

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

Doc. No.: T13/09-131r0

Date: August 26, 2009

Reply to: Mark Overby

To: T13 Membership
From: Mark Overby
Subject: T13 Plenary Meeting (Folsom, CA) -- August 18 - 20, 2009

Agenda

1. Opening Remarks
2. Approval of Agenda
3. Attendance and Membership
4. Approval of the Previous Minutes
5. Review of Previous Action Items
6. Call for Patents
7. Old Business
8. New Business
9. Liaison Reports
10. Review of Action Items
11. Meeting Schedule
12. Adjournment

Results of Meeting

1. Opening Remarks

Dan Colegrove, the T13 Chair, called the meeting to order at 0908 Tuesday, August 18th, 2009. Dan Colegrove thanked Intel for hosting.

As is customary, the people in attendance introduced themselves, and a copy of the attendance list was circulated.

The Chair briefly reviewed the meeting rules: T13 is a Technical Committee of INCITS and operates under INCITS rules. Anyone with interest in the work of the committee is free to attend and take part in discussions. However, motions and votes are limited to member organizations, one vote per member organization.

The Chair also noted that T13 operates under INCITS procedures including antitrust guidelines and such procedures and guidelines were displayed. There should never be discussion of the following topics at any INCITS or an INCITS subgroup meeting:

- “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.

Policies and Procedures and antitrust guidelines for INCITS are available at the web site at www.incits.org. T13 operates under these policies and procedures augmented by the T13 procedures at the T13 web site at www.t13.org.

*Operating under the procedures of The American National Standards Institute.

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2. Approval of Agenda

Mark Overby moved, Dan Colegrove seconded, that the agenda be approved as revised. The motion passed by unanimous consent. Later in the meeting the agenda was further revised to add 7.7.14 and 7.7.15. John Goldman moved, Mark Overby seconded, that the agenda be revised to add 7.7.14 and 7.7.15. The motion passed with unanimous consent.

3. Attendance and Membership

The Chair reviewed the rules for membership and attendance:

3.1 Membership

An individual from an organization new to T13 must attend at least one T13 plenary meeting before requesting voting membership. After that meeting, the representative may request membership from the T13 chair stating expertise and material interest in the scope of the committee and pay the required fees to INCITS. The time when membership becomes effective has just changed. Membership now becomes effective at the start of the next meeting the organization attends assuming the organization attends one of the next two meetings.

3.2 Fees

Current INCITS memberships fees are 1200.00 USD. Alternates are included in the membership fee.

Mailings of committee documents are available to any interested party after each plenary meeting. The cost for mailings for one year is 300.00 USD for mailing in the USA and 400.00 USD for mailing to a location outside of the USA.

Persons with questions or requests regarding membership fees and/or subscriptions for mailings should contact Barbara Bennett, ITI Standards Operations, at bbennett@itic.org.

3.3 Attendance

In addition to payment of fees, there are also minimum attendance and participation requirements to maintain voting membership status on T13. A representative from a member organization must attend two of every three plenary meetings and vote on at least every other letter ballot. If a member organization fails to have a representative in attendance at two of the last three T13 plenary meetings or vote on every other letter ballot, they are warned that failing to attend the next T13 meeting or to vote on the next letter ballot will result in their voting membership being terminated.

Attendance at a working group meeting does not affect voting membership status in T13.

The T13 voting membership during the meeting was 21 organizations.

The number of eligible voting members required for establishing a quorum was 7. 10 member organizations were present at the start of the meeting, thus a quorum was present.

The following individuals attended:

Table 1: Attendance List

Attendee	Company		Attendee	Company
Tom Pratt	Dell		Bill Martin	Emulex
Sumit Puri	Fujitsu		Dan Colegrove	Hitachi GST
Robert Strong	Intel		Steven Wells	Intel
John Goldman	Lexar Media		George Penokie	LSI

Table 1: Attendance List

Attendee	Company		Attendee	Company
Fred Knight	NetApp		Mark Overby	NVIDIA
Joseph Chen	Samsung		Avraham Shimor	SanDisk
Jim Hatfield	Seagate		Hale Landis	STEC
Curtis Stevens	Western Digital		John Schadegg	Marvell

4. Approval of the minutes from the previous T13 plenary meeting (e09126r0)

Mark Overby noted that there was an error in the previous minutes and Bill Martin moved for approval of the previous minutes not Mark Overby. Dan Colegrove moved, Mark Overby seconded, that the minutes be approved as changed. The motion passed with unanimous consent.

