

Accredited Standards Committee*

InterNational Committee for Information Technology Standards (INCITS)

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Date: March 24, 2004

Reply to: John Lohmeyer

To: T10 Membership
From: Ralph Weber / John Lohmeyer
Subject: Minutes of T10 Plenary Meeting #60 -- March 11, 2004
Dana Point, CA

Agenda

1. Opening Remarks
2. Approval of Agenda
3. Attendance and Membership
4. Approval of Minutes - January 2004 Meeting - Chandler, AZ (T10/04-039r0)
5. Document Distribution
6. Call for Patents
7. Review of Old Action Items
8. Project Status Reports
 - 8.1 Project Status Summary and INCITS Liaison [Lohmeyer]
 - 8.1.1 INCITS Antitrust Guidelines
 - 8.2 Object-based Storage Devices Commands (OSD) {Project 1355-D} [Weber]
 - 8.3 SCSI Medium Changer Commands - 2 (SMC-2) {Project 1383-D} [Oetting]
 - 8.4 SCSI Primary Commands - 3 (SPC-3) {Project 1416-D} [Weber]
 - 8.5 SCSI Block Commands - 2 (SBC-2) {Project 1417-D} [Elliott]
 - 8.6 SCSI Serial Bus Protocol -3 (SBP-3) {Project 1467-D} [Johansson]
 - 8.7 SCSI RDMA Protocol - 2 (SRP-2) {Project 1524-D} [Simpson]
 - 8.8 SCSI Management Server Commands (MSC) {Project 1528-D} [Penokie/Elliott]
 - 8.9 MultiMedia Command Set - 4 (MMC-4) {Project 1545-D} [McFerrin]
 - 8.10 Automation/Drive Interface - Transport Protocol (ADT) {Project 1557-D} [Entzel]
 - 8.11 Automation/Drive Interface - Commands (ADC) {Project 1558-D} [Entzel/Wideman]
 - 8.12 SCSI Enclosure Services - 2 (SES-2) {Project 1559-D} [Elliott]
 - 8.13 Fibre Channel Protocol - 3 (FCP-3) {Project 1560-D} [Peterson]
 - 8.14 SCSI Architecture Model - 3 (SAM-3) {Project 1561-D} [Weber]
 - 8.15 Serial Attached SCSI - 1.1 (SAS-1.1) {Project 1601-D} [Elliott]
 - 8.16 SCSI Stream Commands - 3 (SSC-3) {Project 1611-D} [Peterson]
 - 8.17 MultiMedia Command Set - 5 (MMC-5) {Project 1675-D} [McFerrin]
9. Old Business
10. New Business
 - 10.1 SAM-4 Project Proposal (04-055) [Weber]
 - 10.2 2004 5-year Maintenance Review (04-078) {SCSI-2}
 - 10.3 Actions on SAS Protocol Working Group Recommendations
 - 10.4 Actions on CAP Working Group Recommendations
 - 10.5 Actions on Other Working Group Recommendations
11. ISO/IEC
 - 11.1 ISO/IEC Report [Robinson]
 - 11.2 ISO/IEC Business [Robinson]
 - 11.2.1 Recommendation to approve FDIS 14776-452: SCSI SPC-2 [Robinson]

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11.2.2 Recommendation to remove ISO/IEC 14776-411:1999, (ISO/IEC SAM) [Robinson]

11.2.3 New work item proposal for ATA/ATAPI-7 (04-091) [Robinson/Colegrove]

12. Liaison Reports

12.1 T11 Liaison Report [Snively]

12.2 T13 Liaison Report [Colegrove]

12.3 SFF Industry Group [Allan]

12.4 IEEE 1394 [Johansson]

12.5 SCSI Trade Association (STA) [Czekalski]

12.6 IETF SCSI over IP [Black/Robinson]

12.7 SNIA [Cummings]

12.8 SATA II [Cox/open]

13. Review of Action Items

14. Meeting Schedule

14.1 Authorization of Working Group Meetings

15. Adjournment

Results of Meeting

1. Opening Remarks

John Lohmeyer, the T10 Chair, called the meeting to order at 9:00 a.m., Thursday March 11, 2004. He thanked Skip Jones of QLogic 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/revised 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.

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

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

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

The Chair said he had sent letters to 2 people from 1 organization informing them that their membership was in jeopardy due to non-attendance (see 04-050r0) and that their membership would be terminated if they did not attend this meeting. The following organization was in attendance jeopardy:

Toshiba

All the organizations in attendance jeopardy were present at the meeting.

