

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

Doc. No.: T13/07-164r0

Date: June 23, 2007

Reply to: Mark Overby

To: T13 Membership
From: Mark Overby
Subject: T13 Plenary Meeting (Santa Clara, CA) -- June 19-21, 2007

Agenda

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

Results of Meeting

1. Opening Remarks

Dan Colegrove, the T13 Chair, called the meeting to order at 0905 Tuesday, June 19th, 2007. Dan Colegrove thanked Mark Overby and NVIDIA for hosting the meeting.

As is customary, the people in attendance introduced themselves, and a copy of the attendance list was circulated. Copies of the agenda were made available to those in attendance.

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.

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

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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.

2. Approval of Agenda

Mark Overby 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 for Principal or additional Alternates are 800.00 USD. The First Alternate is free with a Principal membership.

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.

Dan Colegrove noted that the fee structure is changing for next year to \$1200 USD and details of the new fare structure was posted to the T13 website.

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. 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
Steve Livaccari	IBM		Wally Bretzer	CPR Tools
Jim Hatfield	Seagate		Mark Overby	NVIDIA
Larry Barras	Apple Computer		Joseph Chen	Samsung
Sumit Puri	Fujitsu		Steven Wells	Intel
Dan Colegrove	Hitachi GST		Curtis Stevens	Western Digital
Wayne Bellamy	HP		Avraham Shimor	SanDisk
Marty Stevens	Dell		Aaron Wilson	ST Microelectronics
Robert Strong	Intel		Wonju Lee	Samsung
Brian Dees	Intel		Mark Quinn	Toshiba
John Geldman	Lexar Media		Nathan Obr	Microsoft
Paul Chicoine	Phoenix		Hale Landis	Broadcom
Duncan Penman	Western Digital			

4. Approval of the minutes from the previous T13 plenary meeting (e07156r0)

Dan Colegrove moved, Mark Overby seconded, that the minutes be approved. The motion passed with unanimous consent.

5. Document Distribution

No documents were distributed by hard copy.

6. Review of Previous Action Items

No action items were recorded from the previous meeting.

7. Old Business

7.1 ATA/ATAPI-7: 1532D

7.1.1 ISO Status

Mark Overby stated that Volumes 2 and 3 had been provided to ISO and were being processed.

7.1.2 ATA/ATAPI-7 Amendment [Overby]

7.1.2.1 INCITS Status

Dan Colegrove stated that the amendment is going through management review and public review with INCITS.

7.2 HBA Amendment 1

Dan Colegrove stated that the amendment is going through management review and public review with INCITS.

7.3 HBA-2 Standard Project: 2014-D

Mark Overby reported that there was nothing new at this time.

7.4 DDT Technical Report

Dan Colegrove stated that the amendment is going through management review and public review with INCITS.

7.5 ATA/ATAPI-8 Projects

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

7.5.1.1 *More Vendor Specific Log Addresses (e07158r0) [Stevens]*

Curtis Stevens reviewed a proposal to add additional log addresses that are device vendor-specific. Curtis Stevens moved, Jim Hatfield seconded, that e07158r0 as revised be incorporated into ATA8-ACS. The motion passed with 17 ayes, 0 nays, and 0 abstentions.

7.5.1.2 *Log Address 80h - 9Fh Name Change (e07159r0) [Stevens]*

Curtis Stevens reviewed his proposal to change the name of vendor-specific log addresses because he felt that the name of the log addresses was not clear. He felt that the host vendor-specific log pages name was misleading and that there was confusion on the use of them. Jim Hatfield stated that he felt that this was an ACS-2 issue because there was a larger problem about determining what logs were in use by who and why. There was extensive discussion about if this is necessary and if the standard was already clear about the behavior. Some members felt that the standard adequately addressed. After discussion Curtis agreed to defer the proposal to ACS-2 for future consideration.