5. Review of Previous Action Items

1. Curtis Stevens to change the website to comply with the notification of the public access model. [carry over]
2. Dan Colegrove to issue letter ballot to forward ATA8-APT to first public review. [done]
3. Dan Colegrove to forward ATA/ATAPI-8 Command Set (ATA8-ACS) Amendment 1 to INCITS for first public review. [carry over]
4. Dan Colegrove to forward ACS-3 project proposal for further processing. [done]
5. Dan Colegrove to draft a response to INCITS question on continuing issues with a large number of liaisons. [done]
6. Dan Colegrove to issue letter ballot to forward ACS-2 to first public review. [done]

6. Call for Patents

The Chair displayed the patent policy. 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 INCITS web site at www.incits.org/help/ansi_sdo.html. Section 1.2.11 of that document contains the ANSI patent policy.

The Chair then called for patents and/or patent applications that may be necessary to comply with the requirements in T13 standards, draft standards, technical reports, or draft technical reports.

There was no response to the call for patents.

7. Old Business

7.1 ATA/ATAPI-7: 1532D

7.1.1 ISO Status

Dan Colegrove stated that all requested ISO edits have been completed and submitted back to the ISO editor.

7.2 HBA-2 Standard Project: 2014-D

Mark Overby noted that he was still waiting on a new draft of ATA8-AST.

7.3 ATA/ATAPI-8 Projects

7.3.1 AT Attachment 8 - Command Set (ATA8-ACS)

7.3.1.1 ISO Status

The work item at T10 to forward to ISO has been approved and Curtis Stevens is working on preparing the FDIS draft.

7.3.2 AT Attachment-8 - Parallel Transport (ATA8-APT)

7.3.2.1 Letter Ballot Review

7.3.3 AT Attachment-8 - Serial Transport (ATA8-AST)

7.3.3.1 *Review of Draft*

John Geldman reported that work is continuing but is currently gated by review of ACS-2.

7.3.4 AT Attachment-8 - Architecture Model (ATA8-AAM)

7.3.4.1 *ISO Status*

This is still on hold until ACS proceeds through ISO.

7.4 ACS-2 Project**2015-D [Stevens]**

7.4.1 Letter Ballot Comment Resolution

[Stevens]

Dan Colegrove noted that the letter ballot closes September 21, 2009.

Curtis Stevens moved, Bill Martin seconded, that a teleconference to sort letter ballot comments be authorized for October 9, 2009 from 0900 to 1200 pacific time with details to be provided on the reflector. The motion passed with unanimous consent.

7.4.2 Clarification questions on ACS-2

[Multiple]

Jim Hatfield noted than in Annex A when a vendor-specific device statistic log page is present should the length include reserved pages. Curtis Stevens noted that a vendor-specific device statistic log page was not added. Jim then went on to ask about the LBA bit and when it is forced to one. It was noted that only the host is forcing it to be set to one on input.

Curtis raised an issue with extended power conditions that bit 6 is timer units in set power condition timer and bit 7 in other subcommands. Curtis asked if it would be better to have bit 7 be timer units always. Curtis requested a meeting vote. Bill Martin requested that this be delayed to the next meeting to allow for input and review, Curtis agreed. George Penokie also requested that this be done as a proposal so that it could be reviewed as opposed to just an agenda item. Curtis agreed to that suggestion as well.

Bill Martin raised an issue with E.4.1 with the way that the 1024 byte sector size. He stated that the 6000h, should be a 5000h. There was agreement that was an error.

7.5 EDD-4 (Project D2132)

7.5.1 Teleconference Review

[Stevens]

Curtis Stevens reviewed the minutes of the teleconference and reported on the results of the teleconference (in e09128r0).

7.5.2 Hybrid MBR Support (e09127r0)

[Elliott]

Rob Elliott was not present, so this item was deferred.

7.5.3 Draft Review

[Stevens]

Curtis Stevens reviewed the draft of EDD-4 and suggestions and comments were made for revisions. After discussion Curtis stated his intent.

7.6 Amendment for ATA8-ACS

7.6.1 INCITS Status

[Hatfield]

Dan Colegrove is assembling the paperwork to send to INCITS for further processing of the amendment.

7.7 ACS-3 Project

7.7.1 Candidate Sectors Statistics (e09104)

[Livacarri]

Steve Livacarri was not present, so this item was deferred.

7.7.2 Set Features Set Policy (e07121) (ACS-3)

[Hatfield]

Jim Hatfield stated that he was withdrawing the proposal.

7.7.3 SCT Zone Control (e07169) (ACS-3)

[Colegrove]

Dan Colegrove is still working on his proposal and will bring more information to the next meeting.

7.7.4 Device Alert Log Pages (e08151)

[Geldman]

John Geldman stated that he has no update and asked that this be deferred to the next meeting.