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

AMCC joined with Neil Wanamaker as the Principal member.

Since the last T10 meeting, David Peterson requested that the SBS Technologies membership be terminated. He plans to join T10 representing CNT once he meets the attendance criteria. Also, Andiamo Systems was acquired by Cisco Systems, so the Andiamo membership was transferred to Cisco Systems.

The T10 membership during the meeting was 38 organizations up from the 37 member organizations prior to the meeting. Enclosure (1) is the list of the people present at the meeting and enclosure (2) is the current T10 membership list.

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

4. Approval of Minutes - January 2004 Meeting - Chandler, AZ (T10/04-039r0)

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

5. Document Distribution

Members who have any problems with their mailing subscription should deal directly with Parthenia Purnell (ppurnell@itic.org) (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 March 18, 2004. Documents received after this time may go into a subsequent mailing.

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

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

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

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

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

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

The INCITS Secretariat maintains a World Wide Web page at:

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

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

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

There is also a mirror site at:

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

The T10 document register is available at:

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

6. Call for Patents

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

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

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

Gary Robinson reported that an ANSI compiled inventory of patent letters of assurance is available at:
<http://public.ansi.org/ansionline/Documents/Standards%20Activities/American%20National%20Standards/Patent%20Letters/>

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

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

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

7. Review of Old Action Items

- 545 David Black will ensure that RFCs are written defining URLs for SNMP, CIM over HTTP/HTTPS, and SSH. *Carryover*
- 559 John Lohmeyer will forward SMC-2 revision 7 to INCITS for processing towards second Public Review. *Complete.*
- 560 Ralph Weber will prepare a project proposal for SAM-4. *Complete.*
- 561 John Lohmeyer will forward 03-358r0 to INCITS for further processing as a new project proposal for MMC-5. *Complete.*
- 562 John Lohmeyer will communicate the recommendation to approve JTC 1/SC 25 FDIS 14776-115 (SPI-5) to INCITS. *Complete.*
- 563 Gary Robinson will communicate the recommendation to approve FCD 14776-222 (FCP-2) to INCITS. *Complete.*
- 564 Gary Robinson will communicate the recommendation to approve FDIS 14776-150 (SAS) to INCITS. *Complete.*
- 565 Gary Robinson will communicate the T10 JTC1/SC25 delegation recommendation to the INCITS Executive Board. *Complete.*

8. Project Status Reports

8.1 Project Status Summary and INCITS Liaison [Lohmeyer]

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

Terry Nelson asked if he should take an action item to report the problems T10 members are having in receiving their INCITS membership fees invoices to INCITS. Bob Snively and John responded that they would be handling that issue at their April meeting with the INCITS staff.

8.1.1 INCITS Antitrust Guidelines

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

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

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

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

Ralph Weber reported that the T10 forwarding Letter Ballot is underway, closing on March 24th.

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

Erich Oetting reported that SMC-2 revision 7 is at second public review, which closes March 15th. John noted that no comments have been reported as of this meeting.

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

Ralph Weber reported that SPC-3 revision 18 will be prepared based on proposals approved by this meeting and will be posted before the next meeting but probably not in time for the mailing. A forwarding Letter Ballot is planned for November 2004.

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

Rob Elliott reported SBC-2 revision 13 will be based on the proposals accepted at this meeting. The Letter Ballot will not be conducted until after the data protection proposals have settled down.

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

John Lohmeyer reported that SBP-3 revision 5 is at INCITS for approval. The Letter Ballot closes the week of April 21, 2004.

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

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

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

George Penokie reported that a revision 0 of MSC will be available around the time of the next meeting.

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

Bill McFerrin reported the MMC-4 working group will be meeting next Tuesday, March 16th. He noted that the MMC-4 Letter Ballot may be started shortly thereafter.

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

Paul Entzel reported on the activities of the ADI working group (minutes in 04-080). He stated that a Letter Ballot will be requested on ADT within the next two weeks.

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

Paul Entzel reported that the ADC Letter Ballot resolution document is 03-385r1 and a new revision is expected in the next couple of weeks. Having reached the point of initiating a Letter Ballot on ADT, the group will now have more time to devote to ADC comment resolution.

