

vvAccredited Standards Committee\*

## InterNational Committee for Information Technology Standards (INCITS)

Doc. No.: T13/09-126r0
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Date: June 20, 2009

Reply to: Bill Martin

To: T13 Membership  
From: Bill Martin  
Subject: T13 Plenary Meeting (Milpitas, CA) -- June 16 - 18, 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 0907 Tuesday, June 16th, 2009. Dan Colegrove thanked Phoenix Technologies 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 the INCITS antitrust guidelines. 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](http://www.incits.org). T13 operates under these policies and procedures augmented by the T13 procedures at the T13 web site at [www.t13.org](http://www.t13.org).

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

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## 2. Approval of Agenda

Bill Martin moved, Dan Colegrove seconded, that the agenda be approved as revised. The motion passed by 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](mailto: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. 17 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
Bill Martin	Emulex		Dan Colegrove	Hitachi GST
Sumit Puri	Fujitsu		Alan Haffner	Lexar Media
Patrick Hery	Toshiba		Frank Shu	Microsoft
Fred Knight	NetApp		Jeff Wolford	HP

Table 1: Attendance List

Attendee	Company		Attendee	Company
David Landsman	SanDisk		Jim Hatfield	Seagate
George Penokie	LSI		Hale Landis	STEC
Tom Pratt	Dell		Curtis Stevens	Western Digital
Anil Godavarthi	Kionix		Dan Meyer	LSI
Thibaut Hourteillan	Phoenix Technologies		Joseph Chen	Samsung

#### 4. Approval of the minutes from the previous T13 plenary meeting (e09106r0)

Dan Colegrove moved, Mark Overby seconded, that the minutes be approved. 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 APT to first public review when draft is available. [carry over]
3. All members to review proposed copyright agreement for ACS-2 with SATA-IO. [completed]

#### 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](http://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.

Dave Landsman (SanDisk) reported that they have intellectual property related to the sanitize proposal. Dan Colegrove pointed them to the patent policy and Dave stated that they intend to comply with the ANSI patent policy.

#### 7. Old Business

##### 7.1 ATA/ATAPI-7: 1532D

###### 7.1.1 ISO Status

Dan Colegrove stated ISO is working on editing parts 1 and 3.

##### 7.2 HBA-2 Standard Project: 2014-D

Dan Colegrove stated that the project was pending the next draft of ATA8-AST for further work.

##### 7.3 ATA/ATAPI-8 Projects

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

###### 7.3.1.1 ISO Status

The new work item was approved and Curtis Stevens has been asked to provide the draft. INCITS also reports that ATA8-ACS is still undergoing management review closing on 19 June 2009 with EB letter ballot issued 22 June 2009.

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

###### 7.3.2.1 Letter Ballot

The Dan Colegrove stated that a letter ballot for ATA8-APT would be issued when the draft was ready.

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

7.3.3.1 *Review of Draft*

John Geldman was not present so there was no work done at this meeting.

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

7.3.4.1 *ISO Status*

Mark Overby and Curtis Stevens agreed to hold this until ACS begins process through ISO.

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

## 7.4.1 ACS-2 Open Issues List (e07172)

[Stevens]

Curtis Stevens reviewed the open issues list and took feedback from the owners of open issues as to status and what the plan is for ACS-2 for those issues.

## 7.4.2 Device Statistics

7.4.2.1 *Additional device statistics - Solid State (e06184)* [Chen]

Joseph Chen presented revision 11. The only remaining statistic is Percentage of Spare Blocks Remaining in Solid State Media. Curtis Stevens moved, George Penokie seconded, that e06184r11 be incorporated into ACS-2. The motion failed with 3 ayes, 9 nays, and 4 abstentions.

7.4.2.2 *Long/Short Term Endurance (e09101)* [Hatfield]

Jim Hatfield asked that this be remove from future agendas.

7.4.2.3 *Candidate Sectors Statistics (e09104)* [Livaccari]

Steve Livaccari was not present, so this item was moved to ACS-3 for future agendas.

## 7.4.3 Security Command Update (e07104) [Chen]

Joseph Chen requested that this be deferred to ACS-3 and defer discussion to the next meeting.

## 7.4.4 Extended Security (e07189) [Chen]

Joseph Chen requested that this be deferred to ACS-3 and defer discussion to the next meeting.

## 7.4.5 Sanitize Command (e07197) [Geldman]

Alan Haffner reviewed revision 8 of the sanitize proposal. Feedback was given to Alan about the proposal and suggestions for revision. Curtis Stevens moved, Sumit Puri second that e07197r8 as modified at this meeting be incorporated into ACS-2. The motion passed with 10 ayes, 0 nays, and 4 abstentions.

