

Accredited Standards Committee*

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Reply to: John Lohmeyer

To: T10 Membership
From: Ralph Weber and John Lohmeyer
Subject: SCSI Commands, Architecture, & Protocol Working Group Meeting -- November 4-5, 2003
Austin, TX

Agenda

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- 5.27 SES-2 Reporting peer enclosure service processes (03-347) [Elliott]
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- 5.30 SBC-2, new READ LONG (16) and WRITE LONG (16) commands (03-383) [Evans]
- 5.31 SPC-3 SBC-2 Data protection usage detection (03-387) [Elliott]
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- 5.33 Modified Reservation Handling Proposal (03-232) [Cummings]
- 6. SCSI Protocol Topics
- 7. End-to-End Data Protection Topics
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- 12. Meeting Schedule
- 13. Adjournment

Results of Meeting

1. Opening Remarks

John Lohmeyer, the T10 Chair, called the meeting to order at 1:30 p.m., Tuesday November 4, 2003. He thanked Bob Griswold of Crossroads Systems for hosting the meeting.

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

2. Approval of Agenda

The draft agenda was approved with no additions or changes.

The following agenda items were added/revised during the course of the meeting:

- 5.33 Modified Reservation Handling Proposal (03-232) [Cummings]

3. Attendance and Membership

Attendance at working group meetings does not count toward minimum attendance requirements for T10 membership. Working group meetings are open to any person or organization directly and materially affected by T10's scope of work. The following people attended the meeting:

Name	S	Organization	Electronic Mail Address
Mr. Tim Symons	P	Adaptec, Inc.	Timothy_Symons@adaptec.com
Ms. Pat Thaler	P	Agilent Technologies	pat_thaler@agilent.com
Dr. Claudio DeSanti	P	Andiamo Systems, Inc.	cds@andiamo.com
Mr. Robert Snively	P	Brocade Comm. Systems, Inc.	rsnively@brocade.com
Mr. Robert Griswold	P	Crossroads Systems, Inc.	rgriswold@crossroads.com
Mr. John Tyndall	A	Crossroads Systems, Inc.	jtyndall@crossroads.com
Mr. Kevin Marks	P	Dell, Inc.	kevin_marks@dell.com
Mr. Gary S. Robinson	P	EMC Corp.	robinson_gary@emc.com
Mr. Robert H. Nixon	P	Emulex	bob.nixon@emulex.com
Mr. Ralph O. Weber	P	ENDL Texas	roweber@ieee.org
Mr. Mike Fitzpatrick	P	Fujitsu	mfitzpatrick@fcpa.fujitsu.com
Mr. Michael Banther	V	Hewlett Packard Co.	michael_banther@hp.com
Mr. Rob Elliott	P	Hewlett Packard Co.	Elliott@hp.com
Mr. Zane Daggett	P	Hitachi Cable Manchester	zdaggett@hcm.hitachi.com
Mr. George O. Penokie	P	IBM / Tivoli Systems	gop@us.ibm.com
Mr. Kevin Butt	AV	IBM Corp.	kdbutt@us.ibm.com
Mr. Robert Sheffield	A	Intel Corp.	robert.l.sheffield@intel.com
Mr. Cris Simpson	P	Intel Corp.	cris.simpson@intel.com
Mr. Brad Besmer	V	LSI Logic Corp.	brad.besmer@lsil.com
Mr. Keith Holt	A	LSI Logic Corp.	keith.holt@lsil.com
Mr. John Lohmeyer	P	LSI Logic Corp.	lohmeier@t10.org
Mr. Mark Miquelon	V	LSI Logic Corp.	Mark.Miquelon@lsil.com
Mr. Mark Evans	P	Maxtor Corp.	mark_evans@maxtor.com
Mr. Edward A. Gardner	AV	Ophidian Designs	eag@ophidian.com
Mr. Bill Galloway	P	Pivot3, Inc.	billg@pivot3.com
Mr. Greg Elkins	V	QLogic	greg.elkins@qlogic.com
Mr. Craig W. Carlson	A#	QLogic Corp.	craig.carlson@qlogic.com
Mr. Paul Entzel	P	Quantum Corp.	paul.entzel@quantum.com
Mr. David Peterson	P	SBS Technologies	dap@sbs.com
Mr. Jim Coomes	A	Seagate Technology	jim.coomes@seagate.com
Mr. Gerald Houlder	P	Seagate Technology	gerry.houlder@seagate.com
Dr. Paul Suhler	V	Seagate Technology	Paul.A.Suhler@certance.com
Mr. Ronald Roberts	V	Sierra-Pac Technology	rkroberts@aol.com
Mr. Erich Oetting	P	Storage Technology Corp.	erich_oetting@stortek.com
Mr. Charles Binford	A	Sun Microsystems, Inc.	Charles.Binford@sun.com
Mr. Vit Novak	P	Sun Microsystems, Inc.	vit.novak@sun.com
Mr. Roger Cummings	P	Veritas Software	roger.cummings@veritas.com
Mr. Kenneth Hirata	P	Vixel Corp.	Ken.Hirata@Vixel.com

