T10/04-327r1

Voting Results on T10 Letter Ballot 04-326r0 on
Forwarding SPC-3 to First Public Review
Ballot closed: 2004/10/25 12:00 noon MDT

Organization	Name	S	Vote	Add'l Info
Adaptec, Inc.	Tim Symons	P	Yes	
Agilent Technologies			DNV	
Amphenol Interconnect	Michael Wingard	P	Yes	
Brocade	Robert Snively	P	Yes	Cmnts
Cisco Systems, Inc.	Claudio DeSanti	P	Yes	
CNT	David Peterson	P	Yes	
Crossroads Systems, Inc.	Dexter Anderson	P	Yes	
Dallas Semiconductor	James A. Lott, Jr.	P	Yes	
Dell, Inc.	Kevin Marks	P	Yes	Cmnts
EMC Corp.	Gary S. Robinson	P	Yes	
Emulex	Robert H. Nixon	P	Yes	
ENDL	Ralph O. Weber	P	No	Cmnts
FCI	Douglas Wagner	P	Yes	
Foxconn Electronics	Elwood Parsons	P	Abs	Cmnts
Fujitsu	Mike Fitzpatrick	P	Yes	
General Dynamics	Nathan Hastad	P	Yes	
Hewlett Packard Co.	Rob Elliott	P	No	Cmnts
Hitachi Cable Manchester	Zane Daggett	P	Yes	
Hitachi Global Storage Tech.	Dan Colegrove	P	Yes	
IBM Corp.	George O. Penokie	P	No	Cmnts
Intel Corp.	Robert Sheffield	P	Yes	Cmnts
Iomega Corp.	David Hawks	P	Yes	
LSI Logic Corp.	John Lohmeyer	P	Yes	Cmnts
Maxtor Corp.	Mark Evans	P	No	Cmnts
Microsoft Corp.	Emily Hill	P	Yes	
Molex Inc.	Jay Neer	P	Yes	
Panasonic Technologies, Inc	Terence J. Nelson	P	Yes	
Philips Electronics	William P. McFerrin	P	Yes	
Pivot3, Inc.	Bill Galloway	P	Yes	
PMC-Sierra	Rachelle Trent	P	Yes	
QLogic Corp.			DNV	
Quantum Corp.	Paul Entzel	P	Yes	Cmnts
Seagate Technology	Gerald Houlder	P	Yes	
Storage Technology Corp.	Dennis Appleyard	A	Yes	
Sun Microsystems, Inc.	Vit Novak	P	Yes	
Texas Instruments	Paul D. Aloisi	P	Yes	
Toshiba	Yutaka Arakawa	P	Yes	
TycoElectronics	Ashlie Fan	P	Yes	
UNISYS	Ron Mathews	P	Yes	
Veritas Software	Roger Cummings	P	No	Cmnts
Western Digital	Curtis Stevens	P	Yes	

Ballot totals: (33:5:1:2=41)
 33 Yes
  5 No
  1 Abstain
  2 Organization(s) did not vote
 41 Total voting organizations
  1 Duplicate ballot(s) not counted
 12 Ballot(s) included comments

This 2/3rds majority ballot passed.
33 Yes are more than half the membership eligible to vote minus abstentions
  [greater than 20] AND
33 Yes are at least 26 (2/3rds of those voting, excluding abstentions [38]) AND
33 Yes are equal to or exceed a quorum [13]

Key:
P   Voter is principal member
A   Voter is alternate member
Abs   Abstain vote
DNV   Organization did not vote
Cmnts   Comments were included with ballot
NoCmnts No comments were included with a vote that requires comments

****

Comments attached to Yes ballot from Robert Snively of
Brocade:

1) E P2, Clause 1

Comment:

Why do all these examples of SCSI structure have to be in these docments. I would expect them to be in SAM only, or perhaps in a separate white paper or TR. They are mostly not relevant to this particular document's content.

Proposed Solution:

Remove examples of interconnects, transport protocols, shared command sets, translation protocols, architecture models, and device-type command sets from this clause.

2) T P7, Clause 3.1.14

Comment:

Byte is much more than just an 8-bit construct. It is structured in the context of memory boundaries.

Proposed Solution:

Change the definition to read: "A sequence of eight contiguous bits considered as a unit and aligned on character boundary"

3) E P8 Clause 3.1.19

Comment:

company_id is a synonym for OUI, and later for IEEE Company_ID.

Proposed Solution:

Choose one of these names (I would suggest OUI (Organizationally Unique Identifier) be the one you choose).

4) E P9 Clause 3.1.44 and 3.1.103

Comment:

If "SCSI initiator (target) port" and "initiator (target) port" are synonyms, just use one, preferably the shortest one. It is defined uniquely for this document in the glossary and need not be further qualified. If there is a compatibility issue with other documents that requires the longer one, use it instead in all places within this document. If there is a clarity problem, use a fixed name for such objects, like "SCSI_initiator_port".

Proposed Solution:

Choose the proper name and apply it at all points within the document instead of using synonyms.

5) E P56 Clause 5.3

Comment:

The first paragraph of clause 5.3 gives a permission and the second takes it away. I would suggest the rewording below.

Proposed Solution:

Change the clause to read:

"Each of the following commands may be processed by the task

manager as if it has a task attribute of HEAD OF QUEUE (see SAM-3) if it is received with a SIMPLE task attribute or no task attribute:

a) INQUIRY; and
b) REPORT LUNS.

An application client should not send a command with the ORDERED task attribute if the command may be processed as if it has a task attribute of HEAD OF QUEUE because whether the ORDERED task attribute is honored is vendor specific.

6) E P11 Clause 3.1.82

Comment:

The term is obviously an obsolete term and has in fact been replaced throughout the document. In fact, it does not even turn up in Annex A.

Proposed Solution:

Delete Clause 3.1.82.

7) E P11 Clause 3.1.85

Comment:

The term is obviously an obselete term and has in fact been replaced in all but two places in the document.

Proposed Solution:

Delete Clause 3.1.82

On page 98, clause 6.2.3, change "...and SCSI identifier information may..." to read "...and SCSI port identifier information may...".

8) E P12 Clause 3.1.91

Comment:

The definition of a page in the glossary in this single case does not appear to be justified. There is nothing special about this page that differentiates it from the many other pages in this document.

Proposed Solution:

Delete Clause 3.1.91.

9) E P13 Clause 3.1.104

Comment:

This clause kind of trips over itself.

Proposed Solution:

Either delete the glossary definition for this and 3.1.106, or alternatively rewrite to read:

"For a device supporting asymmetric logical unit access, the characteristic that specifies the performance properties of the target port and the sub-set of this command set the logical unit supports when accessed through this target port (see 5.3.2.1)."

10) E P347 Clause 8.3.1.5.1.2

Comment:

The use of the word "third-party" is incorrect in
this clause.

Proposed Solution:

Change "... third-party... " to "... third party ...".

11) E P13 Clause 3.1.111

Comment:

The definition is inconsistent with the actual usage
of the term in the document.

Proposed Solution:

Change "3.1.111 third-party: An EXTENDED COPY
command issued to one SCSI device to perform a
copy operation between two other SCSI devices." to
read "3.1.111 third-party copy: A command issued
to one SCSI device to perform a copy operation between
two other SCSI devices. The EXTENDED COPY command
has the option of performing the third-party copy
function."

Also change 6.2.3 "Such validation shall occur
only when the device server consults the alias list to
resolve an alias to a designation in the context
of third-party commands (e.g., EXTENDED COPY) or any other
command that requires reference to the alias list."
to read "Such validation shall occur only when
the device server consults the alias list to
resolve an alias to a designation in the context of a
third-party copy command (e.g., EXTENDED COPY) or any other
command that requires reference to the alias list."

As an alternative to the two changes above, you might
instead define "third party" as "an operation requested
of one logical unit to execute a series of operations
causing information flow between two other logical units."
That would be inclusive of all the uses of third-party
in the document.

12) T P211 Clause 6.23.2 and many others

Comment:

"A service action valid (SERVACTV) bit set to zero
indicates the operation code indicated by the OPERATION CODE field
does not have service actions and the SERVICE ACTION field
should be ignored." begs for the question what happens if
you choose not to ignore the SERVICE ACTION field.

Proposed Solution:

Change the text "and the SERVICE ACTION field should be
ignored" to read "and the SERVICE ACTION field
shall be ignored"

Other cluases with the same problem are identifiable by
a search on "be ignored" and include:

P 96, Clause 6.2.1

P 230, Clause 6.32

P 319, Clause 7.6.4.1

P 320, Clause 7.6.4.1 (2 places)

13) E P225 Clause 6.29

Comment:

The phrase "is to be ignored" sounds to me like it should read "shall be ignored" in three places. Alternatively, a covering paragraph indicating that the I_T_L NEXUS TO SET field controls which fields in the SET PRIORITY parameter list shall be ignored.

Proposed Solution:

Change "is to be ignored" to "shall be ignored" in three places.

13) E P15 Clause 3.3.2

Comment:

The keyword definition "3.3.2 ignored: A keyword used to describe an unused bit, byte, word, field or code value. The contents or value of an ignored bit, byte, word, field or code value shall not be examined by the receiving SCSI device and may be set to any value by the transmitting SCSI device." is a bit flakey. I would recommend that a more intelligent setting of ignored fields would be to set them to zero, since future changes may later require them to not be ignored. In fact, in many of the cases the word "reserved" would have worked better than the word "ignored".

Proposed Solution:

Change the keyword definition to read:
3.3.2 ignored: A keyword used to describe a bit, byte, word, field or code value that has no meaning in the described context. The receiving SCSI device shall perform no actions that might be implied by the contents of an ignored bit, byte, word, field or code value. Bits, bytes, words, fields, or code values that are ignored should be set to zero."

14) T P17 Clause 3.4

Comment:

The words about lists need to be corrected. The lists do not necessarily talk about priorities, but rather about ordering relationships or the lack thereof.

Proposed Solution:

The text "Lists sequenced by letters (e.g., a-red, b-blue, c-green) show no priority relationship between the listed items. Numbered lists (e.g., 1-red, 2-blue, 3-green) show a priority ordering between the listed items." should be changed to read "Lists sequenced by letters (e.g., a-red, b-blue, c-green) show no ordeing relationship between the listed items. Numbered lists (e.g., 1-red, 2-blue, 3-green) show an ordering relationship between the listed items."

15) E P17 Clause 3.6.1

Comment:

Minor editorial fixes:

Proposed Solution:

"contain specific encoded character" s/b "contain
specific encoded characters".

"the same writing out" s/b "the same as writing out".

16) E P20 Clause 4.3.1

Comment:

There are conflicting definitions about how to handle
reserved CDB code values. In the second paragraph, it
is treated as an "INVALID FIELD IN CDB". In the third
paragraph, because it is also invalid and/or not supported,
it is treated as an "INVALID COMMAND OPERATION CODE".

Proposed Solution:

In the second paragraph of the clause, the text should
be changed to read:
"If a logical unit validates reserved CDB fields and
receives a reserved field within the CDB that is not
zero or receives a reserved code value in other than
the OPERATION CODE field, then the
logical unit shall terminate the command with CHECK CONDITION
status, with the sense key set to ILLEGAL REQUEST, and
the additional sense code set to INVALID FIELD IN CDB."

In the fourth paragraph of the clause, the text "that
is invalid or not supported" should be changed to read
"that is invalid, reserved, or not supported".

17) E P25 Clause 4.3.4.1

Comment:

"Command determinate" is not a meaningful expression.

Proposed Solution:

Change "may be modeled as a single, unique command determinate" to
be "together constitute an operation code defining a command".

18) E P26 Clause 4.3.4.1

Comment:

Last paragraph is a bit strange.

Proposed Solution:

Rewrite last paragraph to read:

"The OPERATION CODE field value for commands defined in SPC-3
has the same meaning for all SCSI device types. The OPERATION
CODE field is interpreted as a command for all SCSI devices,
though OPERATION CODE field values other than those specified
in SPC-3 may cause the execution of different functions
for each type of device."

19) T P27 Clause 4.3.4.5 and Clause 4.3.4.6

Comment:

A parameter length of zero is an error for PERSISTENT RESERVE
OUT and probably for some other commands. This clause says
it never is.

Proposed Solution:

Change "This condition shall not be considered an error" to
read "This condition shall not be considered an error unless
an error code is specified in the corresponding command definition."

A similar change needs to be made to the third sentence of
4.3.4.6.

20) T P27 Clause 4.4.1

Comment:

Do you really mean ASCII graphic codes? I believe these
are called ASCII printable character codes. The graphic
codes are those above 80, sometimes called extended ASCII.

Proposed Solution:

Make suggested change.

Better, for docs going ISO, to refer to the printable characters with
codes from 20h to 7Fh of ISO Latin 1 (ISO 8859-1). There is
also a Unicode equivalent, but I have not looked it up.

21) T P138 Clause 6.4.1

Comment:

If the EVPD bit is zero, the page code value presently
has no meaning. However, the PAGE CODE field is required
to be checked for zero and an error posted if it is not
zero, even though it is explicitly labeled as invalid.

Proposed Solution:

Change the text in the third paragraph to read in total:

"If the EVPD bit is set to zero, the PAGE CODE field shall
be ignored and the device server shall return the standard
INQUIRY data (see 6.4.2)."

22) T P138 Clause 6.4.1

Comment:

The eighth paragraph in the clause indicates that some
actions and device information may not be available until
the logical unit has completed its self initialization.
However, the paragraph opens far too big a window. Every
logical unit knows its own device type and can fill in all
but the product revision and perhaps some version descriptor
information in the standard INQUIRY data format.

For the vital product data pages, less information may be
available. I believe that the proper way to handle this
is for the standard inquiry data to be available except
for explicitly excepted values from first accessibility of
the device. For vital product data pages that are not
yet available but will become available, the proper response
should be a NOT READY sense key with a LOGICAL UNIT IS
IN PROCESS OF BECOMING READY for ASC/ASCQ.

Proposed Solution:

Rewrite the seventh, eighth, and ninth paragraphs of the
clause to read:

"The standard INQUIRY data should be returned even though the
device server is not ready for other commands. The
standard INQUIRY data should be available without incurring

any media access delays. If the device server does
store some of the standard INQUIRY data on the media,
it may return zeros or ASCII spaces (20h) in those fields
until the data is available from the media. Fields that
shall always be available include:
  PERIPHERAL DEVICE TYPE
  RMB
  NORMAL ACA SUPPORTED
  HISUP
  RESPONSE DATA FORMAT
  MULTI PORT BIT
  VENDOR IDENTIFICATION
  PRODUCT IDENTIFICATION

If the EVPD bit is set to one and vital product data is not
yet available, the logical unit may return CHECK CONDITION
status with sense key of NOT READY and an ASC/ASCQ of
LOGICAL UNIT IS IN PROCESS OF BECOMING READY.

The INQUIRY data may change as the SCSI target device
and its logical units perform their initialization sequence.
(E.g., logical units may provide limited information
from nonvolatile memory until they load the final firmware
from the media. After the firmware has been loaded, more
options may be supported and therefore different
INQUIRY data may be returned.)

If the INQUIRY data changes for any reason, the device
server shall generate a unit attention condition for all
initiator ports (see SAM-3), with the additional sense
code set to INQUIRY DATA HAS CHANGED."

Somewhere in the text, permission should be given for
all commands other than INQUIRY to return NOT READY
status if initialization is incomplete. The commands
should not be rejected with an indication that the
command is unsupported, as was essentially implied by
paragraph eight.

23) T P157 Clause 6.7 and 6.8

Comment:

The third sentence says that application clients should
issue MODE SENSE before issuing MODE SELECT. Since there
are many ways to achieve those goals, including knowledge
of the particular device or a long ago MODE SENSE to find
the proper parameters, I believe this should be a "may"
condition.

Proposed Solution:

In clause 6.7, change "Application clients should
issue MODE SENSE..." to "Application clients may
issue MODE SENSE..."

The corresponding change needs to be made in clause 6.8.

24) E P158 Clause 6.7

Comment:

Editorial.

Proposed Solution:

"a unsupported" s/b "an unsupported".
"value and terminate the command" s/b "value and terminating
the command".

25) T P158 Clause 6.7

Comment:

In item e) under error conditions, non-zero reserved fields are mandated to cause an error. In clause 3.3.9, it is indicated that while they "shall" be set to zero, it is not required that they be checked for zero. Clause 6.7 should be changed to reflect that.

Proposed Solution:

Item e) identified above should be deleted.

26) T P160, Clause 6.9.1

Comment:

There are some "shoulds" in describing the PC field that should be "shalls".

Proposed Solution:

The paragraph after Table 96 should be rewritten as follows:

"The PC field only affects the mode parameters within the mode pages, however the PS bit, PAGE CODE and PAGE LENGTH fields shall return current values since they have no meaning when used with other types. The mode parameter header and mode parameter block descriptor shall return current values."

27) T P162, Clause 9.6.9

Comment:

The paragraph in C does not appear to be correct. The two cases described above are not relevant to the case.

Proposed Solution:

Rewrite case c as follows:

"c) If current values are requested and the current values of the mode parameters have not been sent by the application client via a MODE SELECT command, the device server shall return the saved values, if saving is implemented. If saving is not implemented, the default values shall be sent. See 6.7. If current values have been sent, the current values shall be reported."

28) T P193 Clause 6.17.2

Comment:

Table 136 appears to be misusing IEC 60027:2000. See http://physics.nist.gov/cuu/Units/binary.html for clarifying text. I will make the assumption here that ALL the counts being multiplied are in bytes. If not, the word "byte" should be dropped where appropriate.

Proposed Solution:

Rewrite the table as follows:

The headers should read:

Value/Multiplier name/Multiplier abbreviation/Multiplier to convert TRANSFER COUNT field to bytes.

Then a typical row should read:

01h/kibiBytes (or kilobinary Bytes)/KiBytes/2**10

By the way, this should probably be moved to clause
3.4, since there are a number of places it should
be used.

29) T P214, Clause 6.24

Comment:

Aren't these task management functions in varying degrees
mandatory for target devices to support?

I would have expected that ABORT TASK, ABORT TASK SET,
CLEAR TASK SET, and LOGICAL UNIT RESET would be mandatory
and therefor would not have to have this bit defined.
CLEAR ACA could conceivably be unsupported if the ACA
function were not supported. Similary QUERY TASK and
WAKEUP may be optional. TARGET RESET is a bit strange,
since it is only allowed in pre-SAM-3 devices, which do
not support SPC-3.