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

Rob Elliott reported that SES-2 revision 7 will be prepared including proposals approved by this meeting but may not be available in time for the mailing. He noted that a Letter Ballot should be held sometime late this summer.

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

Dave Peterson reported on the activities of the FCP-3 working group (minutes in 04-094).

The working group discussed:

- o Define DL field function with protection information enabled.
- o Clarify PRLI impact on open sequences.

- o Reporting of Fabric Login parameters via target device.
- o QUERY TASK support.

Dave reported that he is currently working on incorporation of normative bidirectional operation support from the FCP-2 informative annex.

Dave asked for 2 hours meeting time during the May meeting week and stated a preference that the meeting time not conflict with the CAP working group.

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

Ralph Weber reported that revision 12 will be prepared following this meeting and will contain all proposals approved by this meeting. There will be an editing meeting following this plenary meeting and a Letter Ballot on forwarding SAM-3 to first public review will be initiated before the end of the month.

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

Rob Elliott reported that SAS-1.1 revision 4 will incorporate all the proposals approved by this meeting.

He noted that the plan is to keep SAS-1.1 open until sufficient interoperability information is available from the plugfests.

John Lohmeyer reported that a Jitter Study Group, led by Bill Ham, met on Tuesday March 9 to determine if the new Fibre Channel specifications in MJSQ and in documents that support FC-PI-2 are applicable to SAS. See 04-093 for minutes of the meeting. Future work on this topic will be part of the SAS PHY working group.

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

Dave Peterson requested meeting time in May to review SSC-3 proposals. He stated that a revision 0 may be posted before the May meeting week but not in time for this mailing.

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

Bill McFerrin reported that disclosure presentations regarding the new content for MMC-5 are expected at the MMC-4 working group meeting next Tuesday.

9. Old Business

There was no old business.

10. New Business

10.1 SAM-4 Project Proposal (04-055) [Weber]

Ralph Weber moved that 04-055r1 be approved as a new project proposal for SAM-4. George Penokie seconded the motion.

Bob Snively requested that the benefits of changing to UML be explained. George Penokie stated that UML will allow the model to be interpreted and understood by a wider audience than just this room. Dave Peterson reminded the committee that there will be a learning curve for UML.

The motion passed on a two-thirds vote of 32:0:0:6=38.

John Lohmeyer took an action item to forward 04-055r1 to INCITS for further processing as a new project proposal for SAM-4.

10.2 2004 5-year Maintenance Review (04-078) {SCSI-2}

T10 has an obligation to review standards every five years and decide whether the standard should be reaffirmed, revised, withdrawn, or stabilized. The only T10 standard up for 5 year review this year is SCSI-2.

John Lohmeyer moved that T10 recommend that INCITS.131:1994 [R1999] (SCSI-2) be reaffirmed. Gary Robinson seconded the motion. The two-thirds motion passed: 26:2:1:9=38.

Rob Elliott stated that his vote against the motion was based on the opinion that SCSI-2 should be considered obsolete and that maintaining it has the adverse effect of giving it an overly prominent presence on the INCITS standards store web site.

George Penokie stated that his vote against the motion was based on the opinion that SCSI-2 does not have any usefulness in today's environment and its use should be discouraged.

Ashlie Fan stated that her abstention was based on lack of certainty regarding the action.

John Lohmeyer took an action item to notify INCITS that T10 recommends the reaffirmation of INCITS.131:1994 [R1999] (SCSI-2).

10.3 Actions on SAS Protocol Working Group Recommendations

The recommendations from the SAS working group (minutes in 04-083) were presented to the committee.

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

- 04-032r1 (ALIGNs through expanders) [Elliott]
- 04-061r0 (BREAK handling clarifications) [Hoglund]

Rob Elliott moved that 04-032r1 and 04-061r0 be approved for inclusion in SAS-1.1. Bill Galloway seconded the motion. The motion passed on a vote of 26:0:2:10=38.

10.4 Actions on CAP Working Group Recommendations

The recommendations from the CAP working group (minutes in 04-084) were presented to the committee.

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

- 04-070r1 (Status Precedence Problem) [Penokie]
- 04-087r1 (QErr Wording) [Binford]
- 03-302r4 (Per-Command Priority Tagging) [Penokie]

Mark Evans requested that a separate vote be taken on 03-302r4.

George Penokie moved that 04-070r1 and 04-087r1 be approved for inclusion in SAM-3. Bill Galloway seconded the motion. The motion passed on a vote of 29:0:1:8=38.

