

Date: 19 April 2000

To: T10 Technical Committee

From: Ralph O. Weber

Subject: Review of ISO comments on SPC

The letter ballot review of SPC-2 is approaching and one source of comments has yet to be reviewed for applicability. Those comments come from the ISO review of SPC. This document reviews the ISO comments on SPC and identifies those that still need incorporation in SPC-2.

In summary, most comments have already been addressed in SPC-2 revision 16. The exceptions are comments 3, 20, 21, 23 and 25. As of this writing, I am uncertain how to respond to comments 3 and 20.

Changes to identification of standards by ANSI or ISO/IEC number are not covered in this list, they will be made as best as is possible for a dpANS in a future SPC-2 revision.

For the editor's convenience, changes that need to be made in SPC-2 are in red text.

Comment 1 (US-1): In clause 2 (Normative references), changing "international and regional standards" to "international standards" and removing ITUT from the list of named organizations. Also change "draft and foreign standards" to "other standards". Update document numbers. Change the definition of command standard from: "An SCSI-3 standard that defines another device type models, commands, and parameter data; e.g. SBC, SCC, SGC, SMC, SSC, MMC, SES, etc. (see clause 1)."to: "An SCSI-3 standard that defines the model, commands, and parameter data for a device type; e.g., SBC, SCC, SGC, SMC, SSC, MMC, SES, etc. (see clause 1).

These changes appear in SPC-2 revision 16.

Comment 2 (US-2): In clause 5.1.2, delete the underlined "what" in the following "? the application client that received the error status should issue a "REQUEST SENSE command to receive the sense date describing the what cause of the condition."

This change appears in SPC-2 revision 16.

Comment 3 (DE8): For all lists being used throughout the document: please refer to ISO/IEC Directives, Part 3, Rules for the structure and drafting of International Standards, 3rd edition, 1997, clause 5.2.5 on pages 30 and 31.

I'm investigating what changes this comment is requesting and whether T10 normally makes such changes.

Comment 4 (US-3): In clause 5.4 [now 5.5] list entry e), change the underlined "depending" to "descending" in the following: e) the LOGICAL UNIT RESET task management function removes reservations established by the Reserve/Release method and removes all tasks for all initiators for the addressed logical unit and any logical units depending from it in a hierarchical addressing structure (see SAM)."

SPC-2 revision 16 contains "issuing" in place of "depending". I believe that the change to issuing was agreed by T10 as a compromise between "depending" and "descending".

Comment 5 (US-4): In clause 6, change the "to be is" to the underlined "is to be" in the following: "An application client and the processor device server are assumed to have a common set of rules by which information is to be exchanged between them,?"

This change appears in SPC-2 revision 16.

Comment 6 (DE9): Adopt text on bottom of page 35 and Table 22 (ANSI version) on top of page 36 to ISO (/IEC) version

This change has been overtaken by events, specifically the restructuring of the VERSION field in the Standard INQUIRY data that can be found in SPC-2 revision 16.

Note: The new table of VERSION values contains one instance of ECMA=1 that should be ECMA=001.

Comment 7 (US-5): In clause 7.12.3.2 table 42 reverse the "Read Exclusive" and "Write Exclusive" rows. In clause 7.13.1.3, add the underline word "none" thus changing: "Attempts to release persistent reservations where of the scope, reservation key, and extent values match an existing persistent reservation shall not be considered errors". To: "Attempts to release persistent reservations where none of the scope, reservation key, and extent values match an existing persistent reservation shall not be considered errors."

This change has been overtaken by events, specifically the complete rewrite of the persistent reservations commands and model that can be found in SPC-2 revision 16.

Comment 8 (US-6): In clauses 7.17.3 [now 7.19.3] and 7.21.3 [now 7.24.3], change all instances of "third party device ID" (the name of a field) to "Third party device ID" (the name of the field as it appears in the associated tables. Elsewhere, change "third party" to "third-party".

The changes described in this comment appear in SPC-2 revision 16, with the following exceptions. The COPY command (7.2), MODE SELECT(6) command (7.6), RELEASE(6) command (7.19), and RESERVE(6) command (7.24) contain instances of "third party" that should be "third-party".

Comment 9 (JP1a): Release (6) command: Notes should be added that describes the reason why the bit 4-1 of the byte 0 abolished. Because these bits are already used in SCSI-2 systems.

This information appears in SPC-2 revision 16, but not as a note.