Proposed Solution:

Place the statement "SPC-3 compliant devices shall have this
bit set to one." at the end of the ABORT TASK, ABORT TASK SET, CLEAR
TASK SET, and LOGICAL UNIT RESET descriptive paragraphs.

30) T P229 Clause 6.32

Comment:

The third sentence says that application clients should
issue READ ATTRIBUTE before issuing WRITE ATTRIBUTE.
I believe this should be a "may" condition. It is no more
painful to fail a write command than a read command with
a check condition, and command not supported is perfectly
valid for either.

Proposed Solution:

In clause 6.32, change "Application clients should
issue READ ATTRIBUTE..." to "Application clients may
issue READ ATTRIBUTE..."

31) T P234 and 235, Clause 6.33.7 and 6.33.8

Comment:

It appears that the last of a series of download with
offset must be a down-load with offset and save, but that
it is not necessary that any of the others be that.
I believe an appropriate explicit (rather than implicit)
indication is necessary for that in clause 6.33.7, probably
as part of the second paragraph on page 234.

Proposed Solution:

Rewrite the paragraph to read:

The downloaded microcode or control information
may be sent using several commands. The last of the
commands shall use the "download microcode with offsets
and save" mode. The first and intermediate download
operations may use either the mode 06h or 07h. When the logical
unit detects that the last download microcode with offsets
and save mode WRITE BUFFER command has been
received, the device server shall perform any logical
unit required verification of the complete set of downloaded

microcode or control information prior to returning GOOD
status for the last command. After the last command
completes successfully the device server shall generate
a unit attention condition (see SAM-3) for the initiator port
associated with all I_T nexuses except the I_T nexus on
which the set of WRITE BUFFER commands was
received, with the additional sense code set to
MICROCODE HAS BEEN CHANGED.

32) T P 266-267, Table 224 and

Comment:

This first struck my eye on page 266, but I expect that
it occurs in other locations as well. The use of
MBytes is incorrect in table 224. These are actually MiBytes.

This problem shows up in another form on page 269, where
extraordinary circumlocutions are used to say the same
thing.

Proposed Solution:

Do a generic search of the value "MBytes" or "megabytes"
throughout the document and correct them if necessary
to MiBytes or mebiBytes. All instances appear to be
either in Table 224 or in clauses 7.3.2.2.6 and 7.3.2.2.7
supporting that table.

Do a generic search for "576" and replace the wording with
the corresponding mebiByte or MiByte statement. As an example,
change the text of 7.3.2.2.8, page 269 from:

"The PREVIOUS AMOUNT OF DATA READ field indicates the
amount of data read from the medium during the previous
load of the medium. This value is expressed in increments
of 1 048 576 bytes (e.g., a value of one means
1 048 576 bytes and a value of two means 2 097 152 bytes)."

to:

"The PREVIOUS AMOUNT OF DATA READ field indicates the amount
of data read from the medium during the previous load of
the medium in MiBytes."

It is for this reason that the table described in problem
28 should be included in clause 3.4.

33) E Many pages, many clauses

Comment:

The word "subpage" (or sub_page) is suspect. In most
of these cases, it actually is treated more as an extension
of the page code to access totally different information
than as a sub-division of the page code to access
multiple planes of the same information as the primary
page code.

Proposed Solution:

Change "subpage" or "sub_page" in all locations to
"page code extension".

34) T P288, Clauses 7.4.9

Comment:

Where are the sub-page codes for all devices kept?
If not in this document, there must be a registry for
them.

Proposed Solution:

Either create a registry for Extended mode page codes,
specify that the codes will be defined in future revisions
of SPC, or delete clause 7.4.9 until such pages are
defined in a future revision of SPC.

35) T P296, Clause 7.5.1

Comment:

Should we be picking up parameters for the two iSCSI
variants being processed in IETF now?

Should we be separating out the RDMA over IB from the
RDMA over VI?

Proposed Solution:

Determine the proper formal names for the two variants,
I believe "DA" is a collective term for data mover
based iSCSI and iSER is one particular form that uses
the RDMA capability of RDDP. Seems to me I heard about
a second form that applies the data mover not just to
data, but also to commands and parameters. Therefore
at least a variant called Internet SCSI with RDDP data
mover (iSER) should be specified.

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Comments attached to Yes ballot from Kevin Marks of
Dell, Inc.:

Dell #1
PDF Page i
Global:
Many instances through out the draft of "SCSI protocol" should be changed
to "SCSI transport protocol"
especially if they reference SAM-3.

Dell #2
PDF Page vli
Introduction :
standards. See 3.1.11 for
3.1.11 does not seem to reference information about other SCSI command
standards. Should this be 3.1.18?

Dell #3
PDF Page 2
Figure 1 - Figure 1 u SCSI document relationships
Change
"SCSI Protocols"
to
"SCSI Transport Protocols"
to match SAM-3

Dell #4
PDF Page 6
2.3 References under development
Add SAS-1.1?

Dell #5
PDF Page 9
3.1.42 Idle condition:
...in the active condition because
it may have to activate some circuitry.
Remove "because it may have to activate some circuitry"

Dell #6
PDF Page 11

3.1.74 protocol specific
Change
"SCSI protocol standard"
to
"SCSI transport protocol standard"

Dell #7
PDF Page 11
3.1.75 protocol standard:
Change
"SCSI protocol"
to
"SCSI transport protocol"

Dell #8
PDF Page 20
4.3.1 CDB usage and structure,
3rd paragraph, 1st sentence
change "..is not zero or.."
to
"...is non-zero or..."

Dell #9
PDF Page 26
Table 10 - Group Code values - Note a
Change
"The format the commands using the group code 011b"
to
"The format of the commands using the group code 011b"

Dell #10
PDF Page 29
4.5.2.1 Descriptor format sense data overview.
response code should be SMALL CAPS in the first paragraph after Table 12.

Dell #11
PDF Page 32
4.5.2.3 Command-specific information sense data descriptor
Last paragraph:
... see SBC-2 for MEDIUM SCAN and REASSIGN BLOCKS commands, ...
MEDIUM SCAN command is obsolete in SBC-2

Dell #12
PDF Page 37
4.5.3 Fixed format sense data
Remove 3rd paragraph after Table 26
"The obsolete byte 1 contained information used by the COPY command."
Byte was also obsolete in SPC-2 or change sentence to "The obsolete byte 1
was defined in a previous standard"

Dell #13
PDF Page 56
5.3 Implicit head of queue
change
"if it is received with a SIMPLE task attribute, an ORDERED task attribute,
or no task attribute:"
to
"if it is received with a SIMPLE task attribute or an ORDERED task
attribute:"
Based on SAM-3 each task must have a task attribute.

Dell #14
PDF Page 82
5.8.2.2 Explicit and implicit asymmetric logical unit access
3rd Paragraph after Figure 4
Change
"If both explicit and implicit asymmetric logical unit access are
implemented, the precedence of one over the other is
vendor specific."
to
"If both explicit and implicit asymmetric logical unit access management

methods are implemented, the precedence of
one over the other is vendor specific."

Dell #15
PDF Page 94
Table 42 u Commands for all device types (part 2 of 2)
Change
"REQUEST SENSE 03h C 6.26"
with
"REQUEST SENSE 03h M 6.26"
per section 5.2

Dell #16
PDF Page 140
Table 47 - Peripheral qualifier
Change
"1xxb Vendor specific"
with
"100b - 111b Vendor specific"
xx by definition means not relevant. These are vendor specific and
different values are relevant, they are not don't
cares.

Dell #17
PDF Page 142
3rd Paragraph after Table 83.
Remove
"The BQUE bit combines with the CMDQUE bit to indicate whether the logical
unit supports the full task management
model or the basic task management model as described in table 84."
Roughly same sentence above Table 84.

Dell #18
PDF Page 160
Table 95 - Byte 0
Operation code should be in SMALL CAPS

Dell #19
PDF Page 185
Table 125 - READ BUFFER MODE Field
Since all of the MODES are optional, why is this Implementation
requirements column even shown?

Dell #20
PDF Page 188
6.15.7 Echo buffer descriptor mode (0Bh) section
Does not specify the BUFFER ID field. Reserved or ignored?

Dell #21
PDF Page 209
In Table 152 u REPORT SUPPORTED OPERATION CODES command
Why is the REQUESTED SERVICE ACTION field 2 bytes long?

Dell #22
PDF Page 211
In Table 155 u Command descriptor format
Why is the SERVICE ACTION field 2 bytes long?

Dell #23
PDF Page 214
Table 159 u REPORT SUPPORTED TASK MANAGEMENT
Byte 0, Bit 1 - TRS bit - should be Reserved since SAM-3 Obsoletes TARGET
RESET task management function and
SPC-3 is the first standard to define the REPORT SUPPORTED TASK MANAGEMENT
FUNCTIONS command .

Dell #24
PDF Page 214
Table 159 u REPORT SUPPORTED TASK MANAGEMENT
Byte 0, Bit 1 - WAKES bit - should be Reserved since SAM-3 Obsoletes WAKEUP
task management function and

SPC-3 is the first standard to define the REPORT SUPPORTED TASK MANAGEMENT FUNCTIONS command .

Dell #25
PDF Page 214
7th paragraph after Table 159 u REPORT SUPPORTED TASK MANAGEMENT FUNCTIONS parameter data
remove
"A TARGET RESET supported (TRS) bit set to one indicates the TARGET RESET task management function (see
SAM-3) is supported by the logical unit. An TRS bit set to zero indicates the TARGET RESET task management
function is not supported."
Since SAM-3 Obsoleted TARGET RESET task management function.

Dell #26
PDF Page 214
8th paragraph after Table 159 u REPORT SUPPORTED TASK MANAGEMENT
remove
"A WAKEUP supported (WAKES) bit set to one indicates the WAKEUP task management function is supported by
the logical unit. An WAKES bit set to zero indicates the WAKEUP task management function is not supported.."
Since SAM-3 Obsoleted WAKEUP task management function.

Dell #27
PDF Page 215
6.25 REPORT TARGET PORT GROUPS command
1st paragraph, last sentence - ... "(i.e. , return a non zero value in the TPGS field).
non zero needs a dash - non-zero.

Dell #28
PDF Page 216
Table 162 u Target port group descriptor format
Byte 6 - says Vendor unique and also in several other locations in the standard. There is no definition for Vendor
unique, only Vendor Specific.

Dell #29
PDF Page 216
Table 162 u Target port group descriptor format
Byte 7 -"TARGET PORT COUNT (x)"
What is the reasoning for the (x), remove?

Dell #30
PDF Page 217
1st paragraph, 2nd sentence after Table 163 u Asymmetric access state
"If the U_SUP bit, S_SUP bit, AN_SUP bit, or AO_SUP bit are all set to zero, the bits are reserved as defined by
previous versions of this standard."
or should be an and.
Also, since this command is new to SPC-3, how can it be reserved as defined by previous versions of this standard?

Dell #31
PDF Page 224
Table 173 u SET PRIORITY parameter list format
Byte 2-3 RELATIVE TARGET PORT IDENTIFIER
Global - Throughout the standard, RELATIVE TARGET PORT IDENTIFIER and RELATIVE TARGET PORT are
used. Some commands/parameter lists use INDENTIFER some do not. Need to select one throughout standard.

Dell #32
PDF Page 227
Table 177 u Asymmetric access state
Value - Fh Illegal Request
Fh should be Reserved
4h-Fh Reserved What does it mean to set the Asymmetric access state to Illegal Request

Dell #33
PDF Page 232
Note 39 after Table 183 u WRITE BUFFER MODE field
Change
"39 Modes 00h and0 001h are not recommended."
to
"39 Modes 00h and 01h are not recommended."

Dell #34
PDF Page 232
Table 183 u WRITE BUFFER MODE field
Since all of the MODES are optional, why is this implementation
requirements column even shown?

Dell #35
PDF Page 232
Sentence before Table 183 u WRITE BUFFER MODE field
Change
"The MODE field is defined in table 77."
to
"The MODE field is defined in table 183."

Dell #36
PDF Page 243
Table 191 u Log page format
Shouldn't the PAGE CODE (Byte 0) be 6 bits, i.e. bits 6 and 7 reserved, as
the LOG SENSE - PAGE CODE field is
only 6 bits. If correct, this would apply to all the defined Log pages in
7.2.x. Otherwise Table 194 u Log page codes
needs 40h - FFh Reserved.

Dell #37
PDF Page 247
Table 194 u Log page codes
3Fh Reserved
Annex D - Table D.11 - Log Page Codes shows 3Fh as vendor specific.

Dell #38
PDF Page 255
1st Paragraph after Table 209 u Protocol specific port log parameter format
change
"relative port identifier"
to
"relative target port identifier"

Dell #39
PDF Page 275
1st sentence in 7.4.2 Mode parameter list format
change
"table 91"
to
"table 232"

Dell #40
PDF Page 282
Last sentence prior to Table 242 u Queue error management (QERR) field
Change
" If the TST field equals 001b, then only tasks from the initiator port as
the task that is terminated with CHECK
CONDITION status are affected."
to
"If the TST field equals 001b, then only tasks from the initiator port of
the task that is terminated with CHECK
CONDITION status are affected."

Dell #41
PDF Page 284
7.4.7 Control Extension mode page
1st sentence:
Change

"(see table 239)"
to
"(see table 245)"

Dell #42
PDF Page 286
7.4.8 Disconnect-Reconnect mode page
4th Paragraph after table 246.
Change
"If a parameter that is not appropriate for the specific SCSI protocol implemented by the target port is non-zero, ..."
to
"If a parameter that is not appropriate for the specific SCSI transport protocol implemented by the target port is non-zero, ..."

Dell #43
PDF Page 286
7.4.8 Disconnect-Reconnect mode page
Next Paragraph after NOTE 53, 2nd Sentence.
Change
"applicable SCSI protocol."
to
"applicable SCSI transport protocol."

Dell #44
PDF Page 286
7.4.8 Disconnect-Reconnect mode page
2nd Paragraph after NOTE 53, Last Sentence.
Change
"Different SCSI protocol."
to
"Different SCSI transport protocol."

Dell #45
PDF Page 286
7.4.8 Disconnect-Reconnect mode page
3rd Paragraph after NOTE 53, 2nd Sentence.
Change
"applicable SCSI protocol."
to
"applicable SCSI transport protocol."

Dell #46
PDF Page 287
7.4.8 Disconnect-Reconnect mode page
4th Paragraph after NOTE 53, 2nd Sentence.
Change
"individual SCSI protocol standards."
to
"individual SCSI transport protocol standards."

Dell #47
PDF Page 287
7.4.8 Disconnect-Reconnect mode page
5th Paragraph after NOTE 53, 1st Sentence.
Change
"SCSI protocol services."
to
"SCSI transport protocol services."

Dell #48
PDF Page 287
7.4.8 Disconnect-Reconnect mode page
7th Paragraph after NOTE 53, 2nd Sentence.
Change
"individual SCSI protocol standards."
to
"individual SCSI transport protocol standards."

Dell #49

PDF Page 287
7.4.8 Disconnect-Reconnect mode page
8th Paragraph after NOTE 53, 2nd Sentence.
Change
"applicable SCSI protocol,"
to
"applicable SCSI transport protocol,"

Dell #50
PDF Page 287
7.4.8 Disconnect-Reconnect mode page
2nd Paragraph after table 247, 1st Sentence.
Change
"SCSI protocol services."
to
"SCSI transport protocol services."

Dell #51
PDF Page 294
7.4.14 Protocol Specific Port mode page
1st Paragraph, Last Sentence before Table 254
Change "SCSI protocol standard"
to
"SCSI transport protocol standard"

Dell #52
PDF Page 296
7.5.1 Protocol specific parameters introduction
2nd paragraph, 1st Sentence
Change
"SCSI protocol"
to
"SCSI transport protocol"

Dell #53
PDF Page 296
7.5.2.1 Introduction to alias entry protocol specific designations
1st Paragraph, 1st Sentence
Change
"SCSI protocol"
to
"SCSI transport protocol"

Dell #54
PDF Page 296
7.5.2.1 Introduction to alias entry protocol specific designations
1st Paragraph, 2nd Sentence
Change
"SCSI protocol"
to
"SCSI transport protocol"

Dell #55
PDF Page 320
Sentence before Table 292 u Association
Change
"other path."
to
"SCSI target port to which the logical unit is accessible"

Dell #56
PDF Page 320
Table 292 u Association
Shouldn't the values under Value be in binary, as the field is only 2 bits.
All other fields below a nibble are expressed
in binary. This would change the text in most of the text in section 7.6
for Association from Oxh to binary values and
W-LUN Access Controls.

Dell #57
PDF Page 322

Table 296 u EUI-64 based identifier lengths
Identifier Length is only a byte, remove the 2 leading zeros (00)

Dell #58
PDF Page 322
7.6.4.4.2 EUI-64 identifier format
1st Sentence
Change
"0008h,"
to
"08h,"

Dell #59
PDF Page 323
7.6.4.4.3 EUI-64 based 12-byte identifier format
1st Sentence
Change
"000Ch,"
to
"0Ch,"

Dell #60
PDF Page 323
7.6.4.4.4 EUI-64 based 16-byte identifier format
1st Sentence
Change
"0010h,"
to
"10h,"
7.6.4.5.2 NAA IEEE Extended identifier format
2nd Sentence
Change
"8h."
to
"08h."

Dell #62
PDF Page 325
7.6.4.5.3 NAA IEEE Registered identifier format
2nd Sentence
Change
"8h."
to
"08h."

Dell #63
PDF Page 326
7.6.4.6 Relative target port identifier format
2nd sentence
Change
"4h."
to
"04h."

Dell #64
PDF Page 326
Table 306 u Relative target port identifier values
Values in Value column need leading zeros.

Dell #65
PDF Page 327
7.6.4.7 Target port group identifier format
2nd sentence
Change
"4h."
to
"04h."

Dell #66
PDF Page 327
7.6.4.8 Logical unit group identifier format

2nd Paragraph, 2nd Sentence
Change
"4h."
to
"04h."

Dell #67
PDF Page 330
7.6.4.11.2 Identification descriptors for SCSI target ports
2nd Paragraph, 1st sentence
remove
"name"
since it may be either the name or identifier depending on transport protocol.