George Penokie moved that 03-302r4 be approved for inclusion in SAM-3. Bill Galloway seconded the motion. The motion passed on a vote of 17:1:12:8=38.

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

- 03-376r4 (Invalid LUN on Request Sense Command) [Penokie]
- 03-344r6 (Report all initiator and target ports) [Elliott]

Rob Elliott moved that 03-376r4 and 03-344r6 be approved for inclusion in SAM-3 and SPC-3. Roger Cummings seconded the motion. The motion passed on a vote of 27:0:1:10=38.

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

- 03-342r5 (Persistent reservations read full status) [Elliott]
- 04-060r1 (Persistent reservations type clarification) [Elliott]
- 03-354r2 (Specify initiator ports in EXTENDED COPY target descriptors) [Elliott]
- 04-059r2 (OSD Quota Enforcement **SPC-3 Changes Only**) [Weber]

Rob Elliott moved that 03-342r5, 04-060r1, 03-354r2, and 04-059r2 be approved for inclusion in SPC-3. Ralph Weber seconded the motion. The motion passed on a vote of 27:0:1:10=38.

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

- 04-010r2 (More diagnostic pages for SES) [Elliott]
- 04-074r0 (Supported SES Diagnostic Pages) [Elliott]

Rob Elliott moved that 04-010r2 and 04-074r0 be approved for inclusion in SPC-3 and SES-2. Bill Galloway seconded the motion. The motion passed on a vote of 27:0:1:10=38.

George Penokie reviewed 03-289r3 (Only if Reserved (OIR) Proposal) [Cummings] approved for inclusion in SPC-3 and SSC-3.

Roger Cummings moved that 03-289r3 be approved for inclusion in SPC-3 and SSC-3. Erich Oetting seconded the motion. The motion passed on a vote of 23:0:6:9=38.

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

- 04-012r1 (Write Same fixes) [Penokie]
- 03-348r2 (4-byte LBA commands on 8-byte LBA capable drives) [Elliott]
- 04-076r0 (PRE-FETCH and errors) [Elliott]

Rob Elliott moved that 04-012r1, 03-348r2, and 04-076r0 be approved for inclusion in SBC-2. Bill Galloway seconded the motion. The motion passed on a vote of 25:0:3:10=38.

10.5 Actions on Other Working Group Recommendations

The recommendations from the FCP-3 working group (minutes in 04-094) were presented to the committee.

Dave Peterson reviewed the following proposals recommended for inclusion in FCP-3:

- 04-069r1 (Clarify PRLI impact on open sequences) [Coomes]
- 04-068r0 (Impact of protection information on data length fields) [Coomes]

Ralph Weber requested that 04-068r0 be considered separately.

Bob Snively moved that 04-069r1 be approved for inclusion in FCP-3. Neil Wanamaker seconded the motion. The motion passed on a vote of 20:0:7:11=38.

Ralph Weber stated that 04-068r0 has wording that is too restrictive, referring only to only protection data, and does not consider similar issues related to OSD. He noted that Jim Coomes has agreed to revise the proposal. In the absence of any objections, the proposal was remanded back to the FCP-3 working group for further consideration.

11. ISO/IEC

11.1 ISO/IEC Report [Robinson]

Gary Robinson presented the ISO/IEC report (04-079r3).

11.2 ISO/IEC Business [Robinson]

11.2.1 Recommendation to approve FDIS 14776-452: SCSI SPC-2 [Robinson]

Gary Robinson moved and John Lohmeyer seconded that T10 has reviewed project 1.25.13.11.27: FDIS 14776-452: SCSI SPC-2, and recommends that the JTC1/SC25 TAG vote to approve said FDIS.

The roll call motion passed with a tally of 31:0:0:7=38. Details of the roll call were as follows:

