliott moved that T10 recommend that Project 1528-D be withdrawn due to lack of progress. Roger Cummings seconded the motion. The two-thirds motion passed 30:0:0:6=36.

John Lohmeyer took an action item to notify the INCITS Secretariat that T10 recommends Project 1528-D be withdrawn due to lack of progress.

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

John Lohmeyer reported that the SES-2 public review period ended 14 July 2008. No comments were received. SES-2 is now at INCITS management review.

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

In the absence of Dave Peterson, Kevin Butt reported on the activities of the SSC-3 working group (minutes in 08-294). Dave also provided an electronic report in 08-298r0, which Kevin reviewed.

John Lohmeyer reported that a project proposal for SSC-4 (08-136) is on the agenda for consideration at this meeting.

### **8.5 SCSI Architecture Model - 4 (SAM-4) Project 1683-D [Penokie]**

John Lohmeyer reported that the SAM-4 public review period ended 14 July 08. No comments were received. SAM-4 is now at INCITS management review.

### **8.6 Object-Based Storage Devices - 2 (OSD-2) Project 1729-D [Weber]**

Ralph Weber reported that OSD-2 r04 will be prepared to contain all proposals approved by this meeting. Ralph requested that a Letter Ballot be conducted on OSD-2 r04 for forwarding it to first Public Review.

Ralph Weber took an action item to prepare OSD-2 r04.

John Lohmeyer took an action item to conduct a Letter Ballot on forwarding OSD-2 r04 to first Public Review.

### **8.7 SCSI Media Changer Command Set - 3 (SMC-3) Project 1730-D [Ballard]**

Curtis Ballard reported on the activities of the SMC-3 working group (minutes in 08-238 and 08-288), and provided an electronic report in 08-290r0.

### **8.8 SCSI Primary Commands - 4 (SPC-4) Project 1731-D [Weber]**

Ralph Weber reported that SPC-4 r15 was prepared after the last mailing and will appear in this mailing. SPC-4 r16 will be prepared to include all proposals approved at this meeting, but may not be available in time for the mailing.

Ralph Weber moved and Paul Suhler seconded that SPC-4 r16 be accepted as the current committee draft for project 1731-D. In the absence of objections, the motion passed unanimously.

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

John Lohmeyer reported that ADC-2 was approved by ANSI on May 12, 2008 and is published as ANSI INCITS 441-2008. He congratulated Paul Entzel, the ADC-2 Project Editor.

### **8.10 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 08-291). Paul provided an electronic report in 08-284.

### **8.11 Serial Attached SCSI - 2 (SAS-2) Project 1760-D [Elliott]**

Rob Elliott reported that SAS-2 r14c is available on the web site. SAS-2 r14d will not be available until late August.

Work has proceeded all week on resolving Letter Ballot comments. The Phy stress test definition is encountering difficulties with the StatEye model. The Phy group has agreed to devise an alternate approach if the issues with the StatEye approach have not been resolved by September.

In response to a question from the floor, Rob stated that the target for forwarding is November, with a mostly stable revision posted in September.

#### **8.12 SCSI Block Commands - 3 (SBC-3) Project 1799-D [Evans]**

Mark Evans reported that SBC-3 r16 will be prepared to incorporate the proposals approved this week. The new revision should be posted within the next few weeks, but probably not in time for the mailing.

Rob Elliott suggested that a Letter Ballot should be conducted soon, but the committee deferred consideration of the specific timing of the Letter Ballot to the September CAP meeting.

John Lohmeyer took an action item to place SBC-3 Letter Ballot dates on the September CAP agenda.

#### **8.13 SCSI / ATA Translation - 2 (SAT-2) Project 1826-D [Overby]**

Mark Overby reported that a SAT-2 working group meeting was held June 23rd in Denver, CO (minutes in 08-259r0) and July 15th (minutes in 08-275).

The SAT-2 working group requests that a letter ballot be conducted on forwarding SAT-2 r06 to first public review.

Mark Overby took an action item to prepare SAT-2 r06.

John Lohmeyer took an action item to conduct a Letter Ballot on forwarding SAT-2 r06 to first Public Review.

A SAT-3 project proposal is on the agenda for consideration.

#### **8.14 Fibre Channel Protocol - 4 (FCP-4) Project 1828-D [Peterson]**

In the absence of Dave Peterson, John Lohmeyer led a discussion of the activities of the FCP-4 working group (minutes in 08-296). Dave provided an electronic report in 08-297r0, which John reviewed.