Dell #68
PDF Page 331
Change
"000Ch"
to
"0Ch"

Dell #69
PDF Page 331
Change
"001Oh"
to
"10h"

Dell #70
PDF Page 332
2nd Paragraph, 1st Sentence after Table 313 u Extended INQUIRY Data VPD page
Change
"60."
to
"3Ch."

Dell #71
PDF Page 337
Two Sentences prior to Table 321 u SCSI port identification descriptor
Change
"(see table 3)"
to
"(see table 321)"

Dell #72
PDF Page 337
Table 322 u Relative port identifier values
Values in Value column need leading zeros.

Dell #73
PDF Page 343
8.3.1.2 Access controls overview
10th Paragraph, 2nd Sentence
change
"...enabled, all logical units shall be inaccessible..."
to
"...enabled, all logical units except W-LUN or LUN 0 shall be inaccessible..."

Dell #74
PDF Page 343
8.3.1.2 Access controls overview
15th Paragraph, 1st sentence
"Successful downloading of microcode (see 6.33) may result in access controls being disabled."
Shouldn't this be a NOTE?

Dell #75
PDF Page 359

8.3.2.1 ACCESS CONTROL IN introduction
1st Sentence
change
"(see table 329)"
to
"(see table 337)"

Dell #76
PDF Page 379
8.3.3.1 ACCESS CONTROL OUT introduction
1st Sentence
Change
"(see Table 25)"
to
"(see Table 362)"

Dell #77
PDF Page 387
8.3.3.2.5 The Revoke All Proxy Tokens ACE page
1st Sentence
change
"(see table 370)"
to
"(see table 371)"

****

Comments attached to No ballot from Ralph O. Weber of
ENDL:

ENDL 1
PDF pg 50, pg 4, 1 Scope
<<Management Server Commands MSC>> should be <<Bridge Controller Commands
BCC>>

ENDL 2
PDF pg 107, pg 61, 5.6.1, 1st p on pg
<<an application client shall register each I_T nexus with a device server
using a reservation key>> should be <<the application client shall register
a reservation key for each I_T nexus with the device server>>

ENDL 3
PDF pg 113, pg 67, 5.6.6, p 1, s 1
<<logical unit>> should be <<device server>>

ENDL 4 Technical
PDF pg 157, pg 111, 6.3.6.2, 1st p on pg, s 2
<<The application client shall not send such combinations to the copy
manager.>> should be <<The behavior of the copy manager when such
combinations are received is unpredictable.>>

ENDL 5 Technical
PDF pg 187, pg 141, 6.4.2, table 81, row 10h & table footnotes
Peripheral device type code 10h should be changed from 'reserved for use by
Bridging Expanders (a Parallel SCSI plan that was never implemented) to BCC
Bridge Controller Commands. This change includes removing table footnote b.

ENDL 6
PDF pg 284, pg 238, 6.33.12, 1st p after table 185
As currently written, this paragraph contains two conflicting requirements
on the TIME STAMP field contents. A time stamp generated in this century
cannot be zero, but the second sentence in the paragraph requires it to be
so. <<(see 3.1.113). The application client shall set the TIME STAMP field
to zero if it is not able to determine the UT of the log entry.>> should be
<<(see 3.1.113), or zero if the application client is not able to determine
the UT of the log entry.>> Consideration should be given to making this an
a,b list.

ENDL 7 Technical

PDF pg 287, pg 241, 7.1.1, table 189
T10/04-181r2 has not been incorporated in this table as approved by T10 at the September, 2004 plenary. Incorporate 04-181r2.

ENDL 8
PDF pg 426, pg 380, 8.3.3.1, 1st p after table 363, s 1
<<that the application client shall send>> should be <<being sent>

ENDL 9
PDF pg 455, pg 409, C.5.1, table C.9, row 1
Table C.9 describes causing 'an ACA condition' without mentioning the NACA bit in the CONTROL byte. The use of ACA is completely conditional on the NACA bit value. <<cause an ACA condition>> should be <<generate CHECK CONDITION status>>

ENDL 10
PDF pg 455, pg 409, C.5.1, table C.9, row 1
For consistency with the rest of this subclause, <<a unit attention condition>> should be <<establish a unit attention condition>>

ENDL 11
PDF pg 456, pg 410, C.5.2, 1,2,3 list entry 1
This list entry should be deleted since establishing a unit attention condition does not depend in any way on the current state of tasks in the task set.

ENDL 12
PDF pg 456, pg 410, C.5.2, 1,2,3 list entry 2
[insert] (see SAM-3) [to clarify that numerous rules exist about handling unit attention conditions that are not mentioned in this annex]

ENDL 13
PDF pg 456, pg 410, C.5.3, 1,2,3 list entry 3
For consistency with SAM-3 <<Complete>> should be <<Process the command in>>

ENDL 14
PDF pg 456, pg 410, C.5.3, 1,2,3 list entries 4 & 5
Since it is not possible to create an ACA condition when the NACA bit is set to zero in the CONTROL byte, list entries 4 and 5 should be replaced with:
<<4) Complete the command with CHECK CONDITION status, with the sense key set to RECOVERED ERROR and the additional sense code set to LOG EXCEPTION, COUNT AT MAXIMUM>>

ENDL 15
PDF pg 456, pg 410, C.5.3, 1,2,3 list entry 6) 1)
<<create an ACA condition>> should be <<return CHECK CONDITION status>>

ENDL 16
PDF pg 456, pg 410, C.5.4, 1,2,3 list entry 3
For consistency with SAM-3 <<Complete>> should be <<Process the command in>>

ENDL 17
PDF pg 456, pg 410, C.5.4, 1,2,3 list entries 4 & 5
Since it is not possible to create an ACA condition when the NACA bit is set to zero in the CONTROL byte, list entries 4 and 5 should be replaced with:
<<4) Complete the command with CHECK CONDITION status, with the sense key set to RECOVERED ERROR and the additional sense code set to LOG EXCEPTION, LIST CODES EXHAUSTED>>

ENDL 18
PDF pg 456, pg 410, C.5.4, 1,2,3 list entry 6) 1)
<<Create an ACA condition>> should be <<Return CHECK CONDITION status>>

****

Comments attached to Abs ballot from Elwood Parsons of
Foxconn Electronics:

Abstain - Lack of expertise

****

Comments attached to No ballot from Rob Elliott of
Hewlett Packard Co.:

HPQ #1
PDF Page 1
1 i)
Disable Queueing s/b smallcaps

HPQ #2
PDF Page 1
1 j)
SBC-2 s/b SBC because they didn't survive in SBC-2

HPQ #3
PDF Page 2
Global
Change the format of INCITS document references to:
INCITS 333-2002

HPQ #4
PDF Page 4
2.2 Approved references
Italicize the standard name (e.g. "SCSI Primary Commands - 2 (SPC-2)") and
don't italicize the ISO or INCITS name/number.

HPQ #5
PDF Page 6
2.4
Update "draft-ietf-ips-iscsi-16.txt, Internet SCSI (iSCSI)" to its RFC
reference

HPQ #6
PDF Page 7
3.1.16 s/b bold

HPQ #7
PDF Page 7
3.1.14
Change "Indicates an 8-bit construct." to "A sequence of eight contiguous
bits considered as a unit."

HPQ #8
PDF Page 7
3.1.5
"active condition" s/b "active power condition"

HPQ #9
PDF Page 7
3.1.5
Add "See 5.9."

HPQ #10
PDF Page 7
3.1.12
"CONTROL byte" s/b "CDB CONTROL byte"

HPQ #11
PDF Page 8
3.1.xx
Add "copy target device: the name given by the
EXTENDED COPY command description to a source or the destination logical
units. See 6.3.1.

HPQ #12
PDF Page 8
3.1.31
"device" s/b "peripheral device"

HPQ #13
PDF Page 9
3.1.42
Add "See 5.9."
3.1.42
"idle condition" s/b "idle power condition"

HPQ #15
PDF Page 9
3.1.42
"active condition" s/b "active power condition"

HPQ #16
PDF Page 9
3.1.42
"idle condition" s/b "idle power condition"

HPQ #17
PDF Page 10
3.1.64 s/b bold

HPQ #18
PDF Page 11
3.1.74 s/b bold

HPQ #19
PDF Page 11
Delete "3.1.82 SCSI device identifier: A term used by previous versions of
this standard and by this standard where the
detail provided by newer terms is not critical (see Annex A)."
The phrase "SCSI device identifier" appears nowhere in this document, even
in annex A.

HPQ #20
PDF Page 11
3.1.77
"Internet engineering task
force" s/b "Internet Engineering Task Force (IETF)"

HPQ #21
PDF Page 11
3.1.xx
Add
peripheral device: The part of the logical unit that defines its device
type (see 3.1.31).

HPQ #22
PDF Page 12
3.1.99
"standby condition" s/b "standby power condition"

HPQ #23
PDF Page 12
3.1.99
Add "See 5.9."

HPQ #24
PDF Page 15
3.3.8
standards s/b standard

HPQ #25
PDF Page 15
3.3.9 as error s/b as an error

HPQ #26
PDF Page 17
3.6.1
character s/b characters

HPQ #27
PDF Page 20
4.2
"Service response = Execute Command (IN (I_T_L_x Nexus, CDB, Task
Attribute, [Data-In Buffer Size], [Data-Out Buffer],
[Data-Out Buffer Size], [Command Reference Number]), OUT ([Data-In Buffer],
[Sense Data], [Sense Data Length], Status))"
s/b
Service Response =Execute Command (IN (I_T_L_Q Nexus, CDB, Task Attribute,
[Data-In Buffer Size], [Data-Out Buffer],
[Data-Out Buffer Size], [Command Reference Number], [Task Priority]), OUT (
[Data-In Buffer], [Sense Data], [Sense Data Length],
Status))
(I_T_L_x to I_T_L_Q, and add Task Priority)

HPQ #28
PDF Page 21
table 2
Reserved s/b Miscellaneous

HPQ #29
PDF Page 21
table 3
Reserved s/b Miscellaneous

HPQ #30
PDF Page 21
table 3
Reserved s/b Miscellaneous

HPQ #31
PDF Page 21
4.3.2
Add a warning note that previous versions of this standard (SCSI-2) defined
byte 1 bits 7-5 as a LOGICAL UNIT NUMBER field (for
6,10,and 12 byte formats).
They should have been labeled Obsolete, but there was no Obsolete keyword
defined at the time, so they were marked Reserved.

HPQ #32
PDF Page 22
table 4
Reserved s/b Miscellaneous

HPQ #33
PDF Page 22
table 4
Reserved s/b Miscellaneous

HPQ #34
PDF Page 22
table 5
Reserved s/b Miscellaneous

HPQ #35
PDF Page 22
table 5
Reserved s/b Miscellaneous

HPQ #36
PDF Page 23
table 6
Reserved s/b Miscellaneous

HPQ #37
PDF Page 23
table 6
Reserved s/b Miscellaneous

HPQ #38
PDF Page 23

table 6
Change "miscellaneous CDB information" to "Miscellaneous" (along with
another comment, merge this whole byte into one
"Miscellaneous" row)

HPQ #39
PDF Page 24
table 7
Change bytes 3-7 Reserved
to Miscellaneous
(the GROUP NUMBER field is already violating that space in SBC-2)

HPQ #40
PDF Page 25
table 8
Reserved s/b Miscellaneous

HPQ #41
PDF Page 25
table 8
Reserved DPO FUA Reserved
s/b Miscellaneous

HPQ #42
PDF Page 25
table 8
For consistency with prior Typical CDB tables, show bytes 2, 3, and 4 each
as Reserved too (not the range 2-4 as Reserved)
(note another comment requests that Reserved be change to Miscellaneous)

HPQ #43
PDF Page 25
table 8
Change bytes 3-7 Reserved
to Miscellaneous
(the GROUP NUMBER field is already violating that space in SBC-2)

HPQ #44
PDF Page 25
table 8
Change "Additional CDB data" to "Miscellaneous"

HPQ #45
PDF Page 26
table 10
to make use of the whitespace on the right, add a column "Typical CDB
format reference" containing:
000b: table 2 in 4.3.2
001b: table 3 in 4.3.2
010b: table 3 in 4.3.2
100b: table 5 and table 6 in 4.3.2
101b: table 4 in 4.3.2

HPQ #46
PDF Page 27
4.3.4.6
Change "allocation length bytes" to "the number of bytes specified by the
ALLOCATION LENGTH field"

HPQ #47
PDF Page 27
4.3.4.6
Change "data" to "variable length data"

HPQ #48
PDF Page 27
4.3.4.6
Change "may be specified" to "is able to be specified"

HPQ #49
PDF Page 27

4.3.4.6
after "data" add "(e.g., a LIST LENGTH field)"

HPQ #50
PDF Page 27
4.3.4.7
"CONTROL field" s/b "CONTROL byte"
to match SAM-3 usage

HPQ #51
PDF Page 27
4.3.4.7
"CONTROL field" s/b "CONTROL byte"
to match SAM-3 usage

HPQ #52
PDF Page 28
4.5.1
Change "and in response" to "and as parameter data in response"

HPQ #53
PDF Page 28
4.5.1
To parallel the preceding sentence, change "The REQUEST SENSE command may
be used to request either the fixed format
sense data or the descriptor format sense data."
to:
"Sense data returned as parameter data by a REQUEST SENSE command shall use
the fixed or descriptor format sense data
format based on the value of the DESC bit in the REQUEST SENSE CDB."

HPQ #54
PDF Page 29
table 12
"descriptor(s)" s/b "descriptor list"

HPQ #55
PDF Page 29
table 12
Descriptor sense data format s/b Descriptor format sense data

HPQ #56
PDF Page 29
4.5.2.1
"the descriptor sense data format" s/b "descriptor format sense data"

HPQ #57
PDF Page 29
4.5.2.1
"The descriptor sense data format" s/b "The descriptor format for sense
data"
4.5.2.1
EXTENDED COPY defines using the COMMAND-SPECIFIC INFORMATION field to point
to part of the sense data that contains
(nested) sense data from one of the copy targets being accessed (see
6.3.3).
This doesn't completely agree with table 12, which indicates the entire
sense data buffer is full of "sense data descriptors" each
compliant with table 13.
The copy manager could embed that nested sense data in a sense data
descriptor of a vendor-specific type. It might be better to
standardize a new type for this case, though.

HPQ #59
PDF Page 30
4.5.2.1
Change
"is being returned via a REQUEST SENSE command"
to:
"is being returned as parameter data by a REQUEST SENSE command"

HPQ #60
PDF Page 30
4.5.2.1
Delete "If the sense data is being returned via a REQUEST SENSE command and
the allocation length in the REQUEST SENSE
CDB
is too small to transfer all of the additional sense bytes, then the
additional sense length shall not be adjusted to reflect the
truncation."
The definition of allocation length in 4.3.4.6 includes that rule.

HPQ #61
PDF Page 32
4.5.2.3
delete "MEDIUM SCAN and"

HPQ #62
PDF Page 35
4.5.2.5
shall indicate s/b indicates

HPQ #63
PDF Page 36
Delete 4.5.2.6; reference SBC-2 instead.
(assuming it is added to SBC-2)

HPQ #64
PDF Page 36
4.5.2.7
After inclusive change comma to period.

HPQ #65
PDF Page 37
4.5.3
"The fixed sense data format" s/b "Fixed format sense data"

HPQ #66
PDF Page 37
table 26
"Fixed sense data format" s/b "Fixed format sense data"

HPQ #67
PDF Page 37
4.5.3
"the fixed sense data format" s/b "fixed format sense data"

HPQ #68
PDF Page 38
4.5.3
Change
"is being returned via a REQUEST SENSE command"
to:
"is being returned as parameter data by a REQUEST SENSE command"

HPQ #69
PDF Page 38
4.5.3
Delete "If the sense data is being returned via a REQUEST SENSE command and
the allocation length in the REQUEST SENSE
CDB is too small to transfer all of the additional sense bytes, then the
additional sense length shall not be adjusted to reflect the
truncation."
The allocation length definition in 4.3.4.6 includes that rule.

HPQ #70
PDF Page 39
table 27 1h
"last command" s/b "command"
The word "last" is a remnant of Contingent Allegiance.

HPQ #71

PDF Page 39
table 27 2h
Delete "addressed"

HPQ #72
PDF Page 41
4.5.6
Change "additional sense codes and additional sense code qualifiers"
to
"additional sense codes (i.e., the ADDITIONAL SENSE CODE field and
ADDITIONAL SENSE CODE QUALIFIER field values
returned in sense data)"

HPQ #73
PDF Page 55
Table 28
Remove all caps from "Vendor specific QUALIFICATION OF STANDARD ASC. "

HPQ #74
PDF Page 56
5.2.1
"This standard defines three commands that all SCSI device servers shall
implement - INQUIRY, REQUEST SENSE, and TEST
UNIT READY. These commands are used to configure the system, to test
devices, and to return important information concerning
errors and exception conditions."
Problems:
a) REPORT LUNS is also listed as mandatory now.
b) REQUEST SENSE is not used as often to return information concerning
errors and exception conditions now that autosense is
mandatory. It's more used to return progress information.
c) None of those commands "configures" anything, since they're all read
commands.
d) "to test devices" referred to SEND DIAGNOSTIC which is no longer in this
list.
One option: Delete the whole section 5.2. Table 6.1 has the mandatory
requirement, and the short overviews of each command
have little value. Consider whether each sentence in 5.2.x should be moved
to its corresponding command description in 6.x.
Another option: add REPORT LUNS to the list, create a 5.2.x introducing it,
change "configure the system" to "discover the
configuration of the system", remove "to test devices".

HPQ #75
PDF Page 59
table 29
Add an OSD row, including at least the FORMAT OSD command.

HPQ #76
PDF Page 59
table 29
Direct access s/b Direct access block

HPQ #77
PDF Page 59
5.5.3.3
Change "by returning the sense key"
to "by returning parameter data containing sense data with the sense key"
to clarify that this does not mean the REQUEST SENSE itself gets CHECK
CONDITION status and this is the sense key for that
autosense data.

HPQ #78
PDF Page 59
5.5.3.3
Change "returned in response to a REQUEST SENSE command"
to
"in parameter data returned in response to a REQUEST SENSE command"

HPQ #79
PDF Page 60

5.6.1
Change protect to preserve

HPQ #80
PDF Page 62
table 31
Delete "LU=Logical Unit," key

HPQ #81
PDF Page 62
table 31
Change LU to "logical unit" - it won't cause any additional rows

HPQ #82
PDF Page 64
table 32
Change LU to "logical unit". It may add a row, but the Key row can be
deleted to match.