## 7.4.6 Reporting Non-Volatile Write Cache (e08116) [Livaccari]

Steve Livaccari was not present so this item was moved to ACS-3 for future agendas.

## 7.4.7 Extended Power Conditions (e08120) [Hatfield]

Jim Hatfield presented revision 11 of this proposal for discussion. The group walked through the document and Jim captured changes. Curtis Stevens moved, Jim Hatfield seconded, that e08120r12 be incorporated into ACS-2. The motion passed with 16 ayes, 0 nays, and 0 abstentions.

## 7.4.8 Protocol Identifier for TrustedFlash (e08126) [Landsman]

Dave Landsman presented version 0 of this proposal. Dave agreed to make changes that were requested by the group and post revision 1 Curtis Stevens moved, Dave Landsman seconded that e08126r1 be incorporated into ACS-2. The motion passed with 9 ayes, 1 nays, and 4 abstentions.

## 7.4.9 ASC/ASCQ Recommendations for ACS-2 [Overby]

In the absence of Mark Overby, this agenda item was deferred to the next meeting and will be moved to ACS-3

**7.4.10 Alternate Status Proposal for Request Sense (e09118) [Stevens]**

Curtis Stevens presented revision 0 which was presented at the previous meeting with the comments from the previous meeting. Curtis discussed the issues with the group and the merits of the proposal. Curtis generated revision 1 which included some of the issues were brought up in the meeting. Curtis Stevens moved, Jeff Wolford seconded that e09118r1 be incorporated into ACS-2. The motion passed with 9 ayes, 1 nays, and 2 abstentions. Hitachi voted no because this creates two methods to do this and it does not work with the current AHCI architecture.

**7.4.11 Read Zero after Trim (e09117) [Knight]**

Fred Knight presented a this proposal at the April meeting. The proposal was not voted on in April because it was not posted more than two weeks before the meeting. Fred Knight moved, Dave Landsman seconded, that e09117r1 be incorporated into ACS-2. The motion passed with 8 ayes, 2 nays, and 1 abstentions. The no votes were because this changes trim into a write command this impacts the performance.

**7.4.12 IEEE 1667 requesting a reserved bit (e09121r0) [Hatfield]**

Jim Hatfield presented a new proposal for ACS-2 to reserve a bit in IDENTIFY DEVICE designated "Reserved for IEEE 1667." Jim Hatfield moved, Frank Shu seconded, that e09121r0 be incorporated into ACS-2. The motion passed with 15 ayes, 1 nays, and 0 abstentions. Lexar voted no because they believe that the bit should remain reserved and not be specific for IEEE 1667.

**7.4.13 Corrections to the HPA state diagram (e09122r0) [Hatfield]**

Jim raised the question about whether these issues were sufficient to bring them into the ACS amendment. The group reviewed the proposal and made recommendations for changes. Jim Hatfield moved, Joseph Chen seconded that e09122r1 be incorporated into the ACS Amendment letter ballot comment resolution. The motion passed with 10 ayes, 0 nays, and 2 abstentions.

**7.4.14 Draft Review [Stevens]**

Curtis Stevens led a review of the draft 1a of ACS-2. The group made numerous comments that Curtis will incorporate in the next draft. There was potential confusion over the naming of the Extended Status Reporting feature set with the term Extended Status Code. Curtis Stevens moved, Jeff Wolford seconded that the Extended Status Reporting feature set be renamed to the Sense Data Reporting feature set. The motion passed unanimously. The next draft will be submitted for a letter ballot for INCITS first public review.

**7.4.15 Make 28 Bit Commands Optional (e09125) [Stevens]**

It was moved by Curtis Stevens, seconded by Dan Colegrove to add this to the agenda. The motion passed unanimously.

Curtis presented the new proposal to make 28 Bit commands optional. There was discussion about the need for a supported bit that would have the meaning that if it was zero, then 28 Bit commands would be supported; and if it is one, then 28 Bit commands are optional. Curtis Stevens moved, Bill Martin seconded that e09125r1 be incorporated in ACS-2. The motion passed with 9 ayes, 1 nay, and 1 abstention. HP voted no because they felt that they needed more time to review the proposal.

**7.5 EDD-4 (Project D2132)****7.5.1 Draft Review [Stevens]**

Curtis Stevens reported no need to do draft review at this time as there was no new draft. Jim Hatfield moved, Curtis Stevens seconded to request the chair to perform a letter ballot of forwarding EDD-4 to first public review. Curtis mentioned that some approved proposals are not yet incorporated and there is a possible new proposal. Curtis made a friendly amendment to the motion to schedule conference call to review EDD-4 Thursday July 30, 9:00 - 12:00 PDT. The amended motion passed unanimously.