#### **8.15 MultiMedia Command Set - 6 (MMC-6) Project 1836-D [McFerrin]**

In the absence of Bill McFerrin, no report was available on the activities of MMC-6 working group.

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

Paul Suhler reported on the activities of the ADI working group (minutes in 08-291). Paul provided an electronic report in 08-284.

#### **8.17 USB Attached SCSI (UAS) Project 2095-D [Stevens]**

Curtis Stevens reported on the CAP working group activities related to UAS (minutes in 08-276).

#### **8.18 SCSI Architecture Model - 5 (SAM-5) Project 2104-D [Penokie]**

George Penokie reported that no SAM-5 activities have taken place yet.

### **9. ISO/IEC**

#### **9.1 ISO/IEC Report [Robinson]**

In the absence of Gary Robinson, John Lohmeyer presented the ISO/IEC report (see enclosure 2).

## **9.2 ISO/IEC Business [Robinson]**

### **9.2.1 Delegation to SC25/WG4**

John Lohmeyer noted that the next meeting of SC 25/WG 4 is October 20-24, 2008 in Lyon, France. He asked if anyone wished to volunteer to serve on the US delegation to this meeting.

Sean Dolan of EMC volunteered to represent T10 in the US delegation at the SC 25/WG 4 meeting.

Ralph Weber moved that Sean Dolan be added to the US delegation for the SC 25/WG 4 meeting on October 20-24, 2008. Roger Cummings seconded the motion. The motion passed 30:0:0:6=36.

John Lohmeyer took an action item notify the Head of Delegation, Bob Snively, that T10 has requested that Sean Dolan of EMC be added to the US delegation for the SC 25/WG 4 on October 20-24, 2008.

### **9.2.2 Numbering notes in ISO standards**

Ralph Weber described a conflict between the ISO directives for notes numbering and the long-standing T10 policy of consecutively numbering notes throughout an entire document.

Ralph Weber moved that T10 direct its ISO editors to number notes consecutively throughout its standards, in contravention of the applicable ISO directives. Kevin Butt seconded the motion. The motion passed 30:0:0:6=36.

## **10. Old Business**

### **10.1 Project Proposals for next generation SAS**

#### **10.1.1 Project Proposal for Serial Attached SCSI - 2.1 (SAS-2.1) (08-110) [Elliott]**

Bill Martin moved that T10 consider only the two SAS-2.1 project proposals, not the single project proposal in 08-110. Paul Suhler seconded the motion. The motion passed 19:6:4:7=36.

#### **10.1.2 Project Proposal: Alternate Serial Attached SCSI 2.1 (08-117) [Butt]**

John Lohmeyer presented the SAS-2.1 (Phy layer) project proposal (08-117r0). The committee requested minor changes (including a correction to the forwarding date) and Kevin Butt agreed to prepare a new revision.

Kevin Butt moved that 08-117r1 (r0 as revised) be forwarded to INCITS as the project proposal for SAS-2.1. Bill Martin seconded the motion. The motion passed on a two-thirds vote of 26:1:3:7=36.

Kevin Butt took an action item to prepare 08-117r1, the revised project proposal for SAS-2.1.

John Lohmeyer took an action item to forward 08-117r1 to INCITS as the project proposal for SAS-2.1.

#### **10.1.3 Project Proposal: Serial Attached Protocol (SAP) (08-118) [Butt]**

John Lohmeyer presented the Serial Attached Protocol (SAP) project proposal (08-118r0). The committee requested that the name be changed to SAS Protocol Layer (SPL). Other minor changes were requested (including a correction to the forwarding date) and Kevin Butt agreed to prepare a new revision.

Kevin Butt moved that 08-118r1 (r0 as revised) be forwarded to INCITS as the project proposal for SPL. Bill Martin seconded the motion. The motion passed on a two-thirds vote of 26:1:3:7=36.

Kevin Butt took an action item to prepare 08-118r1, the revised project proposal for SPL.

John Lohmeyer took an action item to forward 08-118r1 to INCITS as the project proposal for SPL.



## 10.2 Project proposal for SSC-4 (08-136) [Peterson]

John Lohmeyer briefly reviewed the project proposal for SCSI Stream Commands - 4 (SSC-4) contained in 08-136r1. The submission date needed to be revised.