38 People Present

Status Key: P - Principal
 A,A# - Alternate
 AV - Advisory Member

L - Liaison
V - Visitor

4. SCSI Architecture Model Topics

4.1 SAM-3 SPC-3 SAS FCP-3 SRP-2 Device names and VPD data (02-419) [Penokie]

George Penokie presented a proposal to add SCSI Device Names in all active SCSI standards (02-419r6). The group questioned George on the presence or absence of requirements in the proposal.

The group requested changes in the definition of how binary values are converted to strings as UTF-8 representations of hexadecimal digits. George agreed to revise the proposal.

George Penokie moved that 02-419r7 (r6 as revised) be recommended for inclusion in SAM-3, SPC-3, SAS-1.1, FCP-3, and SRP-2. Bob Griswold seconded the motion. The motion passed on a vote of 13:1:8.

4.2 SAM-3 SPC-3 Obsolete untagged tasks (03-271) [Elliott]

Rob Elliott presented a proposal to make untagged tasks obsolete (03-271). The group requested several changes and Rob agreed to prepare a new revision of the proposal.

Rob Elliott moved that 03-271r2 (r1 as modified) be recommended for inclusion in SAM-3, SPC-3, SAS-1.1, FCP-3, ADT, and SRP-2. Bill Galloway seconded the motion. In the absence of any objections, the motion passed unanimously.

4.3 Making the DQUE bit obsolete in SAM-3 (03-352) [Weber]

Ralph Weber presented a proposal to remove the obsolete DQUE bit from SAM-3 (03-352r0). He note that the proposal changes the discussion Control mode pages fields ignored in the task set management examples from a specific list to an e.g. list.

Gerry Houlder moved that 03-352r0 be recommended for inclusion in SAM-3. Bill Galloway seconded the motion. In the absence of any objections, the motion passed unanimously.

4.4 SAM-3 SPC-3 Extended Task Attributes mode page (03-351) [Elliott]

Rob Elliott presented a proposal to give initiators greater control over Ordered and Head Of Queue task attributes (03-351r0). The group asked that the control aspects of the proposal be removed, that the mode page be changed to a VPD page, and that reporting of support for Simple and ACA task attributes be removed from the proposal.

Rob agreed to prepare a new revision of the proposal for consideration at the next meeting.

4.5 SAM-3 SPC-3 Status precedence (03-368) [Elliott]

Rob Elliott presented a proposal to restructure the status precedence subclause in SAM-3 (03-368r0). The group discussed the specific precedence at length. The difficulty was allowing reasonable implementations while providing some certainty that important conditions such as Unit Attentions get reported as quickly as possible. Resolving this concern required substantial wording changes to the existing text.

Rob agreed to prepare a revised proposal for consideration at the next meeting.

5. Command Set Topics

5.1 Ordered SCSI proposal (02-283) [Peterson]

Dave Peterson asked that discussion of this topic be deferred to the next meeting.

5.2 Persistent Reserve Out Functionality for Reserve/Release Replacement (02-141) [Peterson]

Dave Peterson asked that discussion of this topic be deferred to the next meeting.

5.3 Two persistent Reservations Problems - Update & Decision Required (03-231, 03-232, 03-233) [Cummings]

Discussion of this topic was discussed under item 5.33.

5.4 Only if Reserved (OIR) Proposal (03-289) [Cummings]

Roger Cummings presented a proposal to add a Control mode page bit to restrict commands to executing when a reservation is in place (03-289r1). The group requested several changes.

It was suggested that applying the change to only tapes be proposed and reviewed since that would limit the device-lockout potential of the proposal to devices that cannot be system disks.

Roger agreed to review the group's suggestions and return with revised proposal during the next meeting.