Organization	Voter	Vote
Adaptec, Inc.	Tim Symons	Yes
Agilent Technologies	Pat Thaler	Yes
AMCC	Neil Wanamaker	Yes
Amphenol Interconnect	Michael Wingard	Yes
Brocade	Robert Snively	Yes
Cisco Systems, Inc.		(not present)
Crossroads Systems, Inc.	Dexter Anderson	Yes
Dallas Semiconductor	James A. Lott, Jr.	Yes
Dell, Inc.	Kevin Marks	Yes
EMC Corp.	Gary S. Robinson	Yes
Emulex	Robert H. Nixon	Yes
ENDL	Ralph O. Weber	Yes
FCI	Douglas Wagner	Yes
Fujitsu	Mike Fitzpatrick	Yes
General Dynamics		(not present)
Hewlett Packard Co.	Rob Elliott	Yes
Hitachi Cable Manchester		(not present)
Hitachi Global Storage Tech.	Dan Colegrove	Yes
IBM Corp.	George O. Penokie	Yes
Intel Corp.	Robert Sheffield	Yes
Iomega Corp.		(not present)
LSI Logic Corp.	John Lohmeyer	Yes
Madison Cable Corp.	Ashlie Fan	Yes
Maxtor Corp.	Mark Evans	Yes
Microsoft Corp.		(not present)
Molex Inc.		(not present)
Panasonic Technologies, Inc	Terence J. Nelson	Yes
Philips Electronics	William P. McFerrin	Yes
Pivot3, Inc.		(not present)
QLogic Corp.	Craig W. Carlson	Yes
Quantum Corp.	Paul Entzel	Yes
Seagate Technology	Gerald Houlder	Yes
Storage Technology Corp.	Erich Oetting	Yes
Sun Microsystems, Inc.	Vit Novak	Yes

Texas Instruments	Robert Kando	Yes
Toshiba	Hiroshi Suzuki	Yes
UNISYS	Ron Mathews	Yes
Veritas Software	Roger Cummings	Yes

This two-thirds roll call vote passed (31:0:0:7=38).

Gary Robinson took an action item to notify the JTC1/SC25 TAG that T10 has reviewed project 1.25.13.11.27: FDIS 14776-452: SCSI SPC-2, and recommends that the JTC1/SC25 TAG vote to approve said FDIS.

11.2.2 Recommendation to remove ISO/IEC 14776-411:1999, (ISO/IEC SAM) [Robinson]

Gary Robinson noted that ISO/IEC had made recommendations regarding a large number of international standards. The only recommendation directly affecting T10 is to remove ISO/IEC 14776-411:1999, Information technology -- Small Computer System Interface-3 -- Part 411: SCSI-3 Architecture Model (SCSI-3 SAM). Ralph Weber recommended that SAM not be removed since the international version of SAM-2 is not yet approved.

Gary Robinson moved and John Lohmeyer seconded that T10 recommend ISO/IEC 14776-411:1999, Information technology -- Small Computer System Interface-3 -- Part 411: SCSI-3 Architecture Model (SCSI-3 SAM) be confirmed and that the five questions be answered as follows:

Question 1: We are in favor of confirmation of the International Standard for a further period of five years.

Question 2: If the voting results show a need to revise the standard, we are prepared to participate in the development of the project. (YES)

Question 3: This ISO/IEC standard has been implemented as a national standard. (YES)

Question 4: The standard is implemented without change. (YES)

Question 5: The national standard is: INCITS.270:1996 [R2001]

The roll call motion passed with a tally of 31:0:0:7=38. Details of the roll call were the same as under agenda item 11.2.1.

Gary Robinson took an action item to notify the JTC1/SC25 TAG that T10 has recommended ISO/IEC 14776-411:1999, Information technology -- Small Computer System Interface-3 -- Part 411: SCSI-3 Architecture Model (SCSI-3 SAM) be confirmed and that the five questions be answered as shown in document T10/04-085 (the minutes of T10 meeting #60).

11.2.3 New work item proposal for ATA/ATAPI-7 (04-091) [Robinson/Colegrove]

Gary Robinson moved and Dan Colegrove seconded that T10 has reviewed the new work item proposal, and recommends the NWIP for AT7 (T10/04-091r0) as a US contribution to JTC1/SC25 and to approve the NP to be issued by SC25, answering the 6 questions 'Yes' and naming Gary S. Robinson as project editor.