Kevin Butt moved the T10 approve the SCSI Stream Commands - 4 (SSC-4) project proposal 08-136r2, r1 as revised. Curtis Ballard seconded the motion. The motion passed on a two-thirds vote of 24:0:4:8=36.

Dave Peterson was given an action item to prepare 08-136r2, the revised project proposal for SSC-4.

John Lohmeyer took an action item to forward 08-136r2 to INCITS as the project proposal for SSC-4.

## 11. New Business

### 11.1 Project Proposal for SAT-3 (08-224) [Overby]

John Lohmeyer briefly reviewed the project proposal for SCSI/ATA Translation -3 (SAT-3) contained in 08-224r0. The submission date needed to be revised, and the work to be considered needed to be trimmed.

Mark Overby moved the T10 approve the SCSI/ATA Translation -3 (SAT-3) project proposal 08-224r1 (r0 as revised). Bill Martin seconded the motion. The motion passed on a two-thirds vote of 28:0:1:7=36.

Mark Overby took an action item to prepare 08-224r1, the revised project proposal for SAT-3.

John Lohmeyer took an action item to forward 08-224r1 to INCITS as the project proposal for SAT-3.

### 11.2 Actions on SAS Protocol Working Group Recommendations

The SAS Protocol working group made no recommendations to the committee this month.

### 11.3 Actions on SAS PHY Working Group Recommendations

The SAS PHY working group made no recommendations to the committee this month.

### 11.4 Actions on SAT Working Group Recommendations

Mark Overby reviewed the following recommendations for inclusion in SAT-2:

- Definitions Cleanup (08-239r1) [Overby]
- Remove Annex A from SAT-2

Kevin Marks moved that 08-239r1 be approved for inclusion in SAT-2, and that Annex A be removed from SAT-2. Curtis Stevens seconded the motion. In the absence of objections, the motion passed unanimously.

### 11.5 Actions on CAP Working Group Recommendations

Mark Evans reviewed the following proposals recommended for inclusion in SPC-4:

- 08-254r0 (Protocol Specific diagnostic page) [Elliott]
- 08-261r1 (Parsing variable-length parameter lists and data) [Elliott]
- 08-262r0 (SAI, SQN, IV, & Data must be contiguous) [Weber]
- 08-287r1 (ATA Information VPD page nits) [Elliott]

Mark Evans reviewed 08-116r3 (Protection Type 3 Reference Tag Clarification) [Penokie] a proposal recommended for inclusion in SPC-4 and SBC-3.

Mark Evans reviewed the following proposals recommended for inclusion in OSD-2:

- 08-179r3 (Fixes for five OSD-2 bugs) [Weber]
- 08-181r0 (Set Attributes error handling in OSD-2) [Weber]
- 08-182r3 (Snapshots and related enhancements) [Weber]
- 08-185r5 (CDB Continuations Definition and Usage) [Weber]

Mark Overby moved that 08-254r0, 08-261r1, 08-262r0, and 08-287r1 be approved for inclusion in SPC-4; that 08-116r3 be approved for inclusion in SPC-4 and SBC-3; and that 08-179r3, 08-181r0, 08-182r3, and 08-185r5 be approved for inclusion in OSD-2. John Goldman seconded the motion. In the absence of objections, the motion passed unanimously.

## 11.6 Actions on Other Working Group Recommendations

No recommendations from other working groups were presented to the meeting.

## 12. Liaison Reports

### 12.1 T11 Liaison Report [Snively]

In the absence of Bob Snively, Bob Nixon presented the T11 electronic liaison report (08-258).

### 12.2 T13 Liaison Report [Colegrove]

Dan Colegrove provided an electronic report in 08-087r3 and made an oral report to the committee on the activities of T13. For additional details regarding T13 activities see [www.t13.org](http://www.t13.org).

### 12.3 SCSI Trade Association (STA) [Czekalski]

In the absence of Marty Czekalski, John Lohmeyer presented an electronic report (08-300) on the activities of the SCSI Trade Association.

### 12.4 IEEE P1619 [Ball]

In the absence of Matt Ball, John Lohmeyer reported that IEEE P1619 SISWG plans to meet with the IEEE Key Management Summit and Security in Storage Workshop in Baltimore, MD on September 23-25, 2008. They will not meet with T10 in September and may not meet with T10 subsequently since P1619.1 has been published.