5.5 PERSISTENT RESERVE OUT SPEC_I_PT additional parameter data (03-210) [Weber]

Ralph Weber presented a proposal to address inconsistent usage of TransportIDs by the PERSISTENT RESERVE OUT command (03-210r3). The CAP group had recommended inclusion of this proposal in September, but Ralph uncovered some problems as he attempted to incorporate it. T10 agreed to send it back to CAP for more work.

The group recommended removing the byte numbering notation that attempted to indicate that the length is a multiple of four from the data structure table and Ralph agreed to revise the proposal.

Ralph Weber moved that 03-210r4 (r3 as modified) be recommended for inclusion in SPC-3. Gerry Houlder seconded the motion. In the absence of any objections, the motion passed unanimously.

5.6 SPC-3: Persistent All Registrants Fix Part 2 (03-253) [Penokie]

George Penokie presented a proposal to correct wording in the All Registrants Persistent Reservations definition (03-253r0).

George Penokie moved that 03-253r0 be recommended for inclusion in SPC-3. Gerry Holder seconded the motion. In the absence of any objections, the motion passed unanimously.

5.7 RBC Defect Report (03-021) (RBC-A) [Atkinson, Roberts]

John Lohmeyer reported that the RBC amendment has been approved and will be published soon. He recommended that this item be removed from future agendas.

5.8 SPC-3: New Inquiry VPD Page - Management Network Address (03-183) [Binford]

Charles Binford presented a proposal to add a VPD page containing network address information for management applications (03-183r5). The group requested minor changes and Charles agreed to prepare a new revision of the proposal.

Charles Binford moved that 03-183r6 (r5 as revised) be recommended for inclusion in SPC-3. Bill Galloway seconded the motion. The motion passed on a vote of 19:1:4.

5.9 MSC Presentation (03-242) [Penokie]

George Penokie asked that this topic be removed from this and future agendas.

5.10 SES-2 Enclosure element status page change for SATAII device/slot correspondence (03-284) [Marks]

Kevin Marks asked that this topic be removed from this and future agendas.

5.11 Per-Command Priority Tagging (03-302) [Penokie]

George Penokie presented a proposal to add command priorities to FCP-3, SAS 1.1, and SRP-2 (03-302r1) command IUs.

George noted that this proposal revision is a design concept and not a fully finished proposal, ready for incorporation in the identified standards.

George took straw poll on the following choices for the meaning of the default value (i.e., 0):

- a) Vendor Specific - received 12 votes
- b) In the middle - received 8 votes

George agreed to prepare a detailed proposal for consideration at the next meeting.

5.12 SPC-3 Mode Page Policy VPD page (03-316) [Elliott]

Rob Elliott presented a proposal to define a VPD page to inform application clients of the mode page sharing policy (03-316r1). The group asked for a 'per target port' policy and a simplification of the 'all pages except' definition. Rob agreed to prepare a new revision of the proposal for consideration at the next meeting.

5.13 SPC-3 SBC-2 Obsolete block device linked commands (03-335) [Elliott]

Rob Elliott presented a proposal to obsolete relative addressing related command linking in SBC-2, with minor changes in SPC-3 too (03-335r0). The group requested changes and Rob agreed to prepare a new revision.

Rob Elliott moved that 03-335r1 (r0 as revised) be recommended for inclusion in SPC-3 and SBC-2. Bob Snively seconded the motion. In the absence of any objections, the motion passed unanimously.

5.14 SPC-3 Third party persistent reservations (03-337) [Elliott]

Rob Elliott presented a proposal to effect the features of Reserve/Release third-party reservations in Persistent Reservations (03-337r2). The group requested several changes and Rob agreed to prepare a new revision of the proposal.

Concerns were raised about the discovery that other initiators can be unregistered without sending unit attentions to the affected initiators. Prohibiting use of initiator lists for unregister operations was proposed as a solution for the problem. Rob agreed to investigate the options and revise the proposal accordingly.

The group discussed using different parameter lists for PERSISTENT RESERVE OUT and Rob felt that such a change would require detailed technical consideration.

Rob suggested that telephone conference calls be scheduled to provide additional review of the proposal.

5.15 SPC-3 Report supported asymmetric access states (03-343) [Elliott]

Rob Elliott presented a proposal to return information on supported asymmetric access states (03-343r0). The group noted that a bit indicating support for the bits is not needed because at least one of the bits must be set if the bits are supported. Rob agreed to revise the proposal.

Rob Elliott moved that 03-343r1 (r0 as revised) be recommended for inclusion in SPC-3. Vit Novak seconded the motion. In the absence of any objections, the motion passed unanimously.