HPQ #83
PDF Page 64
table 32
Delete "Key: LU=Logical Unit" row

HPQ #84
PDF Page 66
5.6.4
Change "listed in this subclause" to "listed above", or change "commands
other than those listed in this subclause" to "other
commands."
The subclause also discusses the PR OUT command; the sentence is only
referring to the a)-g) list.

HPQ #85
PDF Page 68
table 33 footnote b
If SPEC_I_PT bit is zero, the device server does not ignore the additional
parameter data, but returns check condition, as specified
in page 173.
Delete '(b)' or simply reference to section 6.12.1

HPQ #86
PDF Page 69
table 34 unreg/non-zero/one
The Result (return Check Condition status (c)) is wrong.
The 1st paragraph in this page states that one or more I_T nexuses may be
registered with the Register and Ignore Existing key
service action. From table 34 it looks like that is not possible.
Change to 'Register the I_T nexus on which the command was received and
each unregistered I_T nexus specified in the
parameter list with the value specified in the SERVICE ACTION RESERVATION
KEY field. (c)' like in Table 33.

HPQ #87
PDF Page 69
If SPEC_I_PT bit is zero, the device server does not ignore the additional
parameter data, but returns check condition, as specified
in page 173.
Delete '(b)' or simply reference to section 6.12.1

HPQ #88
PDF Page 69
table 34 footnote c
Change to same text as note c in table 33. 'If any I_T nexus specified in
the parameter list is registered, the command shall be
terminated with CHECK CONDITION status, with the sense key set to ILLEGAL
REQUEST, and the additional sense code set to
INVALID FIELD IN CDB.'

HPQ #89
PDF Page 69

table 34
Change 'c' to 'd'.

HPQ #90
PDF Page 69
table 34
Change 'c' to 'd'.

HPQ #91
PDF Page 69
table 34
Add d The sense key shall be set to ILLEGAL REQUEST, and the additional sense code shall be set to INVALID
FIELD IN CDB.

HPQ #92
PDF Page 70
table 35
The a)b) lists in 1 0 and 1 1 seem wrong. With specify initiator ports, the I_T nexus delivering the command is not also registered.

HPQ #93
PDF Page 71
table 36
first "Return CHECK CONDITION status" Contradicts the 2nd paragraph in page 70.
Change to Reservation Conflict.

HPQ #94
PDF Page 71
table 36
Either explain what "See this subclause..." means or delete it.

HPQ #95
PDF Page 71
table 36
Either explain what "See this subclause..." Either explain what this means or delete it.

HPQ #96
PDF Page 71
5.6.7
Add a paragraph explaining what to do if the I_T nexus specified in the TransportID to which the persistent reservation is to be
moved is already registered.

HPQ #97
PDF Page 71
5.6.7
Add a paragraph explaining what to do when an All Registrants persistent reservation is in place.

HPQ #98
PDF Page 72
5.6.7 d)
Simplify to "d) Register the reservation key" because the persistent reservation is to be changed later anyway

HPQ #99
PDF Page 72
5.6.7 f)
Unit Attention must be posted if a persistent reservation other than (Write) Exclusive access is released.
Add a statement or reference.

HPQ #100
PDF Page 72
5.6.8
Change "I_T_L" to "I_T" in b)

HPQ #101

PDF Page 72
5.6.8 4th paragraph
Because only LU_SCOPE is supported, if the SCOPE is different, the command
should be rejected with CHECK CONDITION
status with sense data set to ILLEGAL REQUEST, INVALID FIELD IN CDB.

HPQ #102
PDF Page 72
5.6.9
Change to "RESERVE" to "REGISTER" in b

HPQ #103
PDF Page 72
5.6.9
Change "RESERVE" to to "REGISTER" in b

HPQ #104
PDF Page 73
5.6.10.1.1 first paragraph
Change "I_T_L" to "I_T".

HPQ #105
PDF Page 75
5.6.10.2
Add an explanation about whether the command finishes with a GOOD or
RESERVATION CONFLICT status.

HPQ #106
PDF Page 78
5.6.10.4.3
enable s/b enabled

HPQ #107
PDF Page 79
5.6.10.5 a)A)
"initiator ports other than the initiator port associated with the
persistent reservation being preempted,"
needs I_T nexus based wording.

HPQ #108
PDF Page 79
5.6.10.4.4
the s/b a
With the "all registrants" type, there could be more than one holder

HPQ #109
PDF Page 81
5.7 e)
This sentence fails to reference the TST field in the Control Mode Page and
its effect on the CLEAR TASK SET task management
function.
Suggested change: "The CLEAR TASK SET task management function when the TST
field is 000b (see 7.4.6) removes all tasks
for all I_T nexuses for the selected logical unit."

HPQ #110
PDF Page 81
Delete section 5.7 Multiple target port and initiator port behavior
This discusses topics already discussed by SAM-3, or which belong in SAM-4.
Each sentence is marked for specific deletion (or
recommended for movement to SAM-4) with some reasoning.

HPQ #111
PDF Page 81
Delete "If a SCSI target device has more than one target port, the
arbitration and connection management among the
target ports is vendor specific."
SAM-3 sections 4.13.2 and 4.13.3 describe multiple port target devices. It
doesn't include the above sentence. It uses task routers
in its description.

HPQ #112
PDF Page 81
5.7
Delete "If one target port is being used by an initiator port, accesses attempted through
other target port(s) may:
a) Receive a status of BUSY; or
b) Be accepted as if the other target port(s) were not in use."
If this is an important specific reason for BUSY, it should be included in SAM-3 section 5.3.1 where BUSY is defined. BUSY is
defined generically enough to encompass this statement. In modern SCSI devices where active-active behavior is common, I don't
think the standard should mention this any more.

HPQ #113
PDF Page 81
5.7
Delete "The device server shall indicate the presence of multiple target ports by setting the MULTIP bit to one in its standard
INQUIRY data."
This bit is defined in 6.4.2 in this standard.
This sentence probably should be added to SAM-3 sections 4.7.2 and/or 4.13.3.

HPQ #114
PDF Page 81
Delete
"Only the following operations allow one I_T nexus to interact with the tasks of other I_T nexuses:
a) The PERSISTENT RESERVE OUT with PREEMPT service action preempts persistent reservations (see 5.6.10.4);
b) The PERSISTENT RESERVE OUT with PREEMPT AND ABORT service action preempts persistent reservations and aborts
tasks (see 5.6.10.5);
c) The PERSISTENT RESERVE OUT with CLEAR service action releases persistent reservations for all I_T nexuses (see
5.6.10.6);
d) The LOGICAL UNIT RESET task management function removes all tasks for all I_T nexuses for the addressed logical unit and
any logical units issuing from it in a hierarchical addressing structure (see
SAM-3). Persistent reservations remain unmodified; and
e) The CLEAR TASK SET task management function removes all tasks for all I_T nexuses for the selected logical unit. Most other
logical unit states remain unmodified, including MODE SELECT parameters, reservations, and ACA (see SAM-3)."
The list is probably incomplete.
SAM-3 section 5.7.1 table 23 has its own version of this list for "aborting" tasks on other I_T nexuses, not just "interacting".
"Interacting" would have to include everything that affects the logical unit state (if one I_T nexus writes the medium, that changes
the behavior of reads from other I_T nexuses).

HPQ #115
PDF Page 81
5.7
Delete "SAM-3 specifies the behavior of logical units being accessed by application clients through more than one initiator port
and/or through more than one target port."
Why should the primary command set concern itself with this?

HPQ #116
PDF Page 81
5.7
Delete "Additional initiator ports and target ports allow the definition of multiple I_T nexuses through which the device server may
be reached."
This is true, but should be in SAM-3 section 4.13.2 (which does not currently have any advertisements on the benefits of multiple
ports).

HPQ #117
PDF Page 81
5.7
Delete "Multiple I_T nexuses may be used to improve the availability of logical units in the presence of certain types of failures and to improve the performance between an application client and logical unit when some I_T nexuses may be busy."
This is true, but should be in SAM-3 section 4.13.2 (which does not currently have any advertisements on the benefits of multiple ports).

HPQ #118
PDF Page 83
5.8.2.4.3
Change
"The SCSI target device shall participate in all task management functions as defined in SAM-3."
to:
"The task manager shall support all the task management functions that it supports while in the active/optimized state."

HPQ #119
PDF Page 83
5.8.2.4.2
Change
"The SCSI target device shall participate in all task management functions as defined in SAM-3."
to:
"The task manager shall function (i.e., respond to task management functions) as specified in the appropriate protocol standards."

HPQ #120
PDF Page 83
5.8.2.4.2
After "function" add "(i.e., respond to commands)"

HPQ #121
PDF Page 84
5.8.2.4.5
Change "The SCSI target device is not required to participate in all task management operations."
to
"The task manager is not required to support all the task management functions that it supports while in the active/optimized state."

HPQ #122
PDF Page 84
5.8.2.4.4
Change
"The SCSI target device shall participate in all task management functions as defined in SAM-3."
to:
"The task manager shall support all the task management functions that it supports while in the active/optimized state."

HPQ #123
PDF Page 85
5.8.2.5
Change "The SCSI target device is not required to participate in all task management operations."
to
"The task manager is not required to support all the task management functions that it supports while in the active/optimized state."

HPQ #124
PDF Page 86
5.8.2.7
Device Identifier s/b Device Identification

HPQ #125
PDF Page 86

5.8.2.8
Device Identifier s/b Device Identification

HPQ #126
PDF Page 91
5.10 2nd paragraph 2nd sentence
shall indicate s/b indicates

HPQ #127
PDF Page 91
5.10
Delete "Only one medium transport element shall be permitted, element 0.
Only one data transfer element shall be permitted.
Media exchanges shall not be supported by attached medium changers. The
RESERVE ELEMENT and RELEASE ELEMENT
commands shall not be supported by attached medium changers."
These rules are owned by and already defined in SMC-2. The same paragraph
was removed from SBC-2 for this reason (in
response to an IBM letter ballot comment).

HPQ #128
PDF Page 92
table 41
"application server" s/b "application client"

HPQ #129
PDF Page 95
6.2.1
indicates s/b specifies

HPQ #130
PDF Page 100
6.3.1
indicates s/b specifies

HPQ #131
PDF Page 101
table 49
"Target descriptor(s)" s/b Target descriptor list"

HPQ #132
PDF Page 101
table 49
"Segment descriptor(s)" s/b "Segment descriptor list"

HPQ #133
PDF Page 102
6.3.1 STR paragraph
indicates s/b specifies
6.3.1 STR paragraph
indicates s/b specifies

HPQ #135
PDF Page 103
6.3.1 INLINE DATA LENGTH paragraph
indicates s/b specifies

HPQ #136
PDF Page 104
6.3.3 d)
"shall specify" s/b "shall be set to"

HPQ #137
PDF Page 104
6.3.3. e)
"shall specify" s/b "shall be set to"

HPQ #138
PDF Page 106
Table 50 footer
Change:

"0h (i.e, direct-access), 4h (i.e., write-once), 5h
(i.e., CD/DVD), 7h (i.e., optical memory), and Eh (i.e., simplified
direct-access)."
to
"0h (i.e, direct-access block), 5h (i.e., CD/DVD) , and Eh (i.e.,
simplified direct-access)."
since types 4h and 7h are obsolete.

HPQ #139
PDF Page 108
table 52 title
"LU ID type codes" s/b "LU ID TYPE field"

HPQ #140
PDF Page 109
6.3.6.1
indicates s/b specifies

HPQ #141
PDF Page 109
6.3.6.1
indicates s/b specifies

HPQ #142
PDF Page 119
6.3.7.4
indicates s/b specifies

HPQ #143
PDF Page 121
6.3.7.5
indicates s/b specifies

HPQ #144
PDF Page 121
6.3.7.5
indicates s/b specifies

HPQ #145
PDF Page 121
6.3.7.5
indicates s/b specifies

HPQ #146
PDF Page 121
6.3.7.5
indicates s/b specifies

HPQ #147
PDF Page 121
6.3.7.5
indicates s/b specifies

HPQ #148
PDF Page 123
6.3.7.6
"shall specify" s/b "specifies"

HPQ #149
PDF Page 123
6.3.7.6
"shall specify" s/b "specifies"

HPQ #150
PDF Page 129
6.3.7.5
indicates s/b specifies

HPQ #151
PDF Page 129
6.3.7.5

indicates s/b specifies

HPQ #152
PDF Page 131
6.3.7.5
indicates s/b specifies

HPQ #153
PDF Page 134
6.3.7.5
indicates s/b specifies

HPQ #154
PDF Page 134
6.3.7.17
"is on" s/b "is set to one"

HPQ #155
PDF Page 138
6.4.1
Add:
The ALLOCATION LENGTH field is defined in 4.3.4.6. If EVPD is set to zero,
the ALLOCATION LENGTH field should be at least
0005h to retrieve the ADDITIONAL LENGTH field in the parameter data (see
6.4.2). If EVPD is set to one, the ALLOCATION
LENGTH field should be at least 0004h to retrieve the PAGE LENGTH field in
the parameter data (see 7.6.1)"

HPQ #156
PDF Page 140
table 81
Change "Direct-access device"to "Direct-access block device"

HPQ #157
PDF Page 140
table 80
Change "1xxb" to "100b - 111b"

HPQ #158
PDF Page 140
table 80, 011b
Delete "to provide compatibility with previous versions of SCSI."

HPQ #159
PDF Page 141
table 82
"X3.351:" s/b "NCITS 351-"

HPQ #160
PDF Page 141
below table 82
"and the" s/b "and supports the"

HPQ #161
PDF Page 141
6.4.2
Delete "When the HISUP bit is set to one, the device server
shall support the REPORT LUNS command (see 6.21). When the HISUP bit is set
to zero, the device server may
support the REPORT LUNS command."
According to 6.1, REPORT LUNS is simply mandatory.

HPQ #162
PDF Page 141
6.4.2
"CONTROL byte of the CDB" s/b "CDB CONTROL byte"

HPQ #163
PDF Page 142
6.4.2 RESPONSE DATA FORMAT paragraph
Change two to 2h (3 times)

HPQ #164
PDF Page 142
6.4.2
Delete "If the ALLOCATION LENGTH of the CDB is too small to transfer all of
the parameters, the ADDITIONAL LENGTH shall not
be adjusted to reflect the truncation."
The ALLOCATION LENGTH definition in 4.3.4.6 includes this rule.

HPQ #165
PDF Page 142
6.4.2 Change "parameters" to "remaining standard INQUIRY data."

HPQ #166
PDF Page 142
table 83
Value s/b Code

HPQ #167
PDF Page 142
table 83
Delete "contents"

HPQ #168
PDF Page 142
6.4.2
"shall specify" s/b "indicates"

HPQ #169
PDF Page 144
Table 85
Remove ADP row. ADP no longer exists.

HPQ #170
PDF Page 144
table 85
Add ADT revision 13.

HPQ #171
PDF Page 144
table 85
Change "Version descriptor values" to "VERSION DESCRIPTOR field"

HPQ #172
PDF Page 144
table 85
Change
"Version
Descriptor
Value"
to "Code"

HPQ #173
PDF Page 151
6.4.4
"the a" s/b "the"

HPQ #174
PDF Page 151
6.4.4
Change "Vital product data" to "Vital product data (VPD)"

HPQ #175
PDF Page 153
6.5
indicates s/b specifies

HPQ #176
PDF Page 154
6.5 PLL paragraph
indicates s/b specifies

HPQ #177
PDF Page 154
table 90
Page control field s/b Page control (PC) field

HPQ #178
PDF Page 154
6.5 current cumulative paragraph
"parameter control byte s/b "PARAMETER CONTROL byte"

HPQ #179
PDF Page 154
6.5 current threshold paragraph
"parameter control byte" s/b "PARAMETER CONTROL byte"

HPQ #180
PDF Page 154
6.5
Change the "independent sets" paragraph to:
Logical units shall maintain log pages based on any of the policies listed
in table xx.
Table xx — Log page policies
Log page policy Number of log page copies
Shared One copy of the log page that is shared by all I_T nexuses.
Per I_T nexus A separate copy of the log page for each I_T nexus
If the log page policy is shared and any log parameters are changed by a
LOG SELECT command on one I_T nexus, the device
server shall generate a unit attention condition (see SAM-3) for every
other I_T nexus with the additional sense code set to LOG
PARAMETERS CHANGED.

HPQ #181
PDF Page 155
6.6 a)
indicates s/b specifies

HPQ #182
PDF Page 155
6.6 b)
indicates s/b specifies

HPQ #183
PDF Page 155
6.5
Change "may be found in" to "is in"

HPQ #184
PDF Page 155
6.5 Delete "informative"

HPQ #185
PDF Page 155
6.5
Move "(see SAM-3)" after "unit attention condition"

HPQ #186
PDF Page 156
6.6
Add "The ALLOCATION LENGTH field is defined in 4.3.4.6."

HPQ #187
PDF Page 156
6.6
Delete "to the maximum allocation length or the maximum parameter code
supported by the logical unit,
whichever is less."
The ALLOCATION LENGTH definition in 4.3.4.6 covers the truncation topic.

HPQ #188
PDF Page 156

6.6 SP paragraph
indicates s/b specifies

HPQ #189
PDF Page 156
6.6 SP paragraph
indicates s/b specifies

HPQ #190
PDF Page 156
6.6
Change "may be found" to "is"

HPQ #191
PDF Page 157
Table 93
As part of deleting the per initiator port mode page policy,
Delete "Per initiator port A separate copy of the mode page for each SCSI
initiator port
with each copy shared by all SCSI target ports."

HPQ #192
PDF Page 157
6.7
indicates s/b specifies

HPQ #193
PDF Page 157
6.7
indicates s/b specifies

HPQ #194
PDF Page 157
6.7
Move "(see SAM-3)" after "unit attention condition"

HPQ #195
PDF Page 157
6.7
Delete "initiator ports and"
which is not needed once the "per initiator port" policy disappears

HPQ #196
PDF Page 158
6.7
indicates s/b specifies

HPQ #197
PDF Page 158
6.7
indicates s/b specifies

HPQ #198
PDF Page 158
6.7
indicates s/b specifies

HPQ #199
PDF Page 159
6.9.1
Move the DBD paragraph below table 95

HPQ #200
PDF Page 159
6.9.1
indicates s/b specifies

HPQ #201
PDF Page 160
6.9.1
Add "The ALLOCATION LENGTH field is defined in 4.3.4.6."