## 13. Review of Action Items

- 707 John Lohmeyer will notify the INCITS Secretariat that T10 recommends Project 1528-D be withdrawn due to lack of progress.
- 708 Ralph Weber will prepare OSD-2 r04.
- 709 John Lohmeyer will conduct a Letter Ballot on forwarding OSD-2 r04 to first Public Review.
- 710 John Lohmeyer will place SBC-3 Letter Ballot dates on the September CAP agenda.
- 711 Mark Overby will prepare SAT-2 r06.
- 712 John Lohmeyer will conduct a Letter Ballot on forwarding SAT-2 r06 to first Public Review.
- 713 John Lohmeyer will notify the Head of Delegation, Bob Snively, that T10 has requested that Sean Dolan of EMC be added to the US delegation for the SC 25/WG 4 meeting on October 20-24, 2008.
- 714 Kevin Butt will prepare 08-117r1, the revised project proposal for SAS-2.1.
- 715 John Lohmeyer will forward 08-117r1 to INCITS as the project proposal for SAS-2.1.
- 716 Kevin Butt will prepare 08-118r1, the revised project proposal for SPL.
- 717 John Lohmeyer will forward 08-118r1 to INCITS as the project proposal for SPL.
- 718 Dave Peterson will prepare 08-136r2, the revised project proposal for SSC-4.
- 719 John Lohmeyer will forward 08-136r3 to INCITS as the project proposal for SSC-4.

- 720 Mark Overby will prepare 08-224r1, the revised project proposal for SAT-3.
- 721 John Lohmeyer will forward 08-224r1 to INCITS as the project proposal for SAT-3.

**14. Meeting Schedule**

The next plenary meeting of T10 will be Thursday September 11, 2008 in Colorado Springs, CO at the Antlers Hilton Hotel (Reservations: <http://www.hilton.com/en/hi/groups/personalized/COSCSHF-LSI908-20080907/index.jhtml>) hosted by LSI Corp. The meeting will begin at 1:30 p.m. on Thursday.

The meeting list for the next plenary week is:

September 2008 Meeting Map

Monday 9/8	9	10	11	12	1	2	3	4	5	6	7	8	
	+=====+=====+=====+												
	SMC-3 WG / ADI-2 WG												(15)
	+=====+=====+=====+												
	SAS Protocol WG												(40)
	+=====+=====+=====+												
Tuesday 9/9	9	10	11	12	1	2	3	4	5	6	7	8	
	+=====+=====+=====+												
	SAS Physical WG												(45)
	+=====+=====+=====+												
	SAT WG												(20)
	+=====+-----+-----+=====+												
	STA Marcom / BOD												(20)
	+=====+=====+=====+												
	FCP-4 / SSC-3 WG												(25)
	+=====+=====+=====+												
	MMC WG												(15)
	+=====+=====+=====+												
Wednesday 9/10	9	10	11	12	1	2	3	4	5	6	7	8	
	+=====+=====+=====+												
	CAP WG												(45)
	+-----+-----+-----+=====+												
	Mt Fuji												(15)
	+-----+-----+-----+-----+												
	STA Plen*   TCC*   SFF												(25)
	+-----+-----+-----+-----+												
Thursday 9/11	9	10	11	12	1	2	3	4	5	6	7	8	
	+=====+=====+=====+												
	CAP WG  ////  T10 Plenary/LB cmnt												(45/50/10)
	+=====+=====+=====+												
Friday 9/12	8	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.

## 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)

Meeting	Date(s)	Location / Host
SET PSEUDO FORMAT Call	Tue Jul 29 11:00a-1:00p MDT	TBA via T10 Reflector / Bob Sheffield
SAS PHY Call	Thu Jul 31 10:00a-12:00n CDT	TBA via T10 Reflector / Cox
SMC-3 Call	Wed Aug 6 8:00a-10:00a PDT	TBA via T10 Reflector / HP
SAS PHY Call	Thu Aug 7 10:00a-12:00n CDT	TBA via T10 Reflector / Cox
ADI Call	Wed Aug 13 8:00a-10:00a PDT	TBA via T10 Reflector / Quantum
SAS PHY Call	Thu Aug 14 10:00a-12:00n CDT	TBA via T10 Reflector / Cox
I/F Power Mgt WG	Mon Aug 18 1:00p-5:00p PDT	San Jose, CA / Joseph Chen/Samsung
SMC-3 Call	Wed Aug 20 8:00a-10:00a PDT	TBA via T10 Reflector / Symantec
SAS PHY Call	Thu Aug 21 10:00a-12:00n CDT	TBA via T10 Reflector / Cox
SAS PHY Call	Thu Aug 28 10:00a-12:00n CDT	TBA via T10 Reflector / Cox
SAS PHY Call	Thu Sep 4 10:00a-12:00n CDT	TBA via T10 Reflector / Cox
SAT-2 WG	Mon Oct 20 10:00a-6:00p MDT	Santa Clara, CA / Overby