7.7.5 Identify Data Log (e08156)

[Stevens]

Curtis Stevens presented revision 1 of his proposal to move IDENTIFY DEVICE data into log pages. There was discussion over the format of the log pages and if they should be sparse or dense in numbering. After this discussion Curtis agreed to make them dense and sequential in numbering. Further discussion ensued about if any of these pages should be made mandatory. There was agreement that pages 00h and 01h should be made mandatory. There were further formatting and editorial suggestions made and Curtis agreed to continue revising the proposal.

7.7.6 ATAPI Removal (e08156)

[Stevens]

Curtis Stevens asked that this be deferred to the next meeting.

7.7.7 Obsolete 28-bit (e09105)

[Overby]

Mark Overby reviewed e09105r3 for comment. Mark agreed to revise the proposal for review at the next meeting.

7.7.8 Security Command Update (e07104)

[Chen]

Joseph Chen reviewed e07104r1 for updates to the security command feature set. Curtis Stevens moved, Jim Hatfield seconded, that e07104r1 be incorporated into ACS-3. Significant discussion ensued about if agreement could be reached about this table about the behavior of various conditions. Jim stated that he felt that we would not be able to reach agreement on this table because it would make existing product and design behavior previously allowed inconsistent with the standard. Mark Overby moved, Sumit Puri seconded, that the main motion be postponed to the next meeting. The motion failed with 4 ayes, 4 nays. The main motion was then voted on and failed with 1 aye, 9 nays, and 3 abstentions.

7.7.9 Extended Security (e07189)

[Chen]

Joseph Chen asked that this been withdrawn from future meetings.

7.7.10 Reporting Non-Volatile Write Cache (e08116)

[Livacarri]

Steve Livacarri was not present, so this item was deferred.

7.7.11 ASC/ASCQ Recommendations for ACS-2

[Overby]

Mark Overby requested that this be deferred to the next meeting.

7.7.12 Set Date and Time (e09132)

[Stevens]

Curtis Stevens presented a proposal to add the capability of sending the date and time to a device to allow it to timestamp log information with the actual date and time. Concerns were raised about the necessity of the feature and how the events are recorded. There was discussion about what happens on various forms of resets and how the timers are run or initialized. After lengthy discussion about how T10 operates the timers in SCSI standards several people believed that the T10 timers were always running and that the reset value on reset is all zeros and then the timer counts from that position until reset or re initialized. Curtis agreed to continue to revise the proposal for consideration at the next meeting.

7.7.13 Purge Command (No doc)

[Puri]

Sumit Puri reviewed a document, not yet posted, about having a command that restores an SSD to a known state that is the best performance date. He reviewed the need for this because of data that shows that as a SSD fills up with data that the performance decreases. The intent of the new command is to put the device

7.7.14 Sanitize frozen state reset (e09134)

[Geldman]

John Geldman presented a document that points out a potential problem with the sanitize frozen state where COM-RESET (a normal operation on SATA) will bring the device out of the frozen state. There was debate about if that was the right behavior. It was agreed that this is not right. Two fixes were mentioned, one is that the behavior of SSP as with ATA security could be applied or that only a power-on reset could bring the drive out of the frozen state. John Geldman asked for a straw poll should the proposed fix be SSP or power reset-only. 3 were in favor of the power-on reset, 6 of the SSP fix.

7.7.15 Assignment of a general log address for CFA (e09133)

[Geldman]

John Geldman moved, Bill Martin seconded, that CFA be provisionally assigned a GPL code. Curtis Stevens moved, John Geldman seconded, that the question be called. The motion to call the question passed with 6 ayes, 3 nays, and 2 abstentions. The main motion passed with 7 ayes, 2 nays, and 2 abstentions.

7.8 T13 reflector, FTP, and web site setup

7.8.1 INCITS requirement to transition to KAVI

Dan Colegrove reported no new information on the transition to KAVI.

7.8.2 Reflector and Web Site

No reflector items were reported.

8. New Business

8.1 Items from the reflector

No reflector items were reported.

8.2 ATA/ATAPI-4 Withdrawal

[Stevens]

Curtis Stevens moved, Bill Martin seconded, that ATA/ATAPI-4 be withdrawn.

Apple: Not Present
 Dell: Yes
 Emulex: Yes
 Fujitsu: Yes
 HP: Not Present
 Hitachi GST: Yes
 IBM: Not Present
 Intel: Yes
 Kionix: Not Present
 Lexar Media: Yes
 LSI: Yes
 Microsoft: Not Present
 NetApp: Yes
 NVIDIA: Yes
 Phoenix Technologies: Not Present
 Samsung: Yes
 SanDisk: Yes
 Seagate: Abstain
 STEC: Yes
 Toshiba: Not Present
 Western Digital: Yes

The motion passed with 13 ayes, 0 nays, and 1 abstention.

8.3 INCITS Annual Maintenance Recommendations for 2010

Dan Colegrove reported on the standards that need action by the committee.