7.5.1.3 *Set Features Grant Permissions (e07121r3) [Hatfield]*

Jim Hatfield reviewed his previous power source indication proposal and stated that it had been renamed and revised to the current form. The new proposal was generalized to the device to allow it to take actions that could increase power consumption or to decrease performance. An extensive discussion was held about how this would be used and how it would interact with other features that operate in the background. Jim stated that he would defer this proposal to ACS-2.

7.5.1.4 *ATA8-ACS Open Issues (e06122r17) [Stevens]*

Curtis Stevens led a review of the open issues from revision 17 of the open issues list.

Curtis Stevens moved, Jim Hatfield seconding, that open issue #189 from e06122r17 be incorporated into ATA8-ACS. The motion passed with 12 ayes, 0 nays, and 4 abstentions.

Curtis Stevens moved, Jim Hatfield seconding, that open issue #194 from e06122r17 be incorporated into ATA8-ACS. The motion passed with 13 ayes, 0 nays, and 4 abstentions.

Wayne Bellamy moved, Mark Overby seconding, that open issue #199 from e06122r17 be incorporated into ATA8-ACS. The motion passed with 11 ayes, 1 nays, and 6 abstentions.

Curtis Stevens moved, Dan Colegrove seconding, that open issue #201 from e06122r17 be incorporated into ATA8-ACS. The motion passed with 14 ayes, 0 nays, and 4 abstentions.

Dan Colegrove moved, Sumit Puri seconding, that open issue #202 from e06122r17 be incorporated into ATA8-ACS. The motion passed with 4 ayes, 2 nays, and 11 abstentions. Joseph Chen stated that he voted no because he felt that this was a new technical change that was not necessary.

Dan Colegrove moved, Curtis Stevens seconding, that open issue #204 from e06122r17 be incorporated into ATA8-ACS. The motion passed with 11 ayes, 0 nays, and 2 abstentions.

7.5.1.5 *ATA8-ACS Endianness Clarifications (e07129r1) [Bellamy]*

Wayne Bellamy presented a proposal on clarifying the format of multi-byte fields on ATA8-ACS. Wayne requested a straw poll on if the term endian and related terms should be used in ATA8-ACS. 2 were in favor, 13

were opposed. The rest of the proposed changes were reviewed for inclusion. Comments were given and Wayne agreed to revise the proposal for later consideration at the meeting.

Later in the meeting, revision 2 of the proposal was reviewed with further revisions based on feedback provided earlier. Wayne Bellamy moved, Curtis Stevens seconding, that e07129r1 as revised be approved for incorporation into ATA8-ACS. The motion passed with 17 ayes, 0 nays, and 1 abstention.

7.5.1.6 Draft Review [Stevens]

7.5.1.6.1 Comments on ATA-8 ACS From Reflector

Curtis Stevens reviewed the latest draft of ATA8-ACS and led a change review of comments that had been received against the draft.

Curtis Stevens moved, Dan Colegrove seconded, that a face-to-face ad hoc letter ballot comment resolution working group meeting be authorized for September 26-27, 2007 hosted by Western Digital in Lake Forest, CA. The motion passed with unanimous consent.

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

7.5.2.1 Review of Draft

Mark Overby moved, Dan Colegrove seconding, that two teleconferences be authorized to discuss ATA8-APT. The motion passed with unanimous consent.

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

7.5.3.1 Review of Draft

Dan Colegrove moved, Mark Overby seconding, that two teleconferences be authorized to discuss ATA8-AST. The motion passed with unanimous consent.

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

7.5.4.1 Letter Ballot Comment Resolution

No new comments have been received so no review was held.

7.5.5 ATA8 Schedule Review

Mark Overby stated that his goal was to request a letter ballot for ATA8-APT at the end of the October meeting.

7.6 ACS-2 Project 2015-D [Stevens]

7.6.1 INCITS Status

Dan Colegrove reported that there was no new status to report, project is in development.