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

Activity	Contact	Telephone/Email
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SES-2, SAS-1.1, SAS-2, BCC, SDI	Rob Elliott	(281) 518-5037 Elliott at hp dot com
MMC-5, MMC-6	Bill McFerrin	(325) 423-1560 billmc37 at ctesc dot net
SBP-3	Peter Johansson	(510) 527-3926 PJohansson at ACM dot org
SAM-4, SBC-3	George Penokie	(507) 253-5208 gop at us dot ibm dot com
SAT-2	Mark Overby	(425) 417-9412 moverby at nvidia dot com
SMC-2	Erich Oetting	(303) 673-2178 Erich_Oetting at Stortek dot com
SMC-3	Noud Snelder	+31408446108 Noud dot snelder at bdt dot de
SPC-3, SAM-3, SPC-4, OSD-2	Ralph Weber	(214) 912-1373 roweber at acm dot org
SSC-3, FCP-3, FCP-4	Dave Peterson	(763) 268-6139 david dot peterson at brocade dot com
Other Activities	John Lohmeyer	(719) 533-7560 lohmeier at t10 dot org

The long-term T10 meeting week schedule is:

Dates	Location	Host / Comments
Sep 8-12, 2008	Colorado Springs, CO	LSI Corp.
Nov 3-7, 2008	Santa Ana, CA	Western Digital
Jan 12-16, 2009	Orlando, FL	Symantec
Mar 9-13, 2009	Oklahoma City, OK	Fujitsu
May 4-8, 2009	Bellevue, WA	Microsoft Corp.
Jul 13-17, 2009	Colorado Springs, CO	LSI Corp.
Sep 14-18, 2009	Boston, MA	EMC Corp.
Nov 9-13, 2009	Las Vegas, NV	Hitachi GST
Jan 11-15, 2010	Santa Ana, CA	Western Digital
Mar 8-12, 2010	San Jose, CA	Finisar
May 3-7, 2010	Bellevue, WA	Microsoft
Jul 12-16, 2010	Colorado Springs, CO	LSI Corp.
Sep 13-17, 2010	San Jose, CA	Nvidia
Nov 8-12, 2010		

NOTE: Dates, locations, and hosts shown above in *red italic font* have not been approved by T10 yet and are subject to change.

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

John Lohmeyer moved that the meeting hosts and dates not already approved be approved through July 2010. Curtis Stevens second the motion. In the absence of objections, the motion passed unanimously

#### **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 Butt moved that T10 authorize the T10-related meetings and events in the list above that had not previously been approved. Mark Seidel 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 3:40 p.m. on Thursday July 17, 2008.

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

Name	S	Organization
Mr. Paul von Stamwitz	P	AMCC
Mr. Kevin Marks	P	Dell, Inc.
Mr. Sean Dolan	A	EMC Corp.
Mr. William Martin	P	Emulex
Mr. Robert H. Nixon	A	Emulex
Mr. Ralph O. Weber	P	ENDL Texas
Mr. Douglas Wagner	P	FCI
Mr. David Freeman	P	Finisar Corp.
Mr. Elwood Parsons	P	Foxconn Electronics
Mr. Mike Fitzpatrick	P	Fujitsu
Mr. Curtis Ballard	A	Hewlett Packard Co.
Mr. Rob Elliott	P	Hewlett Packard Co.
Mr. Dan Colegrove	P	Hitachi Global Storage Tech.
Mr. Kevin Butt	P	IBM Corp.
Dr. Mark Seidel	P	Intel Corp.
Mr. Joel Silverman	P	Kawasaki Microelectronics Am
Mr. Dennis Moore	P	KnowledgeTek, Inc.
Mr. John Geldman	P	Lexar Media, Inc.
Mr. John Lohmeyer	P	LSI Corp.
Mr. George Penokie	A	LSI Corp.
Mr. David Geddes	P	Marvell Semiconductor, Inc.
Mr. Takaharu Ai	V	Matsushita
Mr. Robert Griswold	A	Microsoft Corp.
Mr. Jay Neer	P	Molex Inc.
Mr. Chris Fore	A	NetApp
Mr. Frederick Knight	P	NetApp
Mr. Mark Overby	P	Nvidia Corp.
Mr. Tim Symons	P	PMC-Sierra
Dr. Paul Suhler	P	Quantum Corp.
Mr. Michael Rogers	A	Samsung
Mr. Dave Landsman	A	SanDisk Corporation
Mr. Avraham Shimor	P	SanDisk Corporation
Mr. Alvin Cox	A	Seagate Technology
Mr. Gerald Houlder	P	Seagate Technology
Mr. Roger Cummings	P	Symantec
Mr. Jorgen Walle-Jensen	V	Tandberg Storage
Mr. Dan Gorenc	A	TycoElectronics
Mr. Scott Shuey	A	TycoElectronics
Mr. Mark Evans	P	Western Digital
Mr. Curtis Stevens	A	Western Digital