Bill Martin moved, Dan Colegrove seconded, that ATA/ATAPI-5, ATA/ATAPI-7, EDD-3, and EDD-3 erratum be reaffirmed. 14 people were in favor, 0 opposed, and 0 abstaining.

- 8.3.1 1321M AT Attachment with Packet Interface - 5 (ATA/ATAPI-5) INCITS 340:2000 [R2005]
- 8.3.2 1532M AT Attachment with Packet Interface - 7 (ATA/ATAPI-7) INCITS 397:2005 []
- 8.3.3 1572M BIOS Enhanced Disk Drive Services - 3 (EDD-3) INCITS 407:2005 []
- 8.3.4 1572M BIOS Enhanced Disk Drive Services - 3 (EDD-3) Erratum INCITS 407:2005 Erratum [2005]

9. Liaison Reports

Dan Colegrove reported that RD1 has changed in the handling of adoption of ISO standards. The TC's have 90 days to object to an ISO standard replacing an ANSI standard under the new procedure.

9.1 T10

[Colegrove]

9.1.1 SCSI to ATA Translation (SAT) Working Group

[Overby]

Mark Overby reported that SAT-2 is likely to go to 1PR after the September 2009 meeting.

9.2 T11

[Martin]

Bill Martin reported on T11 activities to T13. Bill noted that T11 was working on generating a list of requirements for electronic document, membership, and voting management to present to INCITS. It was mentioned that if T13 had suggestions or requirements they could be forwarded to T11.

9.3 SATA-IO

[Hatfield]

9.3.1 Copyright Agreement (e09112)

Jim Hatfield was waiting until the ACS-3 project is approved and now that has happened, he will resume working on this material.

9.4 JEDEC

9.4.1 64.8

It was reported that JEDEC is currently doing a gap analysis of device statistics to determine if they feel that the device statistics have adequate coverage for SSD's.

9.4.2 42.4

No activities are ongoing that materially affect T13.

9.5 SNIA

[Colegrove]

9.5.1 SSSI

Dan Colegrove reported that Sumit Puri had already raised an issue coming from SSSI about being able to restore the device to a factory, high performance state. Dan also reported that they are working on both consumer and enterprise metrics.

9.6 IEEE

9.6.1 IEEE 1667 Authentication Standard for Transient Storage [Landsman]

John Goldman reported that 1667 is working on changing their trusted in / trusted out work for T10 and T13 protocols. No action was requested from T13 at this time.

9.7 Trusted Computing Group

[Hatfield]

Jim Hatfield reported no items that materially affect T13.

9.8 SFF

[Colegrove]

Dan Colegrove reported that there are no items that materially affect T13 at this time.

9.9 IDEMA**[Colegrove]**

9.9.1 4K Physical

Dan Colegrove reported that IDEMA met prior to the T13 meeting to discuss 4k transition issues. There is ongoing discussion about what IDEMA should endorse as an approach for 4k sector drives.

9.9.2 HDD & SSD Reliability

Dan Colegrove reported no activities for HDD and SSD reliability.

9.10 CFA**[Geldman]**

John Geldman reported that CFA is working on CF5 (a revision to the parallel version of CF). There is also work going on with the serial version of CFAST as well.

10. Review of Action Items

1. Jim Hatfield to ask SATA-IO if they want a SATA-IO log page for IDENTIFY DEVICE data defined (for the proposed IDENTIFY DEVICE log).
2. Jim Hatfield to ask SATA-IO if they would be willing to take an ECN and have their liaison bring the proposal as a letter ballot or other form to T13.
3. Curtis Stevens to change the website to comply with the notification of the public access model.
4. Dan Colegrove to forward ATA/ATAPI-8 Command Set (ATA8-ACS) Amendment 1 to INCITS for first public review.

11. Meeting Schedules**11.1 Authorization of Ad-Hoc Working Groups**

Mark Overby moved, Curtis Stevens seconding, that 2 teleconferences be authorized for ATA8-APT letter ballot comment resolution on September 4 and September 25 from 0900 to 1100 pacific time. The motion passed by unanimous consent.

A teleconference was authorized for ACS-2 letter ballot comment resolution and is recorded in the minutes until ACS-2 items.

Mark Overby moved, Bill Martin seconding, that a working group session be authorized for Thursday August 20 for ATA8-APT letter ballot review. The motion passed with unanimous consent.

11.2 Next Meeting

Table 2: Next Meeting Information

Date	Location	Host	Contact
October 20 - 22, 2009	San Jose, CA	Samsung	Joseph Chen

12. Adjournment

Mark Overby moved, Dan Colegrove seconding, that the meeting be adjourned at 1636 PT, 19 August 2009. The motion passed with unanimous consent.