**7.6 Amendment for ATA8-ACS**

## 7.6.1 Letter Ballot Comment Resolution (e09123) [Hatfield]

Dan Colegrove reported that the letter ballot passed with 16 ayes, 0 nays, 2 abstains, and 5 not voting, 5 yes votes included comments. Jim Hatfield combined all of the comments in e09123r0. The group discussed the comments during the meeting resolving a number of them. It was agreed that editorial changes to ACS should not be made as part of this amendment. Jim Hatfield moved, Dan Colgrove seconded that e09123r1 be accepted as the letter ballot comment resolution for ATA/ATAPI-8 Command Set (ATA8-ACS) -Amendment 1 and that ATA/ATAPI-8 Command Set (ATA8-ACS) -Amendment 1 T13/Project 452 (contained in e08145r6) be forwarded to INCITS for first public review. The motion passed with 13 ayes, 0 nays, and 0 abstentions.

**7.7 ACS-3 Study Group**

## 7.7.1 ACS-3 Project Proposal (e09109) [Stevens]

Curtis reviewed revision 0 the project proposal. Curtis Stevens moved, Jim Hatfield second that the ATA8-ASCS3 project proposal contained in e09109r1 be forwarded to INC ITS for further processing. The motion passed with 12 ayes, 0 nays, and 0 abstentions.

## 7.7.2 Set Features Set Policy (e07121) (ACS-3) [Hatfield]

Jim Hatfield requested that the agenda item be deferred to the next meeting.

## 7.7.3 Freefall Feature Set Enhancements (e06162) (ACS-3) [Chen]

Joseph Chen requested that this item be removed from the agenda.

## 7.7.4 SCT Zone Control (e07169) (ACS-3) [Colegrove]

Dan requested that this item be deferred to the next meeting.

## 7.7.5 Device Alert Log Pages (e08151r0) [Geldman]

John Goldman was not present so this item was deferred to the next meeting.

## 7.7.6 Identify Data Log (e08156) [Stevens]

Curtis presented revision 1 of the proposal. The proposal is for a read only log for access to IDENTIFY DEVICE data and additional device information. Curtis took suggestions from the group to incorporate into the next revision.

## 7.7.7 ATAPI Removal [Stevens]

Curtis asked that this item be deferred to ACS-3.

## 7.7.8 Obsolete 28 Bit (e09105) [Overby]

In the absence of Mark Overby, Curtis asked for a straw poll of do you support making all of the read and write 28 bit commands optional? The poll results were 8 were in favor of making them optional, 3 were opposed to making them optional.

**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. Curtis has a prototype website that is ready to go with the INCITS policy statement at the bottom of the pages.

**8. New Business****8.1 Items from the reflector**

No items were reported.

**8.2 INCITS question on annual report**

The annual report indicated issues with coordinating with a large number of liaisons. This includes issues with copyright and document control. The board would like to know if this is still a problem. This will be a continuing issue due to the large number of committees that we require liaisons with.

## 9. Liaison Reports

### 9.1 T10

[Colegrove]

#### 9.1.1 SCSI to ATA Translation (SAT) Working Group

[Overby]

SAT-2 Letter ballot comment resolution is completed and letter ballot comment resolution is being incorporated for forwarding to INCITS.

#### 9.1.2 Power Management Issues

[Hatfield]

Jim Hatfield reported that these have been completed in T10 and this is now a SAT-3 issue. This can be removed from future agendas.

### 9.2 T11

[Martin]

Bill Martin reported that there is nothing happening in T11 that affects T13.

### 9.3 JEDEC

#### 9.3.1 64.8

[Hatfield, Overby]

Dave Landsman reported that there are no new recommendations for T13

#### 9.3.2 42.4

[Overby]

There was no report due to no liaison.

### 9.4 IEEE

#### 9.4.1 IEEE 1667 Authentication Standard for Transient Storage

[Landsman]

Dave Landsman reported that 1.1 revision is in letter ballot. The bit that was approved at this meeting is being written into the specifications. The ATA implementation of IEEE 1667 is nearing completion.

### 9.5 Trusted Computing Group

[Hatfield]

Jim Hatfield reported that the semi-annual meeting is happening this week. They are finalizing the marble SSC specification.

### 9.6 SFF

[Colegrove]

Dan Colgrove reported that there is nothing new in SFF that impacts T13.