40 People Present

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

## Enclosure(2) -- ISO Status

## T10 ISO Status Report - 07/16/2008

ISO Proj.	Acronym	Part Num.	Last Step Completed	Comments
1.25.13.____	SAM-4	14776-414	S1: SC25 TAG sent NWIP to SC25	NWIP and attached document (for information) sent
1.25.13.11.22	SES-2	14776-372	S2: NWIP Approved	STILL !!!!! Waiting for FCD text
1.25.13.11.25.01	RBC-2	14776-326	S3: SC25 TAG votes on FCD in SC25	FCD Ballot, 25N1494, ends 8/18/2008, USA Voted YES
1.25.13.____	SAT	14776-921	S3: SC25 TAG votes on FCD in SC25	FCD Ballot, 25N1502, ends 8/12/2008, USA Voted Yes, needs editing before FCD ballot ends
1.25.13.11.46	SAS-1.1	14776-151	S4: FDIS sent to SC25	FCD approved, FDIS text sent to SC25 , ;needs editorial issues between T10 and ITTF settled
1.25.13.11.38	PIP	14776-121	S5: FDIS ballot complete	Completed FDIS Ballot
1.25.13.11.33	SPC-3	14776-453	S5: FDIS ballot complete	FDIS Approved
1.25.13.18-2	ATAPI-7-2	24739-2	S5: SC25 requests JTC1 to start FDIS ballot	FCD Approved FDIS TEXT sent, but needs editing
1.25.13.18-3	ATAPI-7-3	24739-3	S5: SC25 requests JTC1 to start FDIS ballot	FCD Approved FDIS TEXT sent, but needs editing
1.25.13.18-1	ATAPI-7-1	24739-1	S6: SC25 sends FDIS to JTC1 for publishing	Ready for publication, but needs some questions answered by Editor
1.25.13.10.14	RL	24740	S6: SC25 sends FDIS to JTC1 for publishing	Approved as IS
1.25.13.11.45	SAM-3	14776-413	S6: SC25 sends FDIS to JTC1 for publishing	Sent for publication
1.25.13.11.47	FCP-3	14776-223	S7: IS Published	Published
1.25.13.11.19	SAM-2	14776-412	S7: IS Published	Published
1.25.13.11.31	SBC-2	14776-322	S7: IS Published	
1.25.13.11.13	SMC	14776-351	S7: IS Published	Published
1.25.13.____	SPC	14776-311/451	S8: WITHDRAWAL, INCITS as JTC1 TAG votes	INCITS Approved Withdrawal



**T10 ISO Status Report - 07/16/2008**

<b>ISO Proj.</b>	<b>Acronym</b>	<b>Part Num.</b>	<b>Last Step Completed</b>	<b>Comments</b>
1.25.13.11.28	SPI-4	14776-114	S8: WITHDRAWAL, INCITS as JTC1 TAG votes	INCITS Approved Withdrawal
1.25.13.11.39	SBP-3	14776-233	S8: WITHDRAWAL, SC25 Resolution	Voted to remove from SC25 Pro- gram of Work, Resolution BL- WG4-13
1.25.13.11.37	SSM-2	14776-132	S8: WITHDRAWAL, SC25 Resolution	Voted to remove from SC25 Pro- gram of Work., Resolution BL- WG4-11
1.25.13.____	Project Acro- nym	14776-____		
25.13.11.34	SRP	14776-241		This project is known to ISO but not active in T10
1.25.13.____ -- too early for NWIP	UAS	14776-251		

**Enclosure(3) -- T10 Attendance Database**

Generated on 2008/07/21 at 15:11:39

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