HPQ #202
PDF Page 160
table 96
"Page control field" s/b "Page control (PC) field"

HPQ #203
PDF Page 160
6.9.1
"Some SCSI devices may not distinguish between current and saved mode
parameters and report identical values in response to a
PC field of either 00b or 11b."
but below says if 11b is selected but the device doesn't support saved
values, it shall return a CHECK CONDITION. So, they
cannot report identical values through 11b.

HPQ #204
PDF Page 164
Table 99
Expand the ALLOCATION LENGTH field in PR IN to 4 bytes. In very large
systems using a different key for each I_T nexus, it is
not big enough to return all the keys (limit of 8191 today for READ KEYS,
2729 for READ FULL STATUS).

HPQ #205
PDF Page 164
6.11.1
Replace "The PERSISTENT RESERVE IN parameter data includes a field that
indicates the number of parameter data bytes
available to be returned. The ALLOCATION LENGTH field in the CDB indicates
how much space has been allocated for the
returned parameter list. An allocation length that is not sufficient to
contain the entire parameter list shall not be considered an
error. If the complete list is required, the application client should send
a new PERSISTENT RESERVE IN command with
allocation length large enough to contain the entire list."
with:
"The ALLOCATION LENGTH field is defined in 4.3.4.6. The ALLOCATION LENGTH
field should be set to a value large enough to
return the length field in the parameter data header for the specified
service action."

HPQ #206
PDF Page 165
6.11.2
Delete "If the allocation length specified by the PERSISTENT RESERVE IN
command is not sufficient to contain the entire parameter list, then only
the first portion of the list (byte 0 to the allocation length) shall be
sent to the application client. The
incremental remaining bytes shall be truncated, although the ADDITIONAL
LENGTH field shall still contain the actual
number of bytes in the reservation key list without consideration of any
truncation resulting from an insufficient
allocation length. This shall not be considered an error."
which is covered by the general ALLOCATION LENGTH definition.

HPQ #207
PDF Page 165
6.11.2
Change "that have registered with the device server through all
combinations of initiator ports and target ports."
to
"that have been registered."

HPQ #208
PDF Page 166
6.11.3.2
Delete "If the allocation length specified by the PERSISTENT RESERVE IN
command is not sufficient to contain the entire
parameter list, then only the first portion of the list (i.e., byte 0 to
the allocation length) shall be sent to the application client. The

incremental remaining bytes shall be truncated, although the ADDITIONAL
LENGTH field shall still contain 16. This shall not be
considered an error."
which is covered by the standard ALLOCATION LENGTH definition.

HPQ #209
PDF Page 166
6.11.3.2
hall s/b shall

HPQ #210
PDF Page 167
6.11.3.4
"value in the TYPE field (see table 105) shall specify" s/b "The TYPE field
(see table 105) specifies"

HPQ #211
PDF Page 167
6.11.3.3
Change "value in the SCOPE field shall be LU_SCOPE (see table 104),
indicating"
to
"The SCOPE field (see table 104) shall be set to LU_SCOPE, specifying"

HPQ #212
PDF Page 167
6.11.3.4
Reservations s/b reservations

HPQ #213
PDF Page 168
6.11.4
Delete "If the ALLOCATION LENGTH field in the CDB is
too small to transfer all of the parameter data, the length shall not be
adjusted to reflect the truncation."
which is covered by the general ALLOCATION LENGTH definition.

HPQ #214
PDF Page 170
6.11.5
Delete "If the allocation length specified by the PERSISTENT RESERVE IN
command is not sufficient to contain the entire
parameter list, then only the first portion of the list (i.e., byte 0 to
the allocation length) shall be sent to the application client. The
incremental remaining bytes shall be truncated, although the ADDITIONAL
LENGTH field shall still contain the actual number of
bytes of full status descriptor(s) and shall not be affected by the
truncation. This shall not be considered an error."
which is covered by the general ALLOCATION LENGTH definition.

HPQ #215
PDF Page 172
Table 110
The PARAMETER LIST LENGTH field in PR OUT should be expanded to 4 bytes.
With the specify initiator ports feature and
lengthy iSCSI port identifiers, the 64KB limit is reachable on big systems.
HPQ #216
PDF Page 177
table 114
Add information about the PR Out command and parameter fields for the
REGISTER AND MOVE SERVICE ACTION.

HPQ #217
PDF Page 179
6.12.4 SARK paragraph
Change to 'The SERVICE ACTION RESERVATION KEY field contains the
reservation key to be registered to the I_T nexus
specified in the TransportID.'

HPQ #218
PDF Page 179

6.12.4
Change 'a' to "the" in "a TransportID"

HPQ #219
PDF Page 180
table 117
Delete "PREVENT ALLOW MEDIUM REMOVAL"

HPQ #220
PDF Page 180
6.13 PREVENT ALLOW MEDIUM REMOVAL command
Incorporate "04-349 SPC-3 Incorporate MMC-4 PREVENT ALLOW MEDIUM REMOVAL features" into this section.

HPQ #221
PDF Page 182
6.14.1
Replace: "The ALLOCATION LENGTH field specifies how many bytes have been allocated for the returned parameter list. If the
length is not sufficient to contain the entire parameter list, the first portion of the list shall be returned. This shall not be considered an error. If the remainder of the list is required, the application client should either send a new READ
ATRRIBUTE command with an allocation length large enough to contain the entire parameter list or use the FIRST ATTRIBUTE
IDENTIFIER field to restrict the attributes returned."
with:
"The ALLOCATION LENGTH field is defined in 4.3.4.6."

HPQ #222
PDF Page 183
6.14.2
Delete "If the parameter list is truncated as a result of insufficient allocation length, the contents of the AVAILABLE DATA field shall
not be altered."
which is covered by the general ALLOCATION LENGTH definition.

HPQ #223
PDF Page 184
6.14.3
Delete "If the parameter list is truncated as a result of insufficient allocation length, the contents of the AVAILABLE DATA field shall
not be altered."
which is covered by the general ALLOCATION LENGTH definition.

HPQ #224
PDF Page 185
6.15.1
Add "If the mode field is set to a value other than 01h, the ALLOCATION LENGTH field is defined in 4.3.4.6."

HPQ #225
PDF Page 185
6.15.1
table 125
row 0Ah
Change "Echo buffer" to "Read echo buffer data"
also change corresponding subclause header

HPQ #226
PDF Page 185
table 125
row 1Ah
Change "Echo buffer" to "read echo buffer data"
also change corresponding subclause header

HPQ #227
PDF Page 185
table 125
Change "Data" to "Read data" to parallel WRITE BUFFER
also change corresponding subclause header

HPQ #228
PDF Page 185
table 125
Change "Combined header and data" to "Read combined header and data" to
parallel WRITE BUFFER
also change corresponding subclause header

HPQ #229
PDF Page 185
table 125
Change "Echo buffer descriptor" to "Read echo buffer descriptor"
also change corresponding subclause header

HPQ #230
PDF Page 185
table 125
Change "Descriptor" to "Read descriptor"
also change corresponding subclause header

HPQ #231
PDF Page 185
Add table footnote 01h
Mode 01h is not recommended because the BUFFER ID field, BUFFER OFFSET
field, and ALLOCATION LENGTH field are
vendor-specific.

HPQ #232
PDF Page 186
6.15.2
Delete "the allocation length; nor is it reduced to reflect"
which is covered by the general definition of ALLOCATION LENGTH

HPQ #233
PDF Page 186
6.15.2
Delete "The device server shall terminate filling the Data-In Buffer when
allocation length bytes of header plus data
have been transferred or when all available header and buffer data have
been transferred to the application client,
whichever is less."
which is covered by the general ALLOCATION LENGTH definition.

HPQ #234
PDF Page 186
6.15.4
Delete "The device server shall terminate filling the Data-In Buffer when
allocation length bytes have been transferred or
when all the available data from the buffer has been transferred to the
application client, whichever amount is less." which is
covered by the general ALLOCATION LENGTH description.

HPQ #235
PDF Page 186
6.15.2
Expand table 126 to show the entire parameter data, not just the header:
Change table title to "Combined header and data mode parameter data." or
"Parameter data for combined header and data mode"
Add 4 .. n containing "Data".

HPQ #236
PDF Page 186
6.15.4
Add a Data mode parameter data table showing the parameter data returned -
just 0..n of "Data"

HPQ #237
PDF Page 186
6.15.2
Add "The allocation length field should be set to 000004h or greater."

HPQ #238
PDF Page 186
6.15.5
Change "The allocation length should be set to four or greater"
to:
"The ALLOCATION LENGTH field should be set to a value of 000004h or greater
so the full descriptor is retrieved."

HPQ #239
PDF Page 186
6.15.5
"Descriptor mode" s/b "Read descriptor mode" to match table (modified per
other comment)

HPQ #240
PDF Page 186
6.15.2
"Combined header and data mode" s/b "Read combined header and data mode" to
match table 125 and other comment

HPQ #241
PDF Page 186
6.15.4
"Data mode" s/b "Read data mode" to match table 125 and other comment

HPQ #242
PDF Page 187
6.15.5
Delete "The device server shall transfer the lesser of the allocation
length or four bytes of READ BUFFER descriptor."
which is covered by the general ALLOCATION LENGTH definition.

HPQ #243
PDF Page 187
6.15.5
Change table 127 title to Descriptor mode parameter data

HPQ #244
PDF Page 187
6.15.6
Add an Echo buffer data mode parameter data table, showing 0..n of "Echo
buffer data"

HPQ #245
PDF Page 187
6.15.6
"Read Data from echo buffer" s/b "Read echo buffer data" to match table 125
and other comment

HPQ #246
PDF Page 187
6.15.6
Change "when the WRITE BUFFER command with the mode field set to echo
buffer was issued."
to
"written by the previous WRITE BUFFER command (see 6.33.9 and 6.33.10)."

HPQ #247
PDF Page 187
6.15.5
Delete "limited by the allocation length as described in 4.3.4.6."
which is covered by 4.3.4.6. The ALLOCATION LENGTH field definition points
there already (assuming another comment is
implemented adding it)

HPQ #248
PDF Page 188
table 129
Add horizontal line under (MSB) and above (LSB)

HPQ #249

PDF Page 188
6.15.8
Change "Echo buffer" to "Read echo buffer data" to match table 125 and
other comment

HPQ #250
PDF Page 188
6.15.7
Delete "The device server shall transfer the lesser of the allocation
length
or four bytes of READ BUFFER descriptor."
which is covered by the general definition of ALLOCATION LENGTH.

HPQ #251
PDF Page 188
6.15.7
Change "The allocation length should be set to four or greater."
to:
"The ALLOCATION LENGTH field should be set to a value of 000004h or greater
so the full echo buffer descriptor is retrieved."

HPQ #252
PDF Page 188
6.15.7
"Echo buffer descriptor mode" s/b "Read echo buffer descriptor mode" to
match table 125 and other comment

HPQ #253
PDF Page 189
6.16
Replace "The ALLOCATION LENGTH field specifies how many bytes have been
allocated for the returned parameter data. If the
length is not sufficient to contain the entire parameter data, the first
portion of the data shall be returned (see 4.3.4.6). This shall
not be considered an error."
with "The ALLOCATION LENGTH field is defined in 4.3.4.6."

HPQ #254
PDF Page 189
6.16
Delete "The media serial number length shall not be adjusted due to an
insufficient allocation length."
which is covered by the general ALLOCATION LENGTH definition.

HPQ #255
PDF Page 190
6.16
Would be helpful to cover the case where media is physically present but
not logically loaded - e.g. "partial load" state where MAM
is accessible, hence media serial number can still be read.
Suggested change:
"If there is currently no accessible media in the device, the command shall
be terminated with CHECK CONDITION status, with the
sense key set to NOT READY, and the additional sense code set to MEDIUM NOT
PRESENT."

HPQ #256
PDF Page 191
6.17.1
Change "The ALLOCATION LENGTH field in the CDB indicates how much space has
been allocated for the returned parameter
list. If the length is not sufficient to contain the entire parameter list,
the first portion of the list shall be returned. This shall not be
considered an error. If the remainder of the list is required, the
application client should send a new RECEIVE COPY RESULTS
command with an ALLOCATION LENGTH field large enough to contain the entire
parameter list."
to "The ALLOCATION LENGTH field is defined in 4.3.4.6. See the service
action definitions for additional requirements."
(some service actions clear their data if allocation length is 0, and don't
clear it if >0 but not big enough to return all their data)

HPQ #257
PDF Page 191
table 133
Add a Reference row pointing to 6.17.2, 6.17.3, 6.17.4, and 6.17.5

HPQ #258
PDF Page 193
table 135
Value s/b Code

HPQ #259
PDF Page 193
table 136
Value s/b Code

HPQ #260
PDF Page 193
table 135
values s/b field

HPQ #261
PDF Page 193
table 136
values s/b field

HPQ #262
PDF Page 193
table 136
Delete "COPY STATUS"

HPQ #263
PDF Page 200
6.18
Add:
"The ALLOCATION LENGTH field is defined in 4.3.4.6."

HPQ #264
PDF Page 201
6.19
described s/b defined

HPQ #265
PDF Page 202
6.19
Delete "The ADDITIONAL
LENGTH field shall contain the actual number of bytes available in the
parameter data and shall not be changed if
the CDB contains an insufficient allocation length."
which is covered by the general ALLOCATION LENGTH definition.

HPQ #266
PDF Page 202
6.19
Delete "and shall not be changed if the CDB contains an insufficient
allocation length."
which is covered by the general ALLOCATION LENGTH definition.

HPQ #267
PDF Page 203
6.20
Replace "The ALLOCATION LENGTH field indicates how many bytes have been
allocated for the returned parameter data. If the
length is not sufficient to contain all the parameter data, the first
portion of the data shall be returned. This shall not be considered
an error. The actual length of the parameter data is available in the
IDENTIFIER LENGTH field in the
parameter data. If the remainder of the parameter data is required, the
application client should send a new REPORT DEVICE
IDENTIFIER command with an ALLOCATION LENGTH field large enough to contain
all the data."

with "The ALLOCATION LENGTH field is defined in 6.3.4.6"

HPQ #268
PDF Page 203
6.20
Delete "If the ALLOCATION LENGTH field in the CDB is too small to transfer
all of the identifier, the length shall not be adjusted to
reflect the truncation."
which is covered by the general ALLOCATION LENGTH definition.

HPQ #269
PDF Page 205
6.21
Add "The ALLOCATION LENGTH field is defined in 4.3.4.6."

HPQ #270
PDF Page 205
6.21
Delete "If the allocation length is not sufficient to contain the entire
logical unit inventory, the device server shall report as many
logical unit number values as fit in the specified allocation length. This
shall not be considered an error."
which is covered by the general ALLOCATION LENGTH definition. As note 36
indicates, this is the command that once had
different behavior; it no longer does.

HPQ #271
PDF Page 205
6.21
Change "The allocation length should be at least 16 bytes."
to:
"The ALLOCATION LENGTH field should be set to a value of OOOOOO10h or
greater so the full first LUN field in the parameter data
is retrieved."

HPQ #272
PDF Page 205
table 146 title
"Select report code values" s/b "SELECT REPORT field"

HPQ #273
PDF Page 206
6.21
Delete "The LUN list length is the number of logical unit numbers in the
logical unit inventory multiplied by eight. If the allocation
length in the CDB is too small to transfer information about the entire
logical unit inventory, the LUN list length value shall not be
adjusted to reflect the truncation."
which is covered by the general ALLOCATION LENGTH definition.

HPQ #274
PDF Page 206
table 147
N should be lowercase

HPQ #275
PDF Page 206
"if the inventory list is null for the requesting I_T nexus, the
device server shall provide a default logical unit inventory that contains
at least LUN 0 or the REPORT LUNS well
known logical unit"
This doesn't cover the case of when the only accessible LUNs are W-LUNs,
but SELECT REPORT is set to 00h.
Under the existing rules, the list cannot contain LUN 0 since that LUN does
not exist; it cannot contain the W-LUNs because the
SELECT REPORT field is 00h (the list is not allowed to include well-known
LUNs).

HPQ #276
PDF Page 206
6.21

Add:
See SAM-3 for the effects that processing this command in one logical unit has on other logical units in the SCSI target device.

HPQ #277
PDF Page 206
6.21
"REPORT LUNS data" s/b "REPORT LUNS parameter data"

HPQ #278
PDF Page 207
6.22
Change nexus to nexus(es)

HPQ #279
PDF Page 207
6.22
PRIOIRTY s/b PRIORITY

HPQ #280
PDF Page 207
6.22
Replace "The ALLOCATION LENGTH field specifies the number of bytes that have been allocated for the returned parameter data. An allocation length that is not sufficient to contain the entire parameter list shall not be considered an error. If the complete list is required, the application client should send a new REPORT PRIORITY command with an allocation length large enough to contain the entire list."
with "The ALLOCATION LENGTH field is defined in 4.3.4.6. The ALLOCATION LENGTH field should be set to a value of OOOOOOO4h or greater so the full PRIORITY PARAMETER DATA LENGTH field in the parameter data is retrieved."

HPQ #281
PDF Page 207
table 148
Delete "(4h or larger)" since it is not an error to use less than 4h.

HPQ #282
PDF Page 208
table 150
descriptors s/b descriptor list

HPQ #283
PDF Page 209
table 152/158
The REPORT SUPPORTED OPERATION CODES table uses 4 rows for bytes 6/7/8/9, but the REPORT SUPPORT TASK MANAGEMENT FUNCTIONS table combines them into two rows 6-9. Make them consistent.

HPQ #284
PDF Page 210
6.23.1
Replace "The ALLOCATION LENGTH field specifies the number of bytes that have been allocated for the returned parameter data. If the length is not sufficient to contain all the parameter data, the first portion of the data shall be returned. This shall not be considered an error. The actual length of the parameter data may be determined from the ADDITIONAL LENGTH field in the parameter data. If the remainder of the parameter data is required, the application client should send a new REPORT SUPPORTED OPERATION CODES command with an allocation length large enough to contain all the data."
with
"The ALLOCATION LENGTH field is defined in 4.3.4.6."