7.6.2 Additional device statistics - Usage Length (e06180r2) [Chen]

Joseph Chen presented the results of the teleconference and the subsequent revisions to this device statistics proposal. There was discussion of the various counters and how the counters track time over various power management states and internal device states. There was substantial discussion about the use of the various counters. New text was provided to Joseph to clarify some of the counter definitions and Joseph agreed to incorporate that in the proposal.

7.6.3 Additional device statistics - Errors [Chen]

This item was deferred to the next meeting due to a lack of time.

7.6.4 Additional device statistics - Free Fall (e06182) [Chen]

This item was deferred to the next meeting due to a lack of time.

7.6.5 Additional device statistics - Temperature [Chen]

This item was deferred to the next meeting due to a lack of time.

7.6.6 Additional device statistics - Solid State Media / NV Cache (e06184r5) [Chen]

Joseph Chen presented the results of the teleconference and the subsequent revisions to the device statistics proposal for solid state media. A substantial argument ensued discussing if the number of erase cycles has any meaning for statistical analysis of a drive. John Geldman and Avraham Shimor both stated that unless the number of erase cycles were tracked with LBA, the statistic has no meaning. Lifetime of flash is determined by the number of erase cycles and how they are leveled across the media, not by the total number of erases to the device. Steve Livacarri stated that he felt the statistic had meaning because he wanted to use it to determine the pattern of usage of the device. Further discussion ensued about why this statistic is could be useful counterargued with why without additional context information it is not useful.

Dan Colegrove stated that he was concerned that the committee is not making any forward progress on this subject and queried what could be done in order to make forward progress. Some people suggested having more frequent calls and others suggested that there may not be a way to achieve consensus on this subject.

7.6.7 Data Path Protection [Stevens]

This item was deferred to the next meeting due to a lack of time.

7.6.8 SCT Capabilities (action codes) (e06174r0) [Bellamy]

This item was deferred to the next meeting due to a lack of time.

7.6.9 Reporting RPM, Footprint, Connector Type (e06176r0) [Bellamy]

Wayne Bellamy stated that this proposal was completed as part of device statistics, and could be removed from the agenda. Wayne stated that he will be bringing a separate proposal for the remaining footprint requests.

7.6.10 Freefall Feature Set Enhancements (e06120r0) [Chen]

This item was deferred to the next meeting due to a lack of time.

7.6.11 Request Sense for ATA (e07123r1) [Overby]

Mark Overby reviewed the proposal to add a REQUEST SENSE mechanism to the ATA command set. He reviewed revision 1 of his proposal that contained changes to how the indication of extended status is made and how the extended status is returned. After discussion of the proposal Mark agreed to turn a new revision to also indicate the conditions under which the sense data is cleared and review at the next meeting.

7.6.12 TCG Command Error Code Mechanism [Chen]

Joseph Chen stated that he was withdrawing his proposal in favor of e07123r1.

7.6.13 Security Command Update [Hatfield]

This item was deferred to the next meeting due to a lack of time.

7.6.14 Remove Input/Output Structures (e07134) [Bellamy]

This item was deferred to the next meeting due to a lack of time.

7.6.15 Proactive Reporting and Correcting [Shu]

This item was deferred to the next meeting due to a lack of time.

7.6.16 Solid State Drive Proposals

7.6.16.1 SSD Identify (e07153) [Shu]

Nathan Obr stated that there were no updates at this time.

7.6.16.2 Notification for Deleted Data (e07154) [Shu]

Nathan Obr stated that there were no updates at this time.

7.7 EDD Erratum

7.7.1 INCITS Status

Dan Colegrove stated that he had no new status to report.

7.8 T13 reflector, FTP, and web site setup

7.8.1 Web Site and Reflector Items

No items were reported that required committee attention.

7.9 INCITS Membership and Meeting Attendance Policy

Dan Colegrove noted that the membership fees for 2008 had been revised and encouraged people to view the documents posted to both the T10 and T13 sites describing the new membership and fee structure.