### 9.7 IDEMA

[Colegrove]

#### 9.7.1 4K Physical

Dan Colgrove reported that there is a 4K physical meeting this Friday at the IDEMA office.

#### 9.7.2 HDD & SSD Reliability

Dan Colegrove stated that there was nothing to report on this.

### 9.8 CFA

[Geldman]

There is a meeting June 29 and July 1.

### 9.9 Serial ATA IO

[Hatfield]

#### 9.9.1 Copyright Agreement (e09112)

[Hatfield]

Jim Hatfield presented the proposed copyright agreement between SATA-IO and T13 he received feedback that he will include in a new revision. Jim Hatfield requested a straw poll of should we ask for all of section 13 in the copyright agreement? The poll results were 4 were in favor asking for all of section 13, 3 believed that asking for all of section 13 was not necessary.

### 9.10 SNIA

#### 9.10.1 SSSI

[Colegrove]

Dan reported that SNIA SSSI is looking at performance testing of solid state devices. There is a requirement to return the devices to a factory setting. Today they expect to use sanitize erase to return the device to factory condi-

tions. We have told them that this will not work. They are attempting to get back to initial conditions as devices which have been previously written have reduced performance. The fact is that any operation will not return the device to the original factory performance.

## **10. Review of Action Items**

1. Curtis Stevens to change the website to comply with the notification of the public access model.
2. Dan Colegrove to issue letter ballot to forward APT to first public review when draft is available.
3. Dan Colegrove to forward ATA/ATAPI-8 Command Set (ATA8-ACS) -Amendment 1 T13/Project 452 (contained in e08145r6) to INCITS for first public review.
4. Dan Colegrove to forward ACS-3 project proposal e09109r1 to INCITS for further processing.
5. Dan Colegrove to draft a response to the INCITS question on continuing issues with a large number of liaisons.
6. Dan Colegrove to issue letter ballot to forward ACS-2 to first public review when draft is available.

## **11. Meeting Schedules**

### **11.1 Authorization of Ad-Hoc Working Groups**

A three hour teleconference was approved for EDD-4 (see 7.5), Thursday July 30 9:00 - 12:00 PDT.

**11.2 Next Meeting**

Dan Colegrove moved, Bill Martin seconded to approve the 2011 meeting dates in Table 2. The motion passed unanimously.

Table 2: Future Meeting Schedule

<b>2009</b>	<b>Subject/ Plenary #</b>	<b>Location</b>	<b>Host</b>	<b>Contact</b>
July 30	EDD-4	Teleconference		Curtis Stevens
Aug 18-20	78	Folsom, CA	Intel	Steven Wells
Oct 20-22	79	San Jose, CA	Samsung	Joseph Chen
Dec 15-17	80	San Jose or Seattle	nVidia	Mark Overby
<b>2010</b>	<b>Subject/ Plenary #</b>	<b>Location</b>	<b>Host</b>	<b>Contact</b>
Feb 23-25	81	Santa Ana, CA	Western Digital	Curtis Stevens
Apr 20-22 <sup>3</sup>	82	Henderson, NV	Hitachi GST	Dan Colegrove
Jun 22-24	83	Longmont, CO	Seagate	Jim Hatfield
Aug 24-26	84	San Jose, CA*	Samsung	Joseph Chen
Oct 12-14	85	San Jose, CA*	Fujitsu *	Sumit Puri
Dec 14-16	86	*	nVidia	Mark Overby
<b>2011</b>	<b>Subject/ Plenary #</b>	<b>Location</b>	<b>Host</b>	<b>Contact</b>
Feb 22-24	87	Santa Ana, CA	Western Digital	Curtis Stevens
Apr 19-21	88	*	*	*
Jun 21-23	89	Longmont, CO	Seagate	Jim Hatfield
Aug 16-18	90	*	*	*
Oct 18-20	91	*	*	*
Dec 13-15	92	*	*	*
<p>* Tentative/TBD            1 T10-Working Group Meeting Follows (See: <a href="http://www.t10.org">www.t10.org</a>)            2 T10-Working Group Meeting Preceding (See: <a href="http://www.t10.org">www.t10.org</a>)            3 Potential Conflict with INCITS Annual Meeting            4 T13 Working Group Meeting            NOTE – Plenary meetings are currently scheduled for 3.0 days; 9am-6pm 1st, 9am-6pm 2nd day,            9am-5pm 3rd day</p>				

## **5. Adjournment**

Bill Martin moved, Dan Colegrove seconding, that the meeting be adjourned at 15:50 PT, 18 June 2009. The motion passed with unanimous consent.