HPQ #285
PDF Page 211
table 154

Commands s/b "Command descriptors" or "Command descriptor list"

HPQ #286
PDF Page 213
6.24
indicates s/b specifies

HPQ #287
PDF Page 213
6.24
Why does REPORT SUPPORTED TASK MANAGEMENT FUNCTIONS have special rules
about its ALLOCATION LENGTH field
(shall be 4h or larger)?
I think it could follow the rules in 4.3.4.6 without problem. If the
application client only requests 1,2, or 3 bytes, so what?

HPQ #288
PDF Page 213
6.23
"CONTROL byte" s/b "CDB CONTROL byte"

HPQ #289
PDF Page 214
6.24
SAM-3 s/b SAM-2 since TARGET RESET is gone from SAM-3

HPQ #290
PDF Page 214
6.24
After "WAKEUP task management function" add "(see SAM-2)"

HPQ #291
PDF Page 215
6.25
Replace "The ALLOCATION LENGTH field indicates how much space has been
allocated for the returned parameter data. If the
length is not sufficient to contain all the parameter data, the first
portion of the data shall be returned. This shall not be considered
an error. The actual length of the parameter data is available in the
RETURN DATA LENGTH field in the
parameter data. If the remainder of the parameter data is required, the
application client should send a new REPORT TARGET
PORT GROUPS command with an ALLOCATION LENGTH field large enough to contain
all the data."
with "The ALLOCATION LENGTH field is defined in 4.3.4.6."

HPQ #292
PDF Page 216
table 161
"descriptor(s)" s/b "descriptor list"

HPQ #293
PDF Page 216
6.25
Delete "If the allocation length in
the CDB is too small to transfer all of the descriptors, the RETURN DATA
LENGTH field shall not be adjusted to reflect the
truncation."
which is covered by the general ALLOCATION LENGTH definition.

HPQ #294
PDF Page 217
table 163
Value s/b Code

HPQ #295
PDF Page 217
table 164
Value s/b Code

HPQ #296

PDF Page 217
table 163
change "Asymmetric access state" to "ASYMMETRIC ACCESS STATE field"

HPQ #297
PDF Page 218
6.26
device server s/b logical unit

HPQ #298
PDF Page 218
6.26
Replace "The ALLOCATION LENGTH field specifies how many bytes have been
allocated for the returned sense data. An
allocation length that is not sufficient to contain all of the sense data
shall not be considered an error."
with
"The ALLOCATION LENGTH field is defined in 4.3.4.6."

HPQ #299
PDF Page 218
6.26
Change "since the REQUEST SENSE command"
to
"since a REQUEST SENSE command with any allocation length"

HPQ #300
PDF Page 218
6.26
indicates s/b specifies

HPQ #301
PDF Page 219
6.26
"LOW POWER CONDITION ON"
s/b
"one of the following:
a) LOW POWER CONDITION ON if the reason for entry into the standby power
condition or idle power condition is unknown;
b) IDLE CONDITION ACTIVATED BY TIMER if the logical unit entered the idle
power condition due to the idle condition timer (see
7.4.12);
c) STANDBY CONDITION ACTIVATED BY TIMER if the logical unit entered the
standby power condition due to the idle condition
timer (see 7.4.12);
d) IDLE CONDITION ACTIVATED BY COMMAND if the logical unit entered the
idlepower condition due to a START STOP UNIT
command (see SBC-2 or RBC);
e) STANDBY CONDITION ACTIVATED BY COMMAND if the logical unit entered the
standby power condition due to a START
STOP UNIT command (see SBC-2 or RBC)."

HPQ #302
PDF Page 219
6.26
If the logical unit considers itself in standby or idle power condition
mode, but a background self-test is running, which has priority:
returning the power condition state or returning the background operation
progress?

HPQ #303
PDF Page 219
6.26
Change "logical unit that the SCSI target device supports, but to which the
peripheral device is not currently attached,"
to
"logical unit which reports a peripheral qualifier of 001b in its standard
INQUIRY data (see 6.4.2)"

HPQ #304
PDF Page 219

6.26
Change
"logical unit that is attached but not operational,"
to
"logical unit which reports a peripheral qualifier of 000b in its standard
INQUIRY data (see 6.4.2) because it has a peripheral device
connected, but is not ready for access"

HPQ #305
PDF Page 219
6.26
Change "
logical unit that the SCSI target device is incapable of
determining if the peripheral device is attached or is not operational when
the peripheral device is not ready,"
to:
"logical unit which reports a peripheral qualifier of 000b in its standard
INQUIRY data (see 6.4.2) because the device server is
unable to determine whether or not a peripheral device is connected"

HPQ #306
PDF Page 219
6.26
Change
"logical unit that the SCSI target device does not support"
to
"logical unit which reports a peripheral qualifier of 011b in its standard
INQUIRY data (see 6.4.2)"

HPQ #307
PDF Page 219
6.26
Change "data" to "parameter data"

HPQ #308
PDF Page 220
table 168 001b
"contain" s/b "be set to"

HPQ #309
PDF Page 220
table 168 010b
"contain" s/b "be set to"

HPQ #310
PDF Page 220
table 168 101b
"contain" s/b "be set to"

HPQ #311
PDF Page 220
table 168 110b
"contain" s/b "be set to"

HPQ #312
PDF Page 220
table 168
Value s/b Code

HPQ #313
PDF Page 220
table 168
Delete "values"

HPQ #314
PDF Page 221
6.27
"directs the device server to perform" s/b "requests that the device server
perform"

HPQ #315

PDF Page 222
6.28
indicates s/b specifies

HPQ #316
PDF Page 224
table 172
nexus s/b nexuses

HPQ #317
PDF Page 224
table 172
nexus s/b nexuses

HPQ #318
PDF Page 224
6.29
PARAMETER LIST LENGTH s/b small caps

HPQ #319
PDF Page 224
6.29
indicates s/b specifies

HPQ #320
PDF Page 225
6.29
indicates s/b specifies

HPQ #321
PDF Page 226
6.30
indicates s/b specifies

HPQ #322
PDF Page 227
table 175
"descriptor(s)" s/b "descriptor list"

HPQ #323
PDF Page 227
table 177
Value s/b Code

HPQ #324
PDF Page 227
table 177
change "Asymmetric access state" to "ASYMMETRIC ACCESS STATE field"

HPQ #325
PDF Page 228
table 179
Delete "GOOD/NO SENSE/NO ADDITIONAL SENSE INFORMATION or
other valid additional sense code."
For autosense protocols, GOOD status is not accompanied by any sense data.
SAM-3's Execute Command model says the
Sense Data argument is only present if the Status is CHECK CONDITION.
Also delete GOOD in the paragraph above the table.

HPQ #326
PDF Page 228
above table 179, delete "GOOD and"
6.32
indicates s/b specifies

HPQ #328
PDF Page 232
6.33.2
after "with the sense key set to ILLEGAL REQUEST." add "and the additional
sense code set to INVALID FIELD IN CDB."

HPQ #329
PDF Page 232
table 183
Change "Echo buffer" to "Write echo buffer data" for consistency
also change corresponding subclause header

HPQ #330
PDF Page 232
table 183
Change "Echo buffer" to "write echo buffer data" for consistency
also change corresponding subclause header

HPQ #331
PDF Page 232
6.33.2
Add a "Write combined header and data mode parameter list" table

HPQ #332
PDF Page 232
6.33.2 header
Change "Combined" to "Write combined"

HPQ #333
PDF Page 232
6.33.4
Change "Data" to "Write data"

HPQ #334
PDF Page 232
6.33.4
Add a "Write data mode parameter list" table showing 0..n of Data

HPQ #335
PDF Page 232
note 39
"and0 001h" s/b "and 01h"

HPQ #336
PDF Page 232
notes 39-40
Change these notes to:
39 Mode 00h is not recommended (because why?).
40 Modes 01h, 04h, and 05h are not recommended because the BUFFER ID field,
the BUFFER OFFSET field, and the
PARAMETER LIST LENGTH field are vendor-specific.

HPQ #337
PDF Page 232
notes 39-40
Consider making these table footnotes instead of notes in the main body.

HPQ #338
PDF Page 233
6.33.7
Change "offsets" to "offsets mode"

HPQ #339
PDF Page 235
6.33.9
Add "Write echo buffer data mode parameter list" table showing 0..n Echo
buffer data

HPQ #340
PDF Page 235
6.33.9
Change "Write data to echo buffer" to "Write echo buffer data mode"

HPQ #341
PDF Page 235
6.33.9
"initiator ports" s/b "I_T nexuses"

HPQ #342
PDF Page 236
6.33.10
Change "Echo buffer" to "write echo buffer data mode"
6.33.11
Change "protocol" to "protocol mode"

HPQ #344
PDF Page 236
6.33.12
Change "log" to "log mode"

HPQ #345
PDF Page 237
6.33.13
Change "Application log data WRITE BUFFER format" to "Download application log mode parameter list"

HPQ #346
PDF Page 238
table 185
Value s/b Code

HPQ #347
PDF Page 238
table 186
Value s/b Code

HPQ #348
PDF Page 238
table 187
Value s/b Code

HPQ #349
PDF Page 238
table 185
Change "Error type values" to "ERROR TYPE field"

HPQ #350
PDF Page 238
table 186
Change "Code set values" to "CODE SET field"

HPQ #351
PDF Page 238
table 187
Change "Error location format values" to "ERROR LOCATION FORMAT field"

HPQ #352
PDF Page 244
table 192
Make byte 2 into two rows, showing the name "PARAMETER CONTROL" encompassing the whole byte

HPQ #353
PDF Page 244
7.2.1 DU paragraph
"nor" is wrong here. The basic sentence construct is "The DU bit is not defined for <a> nor <b>".
It should be:
"The DU bit is not defined for <a> or <b>"
or:
"The DU bit is not defined for <a> and is not defined for <b>"

HPQ #354
PDF Page 244
7.2.1
Change "any log" to "any such" so this sentence only applies to log parameters with PC or LP (referred to in the previous sentence).

HPQ #355
PDF Page 245
table 193 01b
"equal" s/b "equal to"

HPQ #356
PDF Page 245
table 193 10b
"not equal" s/b "not equal to"

HPQ #357
PDF Page 245
7.2.1
"The LBIN bit" s/b "The list binary (LBIN) bit"

HPQ #358
PDF Page 245
7.2.1 LBIN paragraph
"a list of binary information." s/b "binary data."

HPQ #359
PDF Page 248
Table 195
use double lines (to match table 108) around Application client log
parameters

HPQ #360
PDF Page 249
7.2.3 below table 198
Replace "the SCSI bus" with a modern SAM-3 term.

HPQ #361
PDF Page 249
7.2.3
Delete "The cause of this problem is protocol specific."
It could be the application client's fault, too, which has nothing to do
with the protocol.

HPQ #362
PDF Page 250
Table 199
Replace "failed reconnect" with a modern SAM-3 term

HPQ #363
PDF Page 250
Table 200
Replace Bus with a modern SAM-3 term

HPQ #364
PDF Page 250
Note 45
Change "Direct-access" to "Direct-access block"

HPQ #365
PDF Page 258
table 213
Value s/b Code

HPQ #366
PDF Page 258
table 213
change "Self-test results values" to "SELF-TEST RESULTS field"

HPQ #367
PDF Page 262
7.2.13
The current text, "and may be either omitted or set to a value indicating
that the parameter is not defined" partially duplicates the
specification given in the second paragraph of the next page (the paragraph
discussing the Reference Temperature).

Change to "shall implement parameter 0000h and may implement parameter
0001h."

HPQ #368
PDF Page 263
table 220
"ETC is 0" s/b using small caps "the ETC bit is set to zero"

HPQ #369
PDF Page 275
Table 232
Delete
0 - n
0 - n
0 - n
There is always a header present, so the block descriptor cannot start on
byte 0. It would have to start at "n+1".

HPQ #370
PDF Page 275
Table 232
Change "Page(s)" to "Mode page(s)"

HPQ #371
PDF Page 275
table 232
"descriptor(s)" s/b "descriptor list"

HPQ #372
PDF Page 276
7.4.3
Twice in the LONGLBA paragraph:
Change "descriptors are" to descriptor(s), if any, are each"

HPQ #373
PDF Page 276
7.4.3 BLOCK DESCRIPTOR LENGTH paragraph
Delete "or vendor specific parameters," since table 232 doesn't mention
"Vendor specific parameters" as being part of the general
format.

HPQ #374
PDF Page 277
7.4.4.1 first paragraph
Change "direct-access" to "direct-access block devices"

HPQ #375
PDF Page 277
7.4.4.1 first paragraph
Add "See SBC-2 for the mode parameter block descriptor format for
direct-access block devices."

HPQ #376
PDF Page 277
7.4.4.1
Remove spaces in FF FF FFh

HPQ #377
PDF Page 277
7.4.4.1
Remove capitalization of FIELDS.

HPQ #378
PDF Page 278
7.4.5 Each mode page contains...
Start the list with "a PS bit, an SPF bit," Move this sentence above the
SPGFparagraph

HPQ #379
PDF Page 278
2nd to last para on page 278, below table 237

Change this to that to match previous sentence

HPQ #380
PDF Page 279
Above table 238
Change "is permitted" to "may"

HPQ #381
PDF Page 279
7.4.5
"The logical unit is permitted to implement a mode page that is less than
the full mode page length defined in this standard,"
Does this rule apply to all mode pages, or just the ones defined in SPC-3?
If it applies to all mode pages, then delete "in this standard"

HPQ #382
PDF Page 280
7.4.6 Control mode page
As part of deleting the per initiator port mode page policy,
delete "per initiator port,"

HPQ #383
PDF Page 280
7.4.6 Control mode page
As part of deleting the per initiator port mode page policy,
delete "per-initiator port or"

HPQ #384
PDF Page 280
Table 240 Task set type
Change "initiator ports" to "I_T nexus(es)".

HPQ #385
PDF Page 280
Table 240 - Task set type
Change "initiator port regardless of target port" to "I_T nexus"

HPQ #386
PDF Page 280
7.4.6 TST paragraph
Change "If the mode page policy for this mode page is per-initiator port or
per-I_T nexus, the TST field, if changeable, shall reflect
in the mode pages for all initiator ports the state selected by the most
recent MODE SELECT from any initiator port (i.e., the TST
field is always shared)."
to:
Regardless of the mode page policy (see SPC-3) for this mode page, the
shared mode page policy shall be applied to the TST
field."

HPQ #387
PDF Page 280
7.4.6 TST paragraph
After "MODE SELECT" add "command"

HPQ #388
PDF Page 280
7.4.6 TMF_ONLY bit
Change "tasks with a task attribute of ACA may be sent from the faulted
initiator port..." to "that the device server shall process
tasks with a task attribute of ACA from the faulted I_T nexus..."
The rule is applicable to the device server, not the initiator port. The
initiator port is allowed to try to send ACA tasks in all cases; it
will just get ACA ACTIVE status back if TMF_ONLY is 1.

HPQ #389
PDF Page 280
7.4.6 TMF_ONLY paragraph
Change "faulted initiator port" to "faulted I_T nexus"

HPQ #390

PDF Page 280
table 239
add a note that byte 4 bit 7 used to be something else in SCSI-2, was
marked Reserved rather than Obsolete in SPC because
"Obsolete" didn't exist yet, and has had this new meaning in SPC-2 and
SPC-3.

HPQ #391
PDF Page 280
table 240
Value s/b Code

HPQ #392
PDF Page 280
table 240
Change "Task set type to "TASK SET TYPE (TST) field"

HPQ #393
PDF Page 280
7.4.6
"task set type field (TST)" s/b "task set type (TST) field"

HPQ #394
PDF Page 280
7.4.6
Move "(see SAM-3)" after "unit attention condition"

HPQ #395
PDF Page 281
7.4.6 D_SENSE paragraph
D_SENSE and TAS cry out to be per-I_T nexus regardless of the mode page
policy. If D_SENSE is enabled for an initiator that
doesn't understand it, it cannot even parse the sense data to understand
that MODE PARAMETERS CHANGED (or a reset event -
anything that it knows might change mode parameters) is the additional
sense code being returned.
Perhaps require that the power on unit attentions (ASC 29h) and the MODE
PARAMETERS CHANGED unit attention always be
reported in fixed format. New initiators ought to be able to tolerate that
(they must understand both old and new formats). This lets
old initiators at least know whenever a mode parameter could be the cause
of their problem (the presumption is they can at least
see the D_SENSE bit is set (they may think it's supposed to be reserved),
but don't know how to parse descriptor format sense
data).

HPQ #396
PDF Page 281
table 241
Value s/b Code

HPQ #397
PDF Page 281
table 241
change "Queue algorithm modifier" to "QUEUE ALGORITHM MODIFIER field"

HPQ #398
PDF Page 282
above table 242
Change "the initiator port" to "the same I_T nexus"

HPQ #399
PDF Page 282
Table 242
Change the definition above the table of "affected" to include "in the task
set", then delete that phrase from all the entries in the
table. Specifically:
Change preliminary text to "If the TST field is set to 000b, then all tasks
in the task set from all I_T nexuses are affected. If the TST
field is set to 001b, then only tasks in the task set from the same I_T
nexus as the task that is terminated...are affected."

Delete "in the task set" from 00b, 01b with TAS=0, and 11b.
(Note that the 01b with TAS=1 case does not mention "in the task set")

HPQ #400
PDF Page 282
7.4.6 TAS paragraph
Change "without any response" to "without any response (e.g., delivering status)"

HPQ #401
PDF Page 282
7.4.6 RAC paragraph
Change "A RAC bit set to one specifies that a CHECK CONDITION status should be reported rather than a long busy condition
(e.g., longer than the busy timeout period). A RAC bit set to zero specifies that long busy conditions (e.g., busy condition during auto contingent allegiance) may be reported."
to
"A RAC bit set to one specifies that the device server should return CHECK CONDITION status rather than a returning BUSY
status for a longer time than that specified by the BUSY TIMEOUT PERIOD field. A RAC bit set to zero specifies that the device
server may return BUSY status for any length of time."