8. New Business

8.1 Re-vote on SCT TR approval of Letter Ballot Comment Resolution [Colegrove]

Dan Colegrove noted that the SCT technical report vote for comment resolution had not been handled correctly originally. Dan Colegrove moved, Curtis Stevens seconding, that the letter ballot comment resolution for the SCT technical report be approved and the committee forward the document to INCITS for further processing. The motion passed with 16 ayes, 0 nays, and 2 abstentions. Seagate (Jim Hatfield) stated that they would change their vote from no to yes with the approved letter ballot comment resolution.

8.2 Items from the Reflector

There were no items from the reflector that needed to be addressed.

9. Liaison Reports

9.1 T10 [Colegrove]

9.1.1 SCSI to ATA Translation (SAT) Working Group Report

This item was deferred due to a lack of time.

9.1.2 General T10 Report

Dan Colegrove stated that he would post the T10 liaison report.

9.2 T11 [Colegrove]

Dan Colegrove stated that FC-SATA had completed letter ballot and was forwarded to INCITS.

9.3 IEEE

There was no report available.

9.4 Trusted Computing Group [Hatfield]

Jim Hatfield stated that work was continuing on storage TCG work with interactions with SCSI and ATA.

9.5 SFF [Colegrove]

Dan Colegrove stated that there were no activities that affected T13.

9.6 IDEMA [Colegrove]

Dan Colegrove stated that the IDEMA large sector size conference was held in Colorado.

9.7 CFA

Dan Colegrove stated that CFA had not completed assessment of which ATA reserved fields were being used by CFA.

9.8 Serial ATA IO [Dees]

Dan Colegrove stated that Brian Dees was leaving the SATA-IO role and a new liaison is needed.

10. Call for Patents

The Chair explained 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.

11. Review of Action Items

No action items were recorded.

12. Approved Proposals

ATA8-ACS:
e07158r0
e07129r2

13. Meeting Schedules

13.1 Meeting Length

The August meeting will remain at 3 days.

13.2 Authorization of Ad-Hoc Working Groups

Two teleconferences each were authorized for ATA8-APT and ATA8-AST discussion and were authorized during discussion of those agenda items.

Joseph Chen moved, Jim Hatfield seconded, that up to 3 teleconferences be authorized for device statistics. The motion passed with unanimous consent.

13.3 Long-Term Meeting Schedule

Table 2: 2007 Dates

Date	Location	Host	Contact
August 21-24, 2007	Longmont, CO	Seagate	Jim Hatfield
October 23-26, 2007	Fort Myers, FL	CPR Tools	Tony Alvarez
December 11-14, 2007	Redmond, WA	Microsoft	Frank Shu

Table 3: 2008 Dates

Date	Location	Host	Contact
February 19-22, 2008	Lake Forest, CA	Western Digital	Curtis Stevens

Table 3: 2008 Dates

Date	Location	Host	Contact
April 22-25, 2008	Las Vegas, NV	Hitachi GST	Dan Colegrove
June 24-27, 2008	Longmont, CO	ST Microelectronics	Aaron Wilson
August 18-22, 2008	San Jose, CA	Samsung	Joseph Chen
October 21-24, 2008	San Jose, CA or Las Vegas, NV	Fujitsu	Sumit Puri
December 16-19, 2008	Austin, TX or Seattle, WA	NVIDIA	Mark Overby

Table 4: Proposed 2009 Dates

February 17-20, 2009	Lake Forrest, CA	Western Digital	Curtis Stevens
April 21-24, 2009	Longmont, CO	Seagate	Jim Hatfield
June 16-19, 2009	Boston, MA	Phoenix	Paul Chicoine
August 18-21, 2009			
October 20-23, 2009			
December 15-18, 2009			

14. Adjournment

Mark Overby moved, Dan Colegrove seconding, that the meeting be adjourned at 1700 Thursday, 21 June 2007. The motion passed with unanimous consent.