Comment 10 (US-7): In clause 7.20.4 [now 7.22.4] table 65 [now table 112] sense key 1h, add a comma after "successfully" to produce the following: "Indicates that the last command completed successfully, with some recovery action performed by the device server".

This change appears in SPC-2 revision 16.

Comment 11 (US-13b): In clause 7.20.4 [now 7.22.4] table 66 [now table 113] the R, O and M entries for ASC/ASCQ LOGICAL UNIT COMMUNICATION CRC ERROR (ULTRA-DMA/32) are in the wrong columns.

This change appears in SPC-2 revision 16.

Comment 12 (JP1b): Reserve (6) commands: Notes should be added that describes the reason why the bit 4-1 of the byte 0 abolished. Because these bits are already used in SCSI-2 systems.

This information appears in SPC-2 revision 16, but not as a note.

Comment 13 (US-8): In clause 7.23 [now 7.25], add the underlined "are" to produce: " A PF bit of zero indicates that all SEND DIAGNOSTIC parameters <u>are</u> vendor-specific."

This change appears in SPC-2 revision 16.

Comment 14 (US-9): In clause 7.23 [now 7.25] note 41, change "To insure?" to "To ensure?"

This change appears in SPC-2 revision 16.

Comment 15 (US-10): In clause 7.25.1 [now 7.28.1] add the underlined "the" to produce: "If the parameter list length exceeds the buffer capacity the device server shall return CHECK CONDITION status and shall set the sense key to ILLEGAL REQUEST"

This change appears in SPC-2 revision 16.

Comment 16 (JP2): In 8.2.3 [now 8.2.4], the last line: "LP shall bit be set to one" should be "LP bit shall be set to one"

This change appears in SPC-2 revision 16.

Comment 17 (JP3): In 8.2.4 [now 8.2.5] line 3 from the bottom: "control mode page (8.3.1)" should be "control mode page (8.3.4)".

This change appears in SPC-2 revision 16.

Comment 18 (JP4): table 121 [now table 189]: "0Bh - 2Fh Reserved" should be "0Ch- 2Fh Reserved". Rationale: 0Bh is already assigned as "Last n error events page".

This change appears in SPC-2 revision 16.

Comment 19 (US-11): In clause A.4 table A.7, delete the underlined "for" in the following: "Indicates that the device server supports saving <u>for</u> of the log parameter".

This change appears in SPC-2 revision 16.

Comment 20 (DE10): Delete footnote. [refers to the following text from the bottom of pdf page 248 in SPC-2 r16: "TIB for IT - Procedures for Logging Operations (X3-131-1994/TIB-1)."

I'm not sure how T10 wants to handle this reference in the ISO/IEC SPC-2, but now is a good time to think about it.

Comment 21 (DE11): Annex B: Rephrase the 2nd paragraph by removing US-only related information.

More work is necessary in this area, but I like the wording in comment 23 better.

Comment 22 (US 13a): In Annex B [now Annex C] table B.1 [now table C.1] the R, O and M entries for ASC/ASCQ LOGICAL UNIT COMMUNICATION CRC ERROR (ULTRA-DMA/32) are in the wrong columns.

This change appears in SPC-2 revision 16.

Comment 23 (US-12): In Annex B and Annex C [now Annex C and Annex D], correct T10 and NCITS www references, add a reference to the ANSI www site, and remove "Accredited Standards Committee". Change the second paragraph to read as follows. "The information in this annex was complete and accurate at the time of publication. However, the information is subject to change. Technical Committee T10 of NCITS maintains an electronic copy of this information on its world wide web site (http://www.symbios.com/t10). In the event that the T10 world wide web site is no longer active, access may be possible via the NCITS world wide web site (http://www.ncits.org), the ANSI world wide web site (http://www.ansi.org), the IEC site (http://www.iec.ch/), or the ISO site http://www.iso.ch/".

The wording currently in SPC-2 revision 16 almost matches the wording requested by the comment. Events have overtaken the T10 web site and SPC-2 revision 16 correctly shows it as www.t10.org. The references to the IEC and ISO web sites need to be added to the current SPC-2 text.

Comment 24 (US-14): In Annex B [now Annex C] table B.4[now table C.4], change Note 1 to something clearer for readers who do not participate directly in T10.

This change appears in SPC-2 revision 16.

Comment 25 (DE12): Annex C: Rephrase the 1st and 2nd paragraphs by removing US-only related information.

More work is necessary in this area, but I like the wording in comment 23 better.