5.16 SPC-3 Report all target port identifiers (03-344) [Elliott]

Rob Elliott presented a proposal to add a VPD page listing all target ports in a target device (03-344r1). The group requested changes and Rob agreed to revise the proposal.

Rob Elliott moved that 03-344r2 (r1 as revised) be recommended for inclusion in SPC-3. Dave Peterson seconded the motion. In the absence of any objections, the motion passed unanimously.

As a result of the discussion in item 5.22, Rob asked that this recommendation not be forwarded to the plenary.

5.17 SPC-3 Persistent reservations read full status (03-342) [Elliott]

Rob Elliott presented a proposal to add a READ FULL STATUS service action to the PERSISTENT RESERVE IN command (03-342r1). The group requested changes and Rob agreed to prepare a new revision of the proposal for consideration at the next meeting.

5.18 SBC-2 4-byte LBA commands on 8-byte LBA capable drives (03-348) [Elliott]

Rob Elliott presented a proposal to require disks to validate LBAs that cross from 4-byte to 8-byte lengths prior to processing the command (03-348r0).

The group requested that Rob revise the proposal to not require the LBA validation and Rob agreed to revise the proposal for consideration at the next meeting.

5.19 SPC-3 Changing Control mode page with commands in the task set (03-350) [Elliott]

Rob Elliott presented a proposal to make several changes in the definition of the Control mode page and the Log Page annex (03-350r0).

Kevin Butt moved that 03-350r0 be recommended for inclusion in SPC-3. Rob Elliott seconded the motion. In the absence of any objections, the motion passed unanimously.

5.20 SPC-3 Obsolete CmdDt field in Standard INQUIRY data (01-253r3) [Penokie/Elliott]

Ralph Weber agreed to make the INQUIRY CmdDt function obsolete in the next SPC-3 revision as per the previously approved 01-253r3.

5.21 SPC-3 Specify initiator ports in EXTENDED COPY target descriptors (03-354) [Elliott]

Rob Elliott presented a proposal to add specifications for which initiator port to use in an EXTENDED COPY operation (03-354r0). Because of the dependency on other proposals whose consideration is being continued to the next meeting, Rob agreed to bring a revised proposal to the next meeting.

5.22 SPC-3 Report initiator port identifiers (03-353) [Elliott]

Rob Elliott presented a proposal to add reporting of initiator port information, primarily for EXTENDED COPY copy managers (03-354r0). The group requested changes to coordinate initiator and target relative port numbering. Rob asked that the approval of 03-344 not be transmitted to the plenary.

Rob agreed to prepare a new revision of the proposal for consideration at the next meeting.

5.23 SPC-3 Protocol Identifier for ATAPI (03-356) [Elliott]

Rob Elliott presented a proposal to add a protocol identifier for ATAPI (03-356r0).

Rob Elliott moved that 03-356r0 be recommended for inclusion in SPC-3. Bill Galloway seconded the motion. In the absence of any objections, the motion passed unanimously.

5.24 SPC-3 Disable implicit asymmetric logical unit access (03-359) [Elliott]

Rob Elliott presented a proposal to add a mode page bit to disable implicit asymmetric logical unit access changes (03-359r0). The group asked that the mode page be changed to a subpage of the Control mode page, that the 'supported' bit be removed, and that other minor changes be made. Rob agreed to prepare a new revision of the proposal.

Rob Elliott moved that 03-359r1 (r0 as revised) be recommended for inclusion in SPC-3. Bob Nixon seconded the motion. In the absence of any objections, the motion passed unanimously.

5.25 Command Classification Field (03-361) [Penokie]

George Penokie presented a proposal to add a classification field to all commands (03-361r0). The group requested changes and George agreed to revise the proposal for consideration at the next meeting.

5.26 SBC-2 Obsolete SEEK(10) (03-362) [Elliott]

Rob Elliott moved that 03-362r0 be recommended for inclusion in SBC-2 (03-362r0). Bill Galloway seconded the motion. In the absence of any objections, the motion passed unanimously.

5.27 SES-2 Reporting peer enclosure service processes (03-347) [Elliott]

Rob Elliott presented a proposal to provide for reporting peer enclosure service processes (03-347r0). The group requested a minor restructuring of the SES page format and Rob agreed to prepare a new revision of the proposal.

Rob Elliott moved that 03-347r1 (r0 as revised) be recommended for inclusion in SES-2. Bill Galloway seconded the motion. In the absence of any objections, the motion passed unanimously.