The roll call motion passed with a tally of 28:0:3:7=38. Details of the roll call were as follows:

Organization	Voter	Vote
Adaptec, Inc.	Tim Symons	Yes
Agilent Technologies	Pat Thaler	Yes
AMCC	Neil Wanamaker	Yes
Amphenol Interconnect	Michael Wingard	Yes
Brocade	Robert Snively	Yes
Cisco Systems, Inc.		(not present)
Crossroads Systems, Inc.	Dexter Anderson	Yes
Dallas Semiconductor	James A. Lott, Jr.	Yes
Dell, Inc.	Kevin Marks	Yes
EMC Corp.	Gary S. Robinson	Yes
Emulex	Robert H. Nixon	Yes
ENDL	Ralph O. Weber	Yes
FCI	Douglas Wagner	Yes
Fujitsu	Mike Fitzpatrick	Yes
General Dynamics		(not present)
Hewlett Packard Co.	Rob Elliott	Yes
Hitachi Cable Manchester		(not present)
Hitachi Global Storage Tech.	Dan Colegrove	Yes
IBM Corp.	George O. Penokie	Abstain
Intel Corp.	Robert Sheffield	Yes
Iomega Corp.		(not present)
LSI Logic Corp.	John Lohmeyer	Abstain
Madison Cable Corp.	Ashlie Fan	Yes
Maxtor Corp.	Mark Evans	Yes
Microsoft Corp.		(not present)
Molex Inc.		(not present)
Panasonic Technologies, Inc	Terence J. Nelson	Abstain
Philips Electronics	William P. McFerrin	Yes
Pivot3, Inc.		(not present)
QLogic Corp.	Craig W. Carlson	Yes
Quantum Corp.	Paul Entzel	Yes
Seagate Technology	Gerald Houlder	Yes
Storage Technology Corp.	Erich Oetting	Yes
Sun Microsystems, Inc.	Vit Novak	Yes
Texas Instruments	Robert Kando	Yes
Toshiba	Hiroshi Suzuki	Yes
UNISYS	Ron Mathews	Yes
Veritas Software	Roger Cummings	Yes

This two-thirds roll call vote passed (28:0:3:7=38).

Gary Robinson took an action item to inform the JTC1/SC25 TAG that T10 has reviewed the new work item proposal, and recommends the NWIP for ATA/ATAPI-7 (T10/04-091r0) as a US contribution to JTC1/SC25 and to approve the NP to be issued by SC25, answering the 6 questions 'Yes' and naming Gary S. Robinson as project editor.

12. Liaison Reports

12.1 T11 Liaison Report [Snively]

Bob Snively presented the T11 liaison report contained in T10/04-086r0.

12.2 T13 Liaison Report [Colegrove]

Dan Colegrove provided an oral report to the committee on the activities of T13, principally on ATA/ATAPI-7 Letter Ballot comment resolution. Approval of the Letter Ballot comment resolution is expected at the April meeting. For details regarding T13 activities see www.t13.org.

12.3 SFF Industry Group [Allan]

In the absence of Dal Allan no report was available.

12.4 IEEE 1394 [Johansson]

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

12.5 SCSI Trade Association (STA) [Czekalski]

Marty Czekalski provided an electronic report on the activities of the SCSI Trade Association. The report is available in 04-101r0.

12.6 IETF SCSI over IP [Black/Robinson]

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

12.7 SNIA [Cummings]

Roger Cummings provided an electronic report in 04-092r0 that was displayed for the committee to review.

12.8 SATA II [Cox/open]

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

Alvin Cox reported that the SATA Phy group is having a face-to-face meeting after the plugfest next week. There are 25 items to be resolved, some major, some not. The SAS Phy group will be adopting the SATA specifications during their meeting in the May T10 meeting week.

13. Review of Action Items

- 545 David Black will ensure that RFCs are written defining URLs for SNMP, CIM over HTTP/HTTPS, and SSH.
- 566 John Lohmeyer will forward 04-055r1 to INCITS for further processing as a new project proposal for SAM-4.
- 567 John Lohmeyer will notify INCITS that T10 recommends the reaffirmation of INCITS.131:1994 [R1999] (SCSI-2).
- 568 Gary Robinson will notify the JTC1/SC25 TAG that T10 reviewed project 1.25.13.11.27: FDIS 14776-452: SCSI SPC-2, and recommends that the JTC1/SC25 TAG vote to approve said FDIS.
- 569 Gary Robinson will notify the JTC1/SC25 TAG that T10 has recommended ISO/IEC 14776-411:1999, Information technology -- Small Computer System Interface-3 -- Part 411: SCSI-3 Architecture Model (SCSI-3 SAM) be confirmed and that the five questions be answered as shown in document T10/04-085 (the minutes of T10 meeting #60).
- 570 Gary Robinson will inform the JTC1/SC25 TAG that T10 has reviewed the new work item proposal, and recommends the NWIP for ATA/ATAPI-7 (T10/04-091r0) as a US contribution to JTC1/SC25 and to approve the NP to be issued by SC25, answering the 6 questions 'Yes' and naming Gary S. Robinson as project editor.