HPQ #402
PDF Page 282
table 242
Value s/b Code

HPQ #403
PDF Page 283
7.4.6 SWP paragraph
Change "command set" to "command standard"

HPQ #404
PDF Page 283
7.4.6 ATO paragraph
Change "the protected information" to "protection information"

HPQ #405
PDF Page 283
7.4.6 ATO paragraph
Change "the protected information" to "protection information"

HPQ #406
PDF Page 283
7.4.6 ATO paragraph
Change "the protected information" to "protection information"

HPQ #407
PDF Page 283
table 243
Value s/b Code

HPQ #408
PDF Page 284
7.4.6 Busy Timeout Period paragraph
Change "remain busy" to "return BUSY status"

HPQ #409
PDF Page 284
7.4.6 Extended Self-Test Completion Time paragraph
This field seems to be a read-only field. Say so, or define its behavior if written.
7.4.7 first paragraph
Change subpage to mode page

HPQ #411
PDF Page 284
7.4.7 first paragraph
Change mode subpage to mode page

HPQ #412
PDF Page 284
table 244
Value s/b Code

HPQ #413
PDF Page 285
7.4.8
Change "and" to "and, if the SCSI target device contains more than one
target port, "

HPQ #414
PDF Page 285
7.4.8
Delete "If a SCSI target device has multiple target ports, changes in the
parameters for one target port should not affect othertarget
ports. "
which is the same as "the mode page policy should be per target port"

HPQ #415
PDF Page 286
7.4.8 Buffer Full Ratio paragraph
target s/b Target

HPQ #416
PDF Page 286
7.4.8 Buffer Empty Ratio paragraph
target s/b Target

HPQ #417
PDF Page 286
Note 53
fix font of target port
note 53
Change "the read operations described in this example" to "read operations"
HPQ #419
PDF Page 289
7.4.11 IE Control mode page
As part of deleting the per initiator port mode page policy,
delete "per initiator port,"

HPQ #420
PDF Page 290
table 251, 2h
Change "returning a CHECK CONDITION status, with the sense key set to UNIT
ATTENTION, and the additional sense code
indicating the cause of the informational exception condition."
to "by establishing a unit attention condition for all I_T nexus(es). On a
command where the unit attention condition is reported, the
additional sense code shall be set to the cause of the informational
exception condition."

HPQ #421
PDF Page 290
table 251, 2h
"The command that has the CHECK CONDITION shall not be processed before the
informational exception condition is reported."
Is this a general rule for unit attentions, or something specific for
informational exceptions? If a general rule, then this should be a
NOTE.

HPQ #422
PDF Page 290
table 251, 3h, 4h, and 5h
GOOD status should be "GOOD status or INTERMEDIATE status" to account for
linked commands.

HPQ #423
PDF Page 290
table 251, 3h

After CHECK CONDITION status" add "with a sense key set to RECOVERED ERROR"
HPQ #424
PDF Page 290
table 251 3h
After "allowed" add superscript a

HPQ #425
PDF Page 290
table 251 3h, 4h, 5h
Assuming the unit attention is reported on all I_T nexuses, are the CHECK CONDITIONS just reported on any arbitrary I_T nexus?
Change "next command" to "next command (on any I_T nexus)" to clarify.

HPQ #426
PDF Page 290
7.4.11
"method of reporting informational exceptions field (MRIE)" s/b "method of reporting informational exceptions (MRIE) field"

HPQ #427
PDF Page 291
table 251, 4h
After CHECK CONDITION status" add "with a sense key set to RECOVERED ERROR"
HPQ #428
PDF Page 291
table 251, 5h
After CHECK CONDITION status" add "with a sense key set to NO SENSE"

HPQ #429
PDF Page 291
table 251, 4h
Change "regardless of the value of the post error (PER) bit of the Read-Write Error Recovery mode page,"
to:
"regardless of whether the reporting of recovered errors is allowed"

HPQ #430
PDF Page 291
table 251 footnote a
Change "The Read-Write Error Recovery mode page is described in the applicable command standard"
to "in some command standards, this is controlled by the post error (PER) bit in the Read-Write Error Recovery mode page"

HPQ #431
PDF Page 291
7.4.11
shall indicate s/b indicates

HPQ #432
PDF Page 292
7.4.12 first paragraph
Change "the methods to "with methods" since there are other methods (e.g. START STOP UNIT command in block devices)

HPQ #433
PDF Page 293
7.4.13
Delete "If a logical unit is accessible through multiple target ports, changes in the parameters for one target port
should not affect other target ports."
which is the same as "mode page policy should be per target port"

HPQ #434
PDF Page 294
7.4.14
Change "and" to "and, if the SCSI target device contains more than one target port, "

HPQ #435
PDF Page 294

7.4.14
Delete "If a target device has multiple target ports, changes in the
parameters for one target port should not affect other target
ports." which is the same as saying "policy should be per target port".

HPQ #436
PDF Page 303
7.5.3.2 header
Change "world wide name" to "world wide port name"

HPQ #437
PDF Page 303
7.5.3.2 first paragraph
Change "world wide name" to "world wide port name (see FCP-3)"

HPQ #438
PDF Page 303
table 268 header
Change "world wide name" to "world wide port name"

HPQ #439
PDF Page 303
table 268 bytes 12-19
Change "WORLD WIDE NAME" to "WORLD WIDE PORT NAME"
7.5.3.2 below table 268
change "WORLD WIDE NAME field shall contain the port world wide name" to
"WORLD WIDE PORT NAME field shall contain the
world wide port name"

HPQ #441
PDF Page 303
note 57
Change "world wide name" to "world wide port name" (twice)

HPQ #442
PDF Page 303
7.5.3.2
Change "The target descriptor format shown in table 268 is used by an
EXTENDED COPY command to specify a copy
target device using its Fibre Channel world wide name."
to
"The target descriptor format shown in table 268 is used by an EXTENDED
COPY command to specify an FCP copy target device
using its Fibre Channel world wide port name (see FCP-3)."

HPQ #443
PDF Page 304
7.5.3.3
Change "The target descriptor format shown in table 269 is used by an
EXTENDED COPY command to specify a copy target
device using its Fibre Channel N_Port."
to:
"The target descriptor format shown in table 269 is used by an EXTENDED
COPY command to specify an FCP copy target device
using its Fibre Channel N_Port (see FCP-3)."

HPQ #444
PDF Page 305
7.5.3.4 header
Change "world wide name" to "world wide port name"

HPQ #445
PDF Page 305
7.5.3.4 first paragraph
uncapitalize "World Wide Name"
and change to "world wide port name" per other comments

HPQ #446
PDF Page 305
table 270 rows 12-19
Change "WORLD WIDE NAME" to "WORLD WIDE PORT NAME"

HPQ #447
PDF Page 305
7.5.3.4 below table 270
change "WORLD WIDE NAME field shall contain the port world wide name" to
"WORLD WIDE PORT NAME field shall contain the
world wide port name"

HPQ #448
PDF Page 305
7.5.3.4 below note 59
Change "world wide name in the WORLD WIDE NAME" to "world wide port name in
the WORLD WIDE PORT NAME"

HPQ #449
PDF Page 305
7.5.3.4 first paragraph
Change "EXTENDED COPY command copy target devices that are addressed using
their Fibre Channel N_Port with World Wide
Name checking use the target descriptor format shown in table 270 to
specify the addressing information."
to
"The target descriptor format shown in table 270 is used by an EXTENDED
COPY command to specify an FCP copy target device
using its Fibre Channel N_Port provided the world wide port name matches
the one specified (see FCP-3)."

HPQ #450
PDF Page 306
7.5.3.5
Change "EXTENDED COPY command copy target devices that are addressed using
their SCSI parallel protocol SCSI bus target
identifier, and logical unit number use the target descriptor format shown
in table 271 to specify the addressing information."
to:
"The target descriptor format shown in table 271 is used by an EXTENDED
COPY command to specify a SPI copy target device
using its SCSI target identifier (see SPI-5)."

HPQ #451
PDF Page 307
7.5.3.6
Change "The target descriptor format shown in table 272 is used to identify
an EXTENDED COPY command copy target device
using its IEEE 1394 Extended Unique Identifier, 64-bits (EUI-64) and
configuration ROM (Read-Only Memory) directory identifier."
to:
"The target descriptor format shown in table 272 is used by an EXTENDED
COPY command to specify an SBP copy target device
using its IEEE 1394 Extended Unique Identifier, 64-bits (EUI-64) and
configuration ROM (Read-Only Memory) directory identifier
(see SBP-3)."

HPQ #452
PDF Page 308
7.5.3.7
Change "The target descriptor format shown in table 273 is used to identify
an EXTENDED COPY command copy target device using its RDMA SRP target port
identifier (see SRP)."
to
"The target descriptor format shown in table 272 is used by an EXTENDED
COPY command to specify an SRP copy target device
using its SRP target port identifier (see SRP)."

HPQ #453
PDF Page 309
7.5.3.8
Change "EXTENDED COPY command copy target devices that are addressed using
their Internet protocol binary IPv4 address,
and logical unit number use the target descriptor format shown in table 274
to specify the addressing information."

to
"The target descriptor format shown in table 274 is used by an EXTENDED
COPY command to specify an iSCSI copy target
device using its Internet protocol binary IPv4 address (see iSCSI)"

HPQ #454
PDF Page 310
7.5.3.9
Change "The target descriptor format shown in table 273 is used to identify
an EXTENDED COPY command copy target device
using its SAS serial SCSI protocol (see SAS)."
to
"The target descriptor format shown in table 275 is used by an EXTENDED
COPY command to specify a SAS Serial SCSI
Protocol copy target device using its SAS address (see SAS)."
(note the cross reference is broken too)

HPQ #455
PDF Page 312
Device Identifier s/b Device Identification

HPQ #456
PDF Page 315
7.5.4.7
"serial SCSI protocol" s/b "Serial SCSI Protocol"

HPQ #457
PDF Page 315
7.5.4.7
"serial SCSI protocol" s/b "Serial SCSI Protocol"

HPQ #458
PDF Page 316
7.6.1
Change "optionally returned by the INQUIRY command (see 6.4)"
to
"returned by the INQUIRY command (see 6.4) with the EVPD bit set to one"

HPQ #459
PDF Page 317
7.6.2
Delete "If the allocation length is less than the length of the data to be
returned, the page length shall not be adjusted to reflect the
truncation."
which is covered by the general ALLOCATION LENGTH definition.

HPQ #460
PDF Page 317
7.6.2
Delete "If the allocation length is less than the length of data to be
returned, the ASCII operating definition description length shall
not be adjusted to reflect the truncation."
which is covered by the general ALLOCATION LENGTH definition.

HPQ #461
PDF Page 317
7.6.1, 7.6.2
Obsolete ASCII Implemented Operating Definition VPD page 82h.
This was related to the CHANGE DEFINITION command, which was obsoleted long
ago (last seen in SPC-1). There is no
definition of "operating definitions" any more to give this page any
meaning.

HPQ #462
PDF Page 318
7.6.3
Delete "If the allocation length of the CDB is too small to transfer all of
the VPD page, the page length shall not be adjusted to
reflect the truncation."
which is covered by the general ALLOCATION LENGTH definition.

HPQ #463
PDF Page 318
7.6.3
Delete "If the allocation
length is less than the length of the data to be returned, the ASCII length
shall not be adjusted to reflect the
truncation."
which is covered by the general ALLOCATION LENGTH definition.

HPQ #464
PDF Page 319
7.6.4.1
Change "Device identifiers" to "Identification descriptors" to avoid
confusion with the SET/REPORT DEVICE IDENTIFIER command

HPQ #465
PDF Page 319
7.6.4.1 Change "device identifiers" to "identification descriptors"

HPQ #466
PDF Page 319
7.6.4.1
Delete "A SCSI target device may have more than one SCSI target device name
if the SCSI target device supports multiple SCSI
transport protocols. If the returned Device Identification VPD page
contains any SCSI target device names, it shall contain all the
SCSI target device names."
It doesn't seem to belong here, and is already covered by 7.6.4.11.1, which
says "The Device Identification VPD page shall contain
identification descriptors for all the SCSI target device names for all the
SCSI transport protocols supported by the SCSI target
device."

HPQ #467
PDF Page 319
Change "SCSI target device" to "the SCSI target device containing the
logical unit"

HPQ #468
PDF Page 319
7.6.4.1
Change "access path (i.e., SCSI target port) used by the command and
returned parameter data." to
"the SCSI target port through which the INQUIRY command was received and is
being processed."

HPQ #469
PDF Page 320
table 291
Value s/b Code

HPQ #470
PDF Page 320
table 292
Value s/b Code
table 293
Value s/b Code

HPQ #472
PDF Page 320
table 291
Change "Code set" to "CODE SET field"

HPQ #473
PDF Page 320
table 292
Change "Association" to "ASSOCIATION field"

HPQ #474
PDF Page 320
table 293

Change "Identifier type" to "IDENTIFIER TYPE field"

HPQ #475
PDF Page 321
7.6.4.1
Delete "If the ALLOCATION LENGTH field of the
CDB is too small to transfer all of the identifier, the identifier length
shall not be adjusted to reflect the truncation."
which is covered by the general ALLOCATION LENGTH definition.

HPQ #476
PDF Page 321
7.6.4.3
"product serial number field" s/b "PRODUCT SERIAL NUMBER field"

HPQ #477
PDF Page 324
table 301
Value s/b Code

HPQ #478
PDF Page 324
table 301
Change "Name Address Authority values" to Name Address Authority (NAA)
field"

HPQ #479
PDF Page 326
table 306
Value s/b Code

HPQ #480
PDF Page 326
table 306
Change "Relative target port identifier values" to "RELATIVE TARGET PORT
field"

HPQ #481
PDF Page 327
7.6.4.9
After "identifier types 2h (i.e.,
EUI-64 based identifier) or 3h (i.e., NAA identifier)." add "or 8h (i.e.,
SCSI name string)" since that is a peer of 2h and 3h.
Consider adding 1h too.

HPQ #482
PDF Page 328
table 310 and 311
The product serial number example of "00100203 04050607h" is invalid, since
it's required to be an ASCII string. Change to a
series of ASCII characters.

HPQ #483
PDF Page 330
Move 7.6.4.11 earlier so it is 7.6.4.2 (move 7.6.4.2+ down to 7.6.4.3+).
This is a very important section, but doesn't appear so
when buried after the MD5 identifier and name string identifiers.

HPQ #484
PDF Page 330
7.6.4.11.3
This section needs to use the term "logical unit name" which is defined in
SAM-3. That's the name for the identifier if its type is 1h,
2h, 3h, or 8h. (Identifiers with other types don't qualify)

HPQ #485
PDF Page 330
7.6.4.11.1
After last word "device," add "regardless of the I_T nexus being used to
retrieve the identification descriptors."

HPQ #486
PDF Page 331
7.6.4.11.4
Delete "The Device Identification VPD page shall contain the same set of
identification descriptors with the ASSOCIATION field set
to 2h (i.e., SCSI target device) regardless of the I_T nexus being used to
retrieve the identification descriptors."
That is already stated in 7.6.4.11.1, which applies to all types of logical
units, and is not special because this is a well known logical
unit.

HPQ #487
PDF Page 331
7.6.4.11.4
Delete "For well known logical units, the Device Identification VPD page
shall contain one or more SCSI target device identification
descriptors (see 7.6.4.11.1)."
section 7.6.4.11.1 already says that all logical units must return an
identification descriptor for the target device. This is redundant.
The only thing special about well known logical units is that they do not
have association=0 identifiers.

HPQ #488
PDF Page 332
7.6.5 RTO paragraph
the protected information s/b protection information

HPQ #489
PDF Page 332
7.6.5 GRD_CHK paragraph
"the protection information" s/b "protection information"

HPQ #490
PDF Page 332
7.6.5 GRD_CHK paragraph
"the protection information" s/b "protection information"

HPQ #491
PDF Page 332
7.6.5 APP_CHK paragraph
"the protection information" s/b "protection information"

HPQ #492
PDF Page 332
7.6.5 APP_CHK paragraph
"the protection information" s/b "protection information"

HPQ #493
PDF Page 332
7.6.5 REF_CHK paragraph
"the protection information" s/b "protection information"

HPQ #494
PDF Page 332
7.6.5 REF_CHK paragraph
"the protection information" s/b "protection information"

HPQ #495
PDF Page 332
7.6.5 GROUP_SUP paragraph
"grouping function" s/b "the grouping function"

HPQ #496
PDF Page 332
7.6.5 GROUP_SUP paragraph
"grouping function" s/b "the grouping function"

HPQ #497
PDF Page 332
7.6.5
Delete "If the allocation length is less than the length of the data to be

returned, the page length shall not be adjusted to reflect the
truncation."
which is covered by the general ALLOCATION LENGTH definition.

HPQ #498
PDF Page 335
Table 319 Mode page policy codes
As part of deleting the per initiator port mode page policy,
change "10b Per initiator port" to "10b Reserved" (it was not in SPC-2 so
need not be marked Obsolete)

HPQ #499
PDF Page 335
7.6.7
Change to 'or' to 'and' in '3Fh or'. Given the paragraph immediately below,
the Policy Page Code field can contain 3Fh only when
the Policy Subpage Code field contains FFh and vice-versa.

HPQ #500
PDF Page 335
table 319
Value s/b Code

HPQ #501
PDF Page 335
table 319
Change "Mode page policy values" to "MODE PAGE POLICY field"

HPQ #502
PDF Page 335
7.6.7
Add "If the target device has more than one logical unit," to the beginning
of the MLUS should paragraph.
It is unclear what a disk drive with a single logical unit is supposed to
do. This clarifies that it sets MLUS to 0.

HPQ #503
PDF Page 335
7.6.7 MLUS
should s/b shall
The description of each page discusses unit attentions created for in
logical units if any parameter changes. That implies the
parameters are shared by multiple logical units.

HPQ #504
PDF Page 336
7.6.8
"page" s/b "VPD page"

HPQ #505
PDF Page 337
above table 321
Change 3 to '321'.

HPQ #506
PDF Page 337
table 322
Value s/b Code

HPQ #507
PDF Page 337
Change "Relative port identifier values" to "RELATIVE PORT field"

HPQ #508
PDF Page 338
7.6.8
shall indicate s/b indicates

HPQ #509
PDF Page 339
7.6.9

Delete "If the allocation length is too small to transfer all of the VPD
page, the page length shall not be adjusted to reflect the
truncation."
which is covered by the general ALLOCATION LENGTH definition.

HPQ #510
PDF Page 339
7.6.9
"page" s/b "VPD page"

HPQ #511
PDF Page 340
7.6.10
Delete "If the allocation length is too small to transfer all of the VPD
page, the page length shall not be adjusted to reflect the
truncation."
which is covered by the general ALLOCATION LENGTH definition.