5.28 MSC Report Bridge Mapping command (03-364) [Elliott]

Rob Elliott presented a proposal for a REPORT BRIDGE MAPPING command to be incorporated in the MSC standard (03-364r0). George Penokie raised concerns about some of the addressing modes proposed.

George and Rob discussed scheduling telephone conference calls to discuss and improve the proposal.

5.29 Invalid LUN on Request Sense Command (03-376) [Penokie]

George Penokie presented a proposal to correct an inconsistency between SPC-3 and SAM-3 regarding invalid logical unit selection on a Request Sense command (03-376r1). The group requested that George consider moving some behavior requirements from SAM-3 to SPC-3. Other minor changes also were requested.

George agreed to bring a revised proposal to the next meeting.

5.30 SBC-2, new READ LONG (16) and WRITE LONG (16) commands (03-383) [Evans]

Mark Evans presented a proposal to define READ LONG(16) and WRITE LONG (16) commands (03-383r0). Mark presented two options: defining new operation codes or defining new service actions. The group recommended using the service action approach and Mark agreed to revise the proposal.

Mark Evans moved that 03-383r1 (r0 as revised) be recommended for inclusion in SBC-2. Bob Nixon seconded the motion. In the absence of any objections, the motion passed unanimously.

5.31 SPC-3 SBC-2 Data protection usage detection (03-387) [Elliott]

Rob Elliott presented a proposal to move the end-to-end data protection active information out of the INQUIRY data into a log page (03-387r0). The group discussed a location to put the information and settled on the READ CAPACITY(16) parameter data.

George agreed to reduce the number of end-to-end bits in the INQUIRY data from 2 to 1 in 03-365r1.

Rob agreed to revise the proposal for consideration at the next meeting.

The group noted that this topic should be covered under the end-to-end topics in the January agenda.

5.32 SPC-3 Report LUNS Clarification (03-386) [Binford]

Charles Binford led the group in a discussion of ambiguities in the REPORT LUNS command (03-386r0). The group requested changes and Charles agreed to prepare a new revision of the proposal.

Because the proposal was not posted until Monday of this week, Charles agreed to continue the discussion of the proposal at the next meeting.

5.33 Modified Reservation Handling Proposal (03-232) [Cummings]

Roger Cummings presented a proposal to increase the degree of coexistence between Reserve/Release Reservations and Persistent Reservations (03-232r1). The group requested several changes and Roger agreed to prepare a new revision for consideration at the next meeting.

6. SCSI Protocol Topics

No SCSI protocol topics were brought to the group.

However, the FCP-3 working group requested meeting time in March and discussion of the request was deferred to the next meeting.

7. End-to-End Data Protection Topics

7.1 End-to-End Data Protection Proposal (03-110, 03-111) [Houlder]

Gerry Houlder asked that this topic be removed from this and future agendas.

7.2 SPC-3; SBC-2; Simplified End-to-End Data Protection (03-176, 03-365) [Penokie]

George Penokie led the group in a review of the latest simplified end-to-end data protection proposal (formerly 03-176, now 03-365r0).

The group discussed information recorded during formats and legacy writes. It was agreed that all 1's will be written to all data protection fields during a format. It was agreed that during legacy writes, valid LBAs and CRCs will be written with all 1's written in the application tag. An exception to the legacy writes rule was agreed for the case where the application tag is owned by the target, in which case the target can do whatever it wants.

George Penokie moved that the xxProtect fields be increased from 2 to 3 bits and that all necessary related changes be made. Ed Gardner seconded the motion. In the absence of any objections, the motion passed unanimously.

The group discussed and agreed to several specific changes in the proposal. George agreed revise the proposal.

7.3 End-to-End Error Cases (03-207) [Penokie]

George Penokie asked that discussion of this topic be removed from this and future agendas.

7.4 End-to-End Data Protection justification (03-224) [Holt]

Keith Holt asked that discussion of this topic be deferred to the next meeting.

7.5 Architecture for End to End Data Protection (03-291) [Snively]

Bob Snively asked that discussion of this topic be deferred to the next meeting.

7.6 SBC, 32 Byte Commands for End-to-End Data Protection (03-307) [Coomes]

Jim Coomes presented a proposal detailing the changes from 03-365r0 needed to support application specified data block reference tag and application tag values (03-307r4).

The group requested numerous changes and Jim agreed to prepare a revised proposal.