14. Meeting Schedule

The next plenary meeting of T10 will be Thursday May 6, 2004 in Seaside, CA at the Embassy Suites on Monterey Bay Hotel (831-393-1115), hosted by Brocade Communications Systems. The meeting will begin at 9:00 a.m. on Thursday.

The meeting list for the next plenary week is:

Monday 5/03	9	10	11	12	1	2	3	4	5	6	7	8	
						+=====+							
						ADI WG						(15)	
						+=====+							
						SAS Protocol WG						(40)	
						+=====+							
						SAS Physical WG						(25)	
						+=====+							
						T11.5 FAIS WG						(30)	
						+-----+							
Tuesday 5/04	8	9	10	11	12	1	2	3	4	5	6	7	8
						+=====+							
						SCSI/ATA Trans SG CAP WG						(40)	
						+=====+							
						SSC-3 WG FCP-3 WG						(30)	
						+-----+							
						Plugfest Adm * STA Marcom *						(20)	
						+-----+							
						T11.5 FAIS WG						(30)	
						+-----+							
Wednesday 5/05	9	10	11	12	1	2	3	4	5	6	7	8	
						+=====+							
						CAP WG						(40)	
						+=====+							
						T11.3 FC-SP WG SFF						(30)	
						+-----+							
						STA Plenary * / Plugfest TCC *						(20)	
						+-----+							
						Reception						(All)	
						+-----+							
Thursday 5/06	8	9	10	11	12	1	2	3	4	5	6	7	8
						+=====+							
						T10 Plenary OSD/SAM-3 LB Res						(45/20)	
						+=====+							
Friday 5/07	8	9	10	11	12	1	2	3	4	5	6	7	8
						+=====+							
						OSD/SAM-3 LB Res						(20)	
						+=====+							

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

Other T10-authorized meetings:

Meeting	Date	Location / Contact
ADI Calls		To be announced via T10 reflector
MMC WG	Apr ??	To be announced via T10 reflector/McFerrin
MSC Call	TBD	To be announced via T10 reflector
SAS Prot Calls	TBD	To be announced via T10 reflector
SAS PHY Calls	TBD	To be announced via T10 reflector
3rd party persistent reservations	TBD	To be announced via T10 reflector

Map Abbreviation Key:

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

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

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

The long-term T10 meeting week schedule is:

Date	Location	Host/Comments
Mar 8-12, 2004	Dana Point, CA	QLogic
May 3-7, 2004	Monterey, CA	Brocade
Jul 12-16, 2004	Colorado Springs, CO	LSI Logic
Sep 13-17, 2004	Nashua, NH	Hitachi Cable
Nov 8-12, 2004	Austin, TX	Crossroads
Jan 17-21, 2005	Las Vegas, NV	Hitachi GST
Mar 7-11, 2005	Dana Point, CA	QLogic
May 2-6, 2005	Oklahoma City, OK	Fujitsu
Jul 11-15, 2005	Colorado Springs, CO	LSI Logic
Sep 12-16, 2005		
Nov 7-11, 2005	Austin, TX	Crossroads

John Lohmeyer moved that the 2005 hosts and locations be approved, with the exception of September. Mark Evans seconded the motion. In the absence of any objections, the motion passed unanimously.

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

14.1 Authorization of Working Group Meetings

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

Erich Oetting moved that T10 authorize the T10-related meetings and events in the list above that had not previously been approved through the end of April 2004. Gerry Houlder 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 11:10 a.m. on Thursday March 11, 2004.

Enclosure(1) -- Meeting Attendees

Name	S	Organization	Electronic Mail Address
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Mr. David Peterson	AV	CNT	david_peterson@cnt.com
Mr. Dexter Anderson	A#	Crossroads Systems, Inc.	danderson@crossroads.com
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Mr. Ron Mathews	P	UNISYS Corporation	ronald.mathews@unisys.com
Mr. Roger Cummings	P	Veritas Software	roger.cummings@veritas.com

40 People Present

Status Key: P - Principal
A,A# - Alternate

AV - Advisory Member
L - Liaison
V - Visitor

Enclosure(2) -- T10 Attendance Database

Generated on 2004/03/12 at 07:30:55

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