7.7 End-to-End Data Protection Proposal - Straw Horse for 03-111r1 (03-310) [Holt]

Keith Holt ask that discussion of this topic be deferred to the next meeting.

7.8 SBC Default data protection block (03-309) [Coomes]

Jim Coomes asked that discussion of this topic be removed from this and future agendas.

7.9 SBC/SPC ASC/ASCQ for Protection Information Read Error (03-308) [Coomes]

Jim Coomes asked that discussion of this topic be removed from this and future agendas.

7.10 End-to-End Data Protection Information Field Ordering (03-336) [Holt]

Keith Holt explained the field ordering proposal (03-336r0).

7.11 End-to-End Data Protection Interoperability with Legacy Hosts (03-360) [Holt]

Keith Holt stated that this topic had been discussed under item 7.2.

7.12 SBC-2 Data protection CRC seed (03-381) [Elliott]

Rob Elliott presented a proposal to change the end-to-end data protection CRC seed (03-381r0). Bob Sheffield raised concerns about the application of the modified CRC to RAID implementations.

Rob Elliott moved that 03-381r0 be recommended for inclusion subsequent to the incorporation of other end-to-end related proposals. Mark Evans seconded the motion.

Pat Thaler asked that consideration of the proposal be deferred based on the two-week rule.

7.13 End-to-End Data Protection and Legacy Tape Drives (03-389) [Banther]

In view of the late hour, Michael Banther asked that discussion of this topic to be deferred to the next meeting.

8. Old Business

All old business was covered under specific agenda items.

9. New Business

9.1 OSD Presentation (03-394r0) [Riedel]

Erik Riedel presented an overview of OSD (03-394r0). He noted that an editing review meeting is scheduled for Friday of this week.

10. Review of Documents

10.1 SRP-2 Review (SRP-2) [Simpson]

Cris Simpson requested that reviewing SRP-2 be deferred to the next meeting.

10.2 OSD Review (OSD) [Weber]

Ralph Weber announced that an OSD editing meeting will be held on Friday of this meeting week.

11. Review of Recommendations to the Plenary

Ralph Weber noted that the following recommendations have been made to the T10 plenary:

For inclusion in SAM-3, SPC-3, SAS-1.1, FCP-3, ADT, and SRP-2:

Obsolete untagged tasks (03-271r2) [Elliott] {r1 as modified, unanimous}

For inclusion in SAM-3, SPC-3, SAS-1.1, FCP-3, and SRP-2:

Device names and VPD data (02-419r7) [Penokie] {r6 as revised, 13:1:8}

For inclusion in SPC-3 and SBC-2:

SPC-3 SBC-2 Obsolete block device linked commands (03-335r1) [Elliott] {r0 as revised, unanimous}

For inclusion in SAM-3:

Making the DQUE bit obsolete in SAM-3 (03-352r0) [Weber] {unanimous}

For inclusion in SPC-3:

New Inquiry VPD Page - Management Network Address (03-183r6) [Binford] {r5 as revised, 19:1:4}

Persistent All Registrants Fix Part 2 (03-253r0) [Penokie] {unanimous}

PERSISTENT RESERVE OUT SPEC_I_PT additional parameter data (03-210r4) [Weber] {r3 as revised, unanimous}

Report supported asymmetric access states (03-343r1) [Elliott] {r0 as revised, unanimous}

Protocol Identifier for ATAPI (03-356r0) [Elliott] {unanimous}

Disable implicit asymmetric logical unit access (03-359r1) [Elliott] {r0 as revised, unanimous}

Changing Control mode page with commands in the task set (03-350r0) [Elliott] {unanimous}

For inclusion in SBC-2:

Obsolete SEEK(10) (03-362r0) [Elliott] {unanimous}

New READ LONG (16) and WRITE LONG (16) commands (03-383r1) [Evans] {r0 as revised, unanimous}

For inclusion in SES-2:

Reporting peer enclosure service processes (03-347r1) [Elliott] {r0 as revised, unanimous}

12. Meeting Schedule

The next meeting of the SCSI Commands, Architecture, and Protocols Working Group will be Tuesday, January 13, 2004 commencing at 11:00 p.m. and continuing Wednesday, January 14, 2004 from 9 a.m. to 7 p.m. (or until all agenda items are completed). The meeting will be in Chandler, AZ at the Wyndham Garden Hotel (480-961-4444), hosted by Intel Corp.

13. Adjournment

The meeting was adjourned at 9:00 p.m. on Wednesday November 5, 2003.