HPQ #512
PDF Page 340
7.6.11
Delete "If the allocation length is too small to transfer all of the VPD
page, the page length shall not be adjusted to reflect the
truncation."
which is covered by the general ALLOCATION LENGTH definition.

HPQ #513
PDF Page 340
table 326
supported s/b Supported

HPQ #514
PDF Page 360
8.3.2.2.1
described s/b defined

HPQ #515
PDF Page 361
8.3.2.2.2.1
Delete "If the allocation length is too small to transfer all of the REPORT
ACL parameter data, the ACL data length shall not be
adjusted to reflect the truncation."
which is covered by the general ALLOCATION LENGTH definition.

HPQ #516
PDF Page 362
table 341
"Descriptors" s/b "descriptor list"

HPQ #517
PDF Page 362
8.3.2.2.2.2
Delete "and shall not
be adjusted to reflect any truncation caused by insufficient allocation
length."
which is covered by the general ALLOCATION LENGTH definition.

HPQ #518
PDF Page 362
8.3.2.2.2.2 "shall indicate" s/b "indicates"

HPQ #519
PDF Page 365
table 345
"descriptors" s/b "descriptor list"

HPQ #520
PDF Page 365
8.3.2.2.2.4
"shall indicate" s/b "indicates"

HPQ #521
PDF Page 365
8.3.2.2.2.4
Delete "and shall not
be adjusted to reflect any truncation caused by insufficient allocation
length."
which is covered by the general ALLOCATION LENGTH definition.

HPQ #522
PDF Page 366
8.3.2.3.1
described s/b defined

HPQ #523
PDF Page 367
table 348
"descriptors" s/b "descriptor list"

HPQ #524
PDF Page 367
8.3.2.3.2
Delete "If the allocation length is too small to transfer all of the REPORT
LU DESCRIPTORS parameter data, the LU inventory
length shall not be adjusted to reflect the truncation."
which is covered by the general ALLOCATION LENGTH definition.

HPQ #525
PDF Page 369
8.3.2.3.2
Delete "and shall not reflect
any truncation of the parameter data as a result of insufficient allocation
length."
which is covered by the general ALLOCATION LENGTH definition.

HPQ #526
PDF Page 372
8.3.2.4.2.1
Delete "If the allocation length is too small to transfer all of the REPORT
ACCESS CONTROLS LOG parameter data, the log list
length shall not be adjusted to reflect the truncation."
which is covered by the general ALLOCATION LENGTH definition.

HPQ #527
PDF Page 372
8.3.2.4.1
described s/b defined

HPQ #528
PDF Page 376
8.3.2.5
described s/b defined

HPQ #529
PDF Page 378
8.3.2.6
described s/b defined

HPQ #530
PDF Page 379
8.3.3
Command s/b command

HPQ #531
PDF Page 383
table 366
Descriptors s/b descriptors

HPQ #532
PDF Page 400
B.3
Explain the value of the UNREG bit (of the REGISTER AND MOVE service action

parameter list).

HPQ #533
PDF Page 400
B.3
Explain the value of the UNREG bit (of the REGISTER AND MOVE service action
parameter list).

HPQ #534
PDF Page 401
C.2.3
"parameter control byte" s/b "PARAMETER CONTROL byte"

HPQ #535
PDF Page 401
C.2.5
"parameter control byte" s/b "PARAMETER CONTROL byte"

HPQ #536
PDF Page 401
Delete "C.2.8 GT: Greater Than"
and replace with > everywhere used (which is in the main glossary)

HPQ #537
PDF Page 401
Delete "C.2.9 NV: Not Valid" It's one use in table c.9 can be replaced by -
or xx.

HPQ #538
PDF Page 402
table c.1 0--
Indicates s/b specifies

HPQ #539
PDF Page 402
table c.1 1--
Indicates that the device server returns" s/b "Specifies that the device
server return"

HPQ #540
PDF Page 402
table C.1 -0-
"Indicates that the device server performs the specified LOG SENSE command
and does not"
s/b "Specifies that the device server perform the specified LOG SENSE
command and not"

HPQ #541
PDF Page 402
table C.1 -1-
"Indicates that the device server performs the specified LOG SENSE command
and saves"
s/b "Specifies that the device server perform the specified LOG SENSE
command and save"

HPQ #542
PDF Page 402
table C.1 --00
"Indicates that the device server returns"
s/b "Specifies that the device server return"

HPQ #543
PDF Page 402
table C.1 --01
"Indicates that the device server returns"
s/b "Specifies that the device server return"

HPQ #544
PDF Page 402
table C.1 --10
"Indicates that the device server returns"

s/b "Specifies that the device server return"

HPQ #545
PDF Page 402
table C.1 --11
"Indicates that the device server returns"
s/b "Specifies that the device server return"

HPQ #546
PDF Page 404
c.3 before table c.3
"log parameter control byte" s/b "PARAMETER CONTROL byte"

HPQ #547
PDF Page 404
table c.3
"Log Page Parameter
Control Byte Value"
s/b "PARAMETER CONTROL byte values"

HPQ #548
PDF Page 405
table C.4
"Indicates that the log parameters are not reset."
s/b
"Specifies that the device server not reset the log parameters."

HPQ #549
PDF Page 405
Table C.4
"Indicates that the device server sets"
s/b "Specifies that the device server set"

HPQ #550
PDF Page 405
table C.4
"Indicates that the device server does not" s/b "Specifies that the device
server not"

HPQ #551
PDF Page 405
table C.4
"Indicates that, after performing the specified LOG SELECT
operation, the device server saves" s/b "Specifies that, after performing
the specified LOG SELECT operation, the device server
save"

HPQ #552
PDF Page 405
table C.4
"Indicates that the application client sends"
s/b "Specifies that the application client is sending"

HPQ #553
PDF Page 405
table C.4
"Indicates that the application client sends"
s/b "Specifies that the application client is sending"

HPQ #554
PDF Page 405
table C.4
"Indicates that the application client sends"
s/b "Specifies that the application client is sending"

HPQ #555
PDF Page 405
table C.4
"Indicates that the application client sends"
s/b "Specifies that the application client is sending"

HPQ #556
PDF Page 405
table C.4
"GT 0" s/b "> 0"

HPQ #557
PDF Page 406
C.4
"log parameter control byte"
s/b "PARAMETER CONTROL byte"

HPQ #558
PDF Page 406
table c.5
"Log Page Parameter
Control Byte Value"
s/b
"PARAMETER CONTROL byte values"

HPQ #559
PDF Page 408
C.5.1
"parameter control byte of the log parameter." s/b "PARAMETER CONTROL byte
(see 7.2)."

HPQ #560
PDF Page 408
C.5.1
"parameter control byte" s/b "PARAMETER CONTROL byte"

HPQ #561
PDF Page 408
C.5.1
"parameter control byte" s/b "PARAMETER CONTROL byte"

HPQ #562
PDF Page 408
table c.7 title
"Log Parameter Control Byte"
s/b "PARAMETER CONTROL byte"

HPQ #563
PDF Page 408
table c.7 header row
"Log Parameter
Control Byte
Values"
s/b "PARAMETER CONTROL byte values'

HPQ #564
PDF Page 409
table c.8 title
"Log Parameter Control Byte" s/b "PARAMETER CONTROL byte"

HPQ #565
PDF Page 409
table C.8 header row
"Parameter Control Byte Values" s/b "PARAMETER CONTROL byte values"

HPQ #566
PDF Page 409
table C.9 header row
"Log Page Parameter
Control Byte Values"
s/b "PARAMETER CONTROL byte values"

HPQ #567
PDF Page 409
table C.9
"GT 0" s/b "> 0"

HPQ #568
PDF Page 409
table c.9
Change "NV" to "xx" or "-". Since ETC is 0, the value is meaningless.

HPQ #569
PDF Page 409
table c.9
RECL s/b RLEC

HPQ #570
PDF Page 410
C.5.3
Change "Set DU to 1" to "Set the DU bit to 1, indicating that the device
server is no longer updating the log parameter"

HPQ #571
PDF Page 410
C.5.2, C.5.3, and C.5.4 do not show up in the table of contents

HPQ #572
PDF Page 411
D.1 first paragraph
Add "diagnostic page codes"
D.1 first paragraph
add "version descriptor values" and "T10 IEEE binary identifiers"

HPQ #574
PDF Page 411
All D.n section headers
Only capitalize the first word in each of the section headers:
Additional sense codes
Operation codes
Diagnostic [page] codes
Log page codes
Mode page codes
VPD page codes
Version descriptor values

HPQ #575
PDF Page 411
D.2
"additional sense codes and the additional sense code qualifiers."
s/b
additional sense codes (i.e., the ADDITIONAL SENSE CODE field and
ADDITIONAL SENSE CODE QUALIFIER field values
returned in sense data)."

HPQ #576
PDF Page 411
D.2
"Additional Sense Codes" s/b "Additional sense codes"

HPQ #577
PDF Page 425
Table D.1 end
Fix capitalization in "vendor specific QUALIFICATION OF STANDARD ASC."
Also, note that most other tables use "Vendor specific" rather than "vendor
specific."

HPQ #578
PDF Page 426
D.3
"Operation Codes" s/b "Operation codes"

HPQ #579
PDF Page 426
D.3.1
"Operation Codes" s/b "Operation codes"

HPQ #580

PDF Page 428
Table D.2
36h LOCK UNLOCK CACHE (10) is obsolete in SBC-2

HPQ #581
PDF Page 430
Table D.2
92h LOCK UNLOCK CACHE (16) is obsolete in SBC-2

HPQ #582
PDF Page 432
D.3.2
set s/b "set to one"

HPQ #583
PDF Page 432
D.3.3
set s/b "set to one"

HPQ #584
PDF Page 432
D.3.2
set s/b "set to one"

HPQ #585
PDF Page 432
D.3.3
set s/b "set to one"

HPQ #586
PDF Page 435
Table D.8
Change "Direct-access device" to "Direct-access block device"

HPQ #587
PDF Page 435
D.3.6
"Variable Length CDB Service Action Codes" s/b "Variable length CDB service
action codes"

HPQ #588
PDF Page 436
D.4
"Diagnostic Codes" s/b "Diagnostic page codes"

HPQ #589
PDF Page 436
D.4 first paragraph
Diagnostic s/b diagnostic

HPQ #590
PDF Page 437
D.5
"Log Page Codes" s/b "Log page codes"

HPQ #591
PDF Page 438
D.6
"Mode Page Codes" s/b "Mode page codes"

HPQ #592
PDF Page 440
D.7
"VPD Page Codes" s/b "VPD page codes"

HPQ #593
PDF Page 441
Table D.14
Create a separate column for the decimal and hexadecimal representations of
the version descriptor code. Or, drop the decimal
altogether.

HPQ #594
PDF Page 441
D.8
Change "Version Descriptor Values" to "Version Descriptor Codes"

HPQ #595
PDF Page 451
Table D.15
SAS-2 s/b SAS-1.1

HPQ #596
PDF Page 451
Table D.15
ATAPI-6 s/b ATA/ATAPI-6

HPQ #597
PDF Page 451
Table D.15
ATAPI-7 s/b ATA/ATAPI-7

HPQ #598
PDF Page 454
Global
Annex E first paragraph
Before "www.t10.org" add "http://" (either use http:// everywhere or remove
it everywhere; I recommending using it)

HPQ #599
PDF Page 465
Move all the Annex F definitions into the main definitions section 3.1.

****

Comments attached to No ballot from George O. Penokie of
IBM Corp.:

IBM-001
PDF pg 3, pg iii, Revision Information
The revision information needs to be removed before letter ballot

IBM-002
PDF pg 44, pg xliv, Foreword, 2nd paragraph
The statement << SCSI devices (disks, tapes, printers, etc.) by an operating
system. >> should be << SCSI devices (e.g., disks, tapes, printers) by an
operating system. >>

IBM-003
PDF pg 46, pg vli, Introduction, 1st paragraph
The statement << standard is divided into eleven clauses: >> is not correct.
It should be changed to << standard is divided into the following clauses
and
annexes: >>

IBM-004
PDF pg 46, pg vli, Introduction
All the annex description should contain whether the annex is informative or
norminative.

IBM-005
PDF pg 47, pg 1, 1 Scope, 1st paragraph
The statement << devices (disks, tapes, printers, scanners, and many more).
>>
should be << devices (e.g., disks, tapes, printers, scanners). >>

IBM-006
PDF pg 47, pg 1, 1 Scope, 2nd paragraph
The statement << specifies the interfaces, functions, and operations >>
would

be more accurate if it was stated as << specifies the protocols, functions, and operations >>

IBM-007
PDF pg 47, pg 1, 1 Scope, Item h
The statement << The Medium Partition mode pages 2-4; >> should be << The Medium Partition mode pages 2h, 3h, and 4h; >>

IBM-008
PDF pg 48, pg 2, 1 Scope
There is no point in this list of standards. It is never 100% correct. It should be deleted from SPC-3.

IBM-009
PDF pg 52, pg 6, 2.4 IETF References
This << draft-ietf-ips-iscsi-16.txt >> should be changed to << RFC 3720 >>

IBM-010
PDF pg 53, pg 7, 3.1.5 active condition:
This << capable of responding immediately to media access requests, >> should
be << capable of responding without delay to media access requests, >>

IBM-011
PDF pg 53, pg 7, 3.1.12 auto contingent allegiance (ACA):
This << set to one in the CONTROL byte. >> should be << set to one in the CONTROL byte of a CDB. >>

IBM-012
PDF pg 53, pg 7, 3.1.13 blocked task:
I see no need to reference SAM-3 twice in one definition. Delete the first reference << as defined in SAM-3.>>

IBM-013
PDF pg 54, pg 8, 3.1.20 Control mode page:
I see no point in having a definition for a mode page in the glossary. It should be deleted.

IBM-014
PDF pg 54, pg 8, 3.1.21 Control Extension mode page:
I see no point in having a definition for a mode page in the glossary. It should be deleted.

IBM-015
PDF pg 54, pg 8, 3.1.26 designation:
This is the word I used to replace <<identification>> in VPD page 83h. This is
a problem. One way to handle it would be to state << When used in reference to
access controls, a name and optional identifier information that specifies >>.
Another way would be to find a new word.

IBM-016
PDF pg 54, pg 8, 3.1.27 Device Identification VPD page:
I see no point in having a definition for a VPD page in the glossary. It should be deleted.

IBM-017
PDF pg 54, pg 8, 3.1.31 device type:
This << The type of device (or device model) implemented >> should be << The type of device or device model implemented >>

IBM-018
PDF pg 54, pg 8, 3.1.32 Disconnect-Reconnect mode page:
I see no point in having a definition for a mode page in the glossary. It should be deleted.

IBM-019
PDF pg 55, pg 9, 3.1.39 I_T_L nexus:
Change << and logical unit in them (see SAM-3). >> to << and logical unit

within those SCSI devices (see SAM-3). >>

IBM-020
PDF pg 55, pg 9, 3.1.42 idle condition:
Change << capable of responding quickly to media access >> to << capable of responding with little or no delay to media access >>

IBM-021
PDF pg 56, pg 10, 3.1.53 logical unit identifier:
There is no such thing as a logical unit identifier defined or used in SAM-3.
If there was such a thing (which is a pure sense there should be) it would be
synonymous with logical unit number.

IBM-022
PDF pg 56, pg 10, 3.1.57 medium:
this << nonvolatile manner (retained through a power cycle) in >> should be <<
nonvolatile manner (i.e., retained through a power cycle) in >>

IBM-023
PDF pg 56, pg 10, 3.1.62 network address authority (NAA):
This <<An organization that administers network addresses such as the identifiers that may be used in the Device Identification VPD page (see 7.6.4). >> should be << A field within a name that specifies the format and length of that name (see FC-FS and 7.6.4). >> .

IBM-024
PDF pg 56, pg 10, 3.1.64 null-padded:
This << end of the field (highest offset) >> should be << end of the field (i.e., highest offset) >>

IBM-025
PDF pg 56, pg 10, 3.1.64 null-padded:
This << the last used byte (highest offset) is required >> should be << the last used byte (i.e., highest offset) is required >>

IBM-026
PDF pg 57, pg 11, 3.1.80 right-aligned:
This << field (lowest offset) and are >> should be << field (i.e., lowest offset) and are >>

IBM-027
PDF pg 57, pg 11, 3.1.83 SCSI device name:
This << device that is world wide unique within the protocol of a SCSI domain
(see 3.1.84) >> should be << device that is world wide unique >>. If it is only unique within the SCSI domain then it is of little or no value.

IBM-028
PDF pg 58, pg 12, 3.1.88 SCSI port:
This usage of the term << element >> is not correct per the definitions of the
term << element >>. This << An element of a SCSI device that connects the application client, >> should be << An object within a SCSI device that connects the application client, >>

IBM-029
PDF pg 58, pg 12, 3.1.90 SCSI port name:
This << port that is world wide unique within the protocol of the SCSI domain
of that SCSI port (see 3.1.88). >> should be << port that is world wide unique. >> If it is only unique within the SCSI domain then it is of little or no value.

IBM-030
PDF pg 59, pg 13, 3.1.114 vendor specific (VS):
This << Something (e.g., a bit, field, code value, etc.) that is not defined by this standard >> should be << Something (e.g., a bit, field, code value) that is not defined by this standard >>

IBM-031
PDF pg 59, pg 13, 3.1.119 zero-padded:
This << end of the field (highest offset) and >> should be << end of the
field
(i.e., highest offset) and >>

IBM-032
PDF pg 60, pg 14, 3.2 Acronyms
This << SCSI-3 Fibre Channel Protocol - 2 >> should be << Fibre Channel
Protocol for SCSI -2 >> as that is the official name of the standard.

IBM-033
PDF pg 63, pg 17, 3.5 Bit and byte ordering, 2nd paragraph
This << shown on the left; and bit 0 is the LSB and is shown >> should be <<
shown on the left, and bit 0 is the LSB and is shown >>

IBM-034
PDF pg 63, pg 17, 3.5 Bit and byte ordering, 4th paragraph
This << in the table (if any) that describes >> should be << in the table,
if
any, that describes >>

IBM-035
PDF pg 63, pg 17, 3.6.1 Notation for byte encoded character strings, 1st
paragraph
This << are shown in exactly the case that is to be encoded. >> should be <<
are shown in the case that is to be encoded. >>

IBM-036
PDF pg 72, pg 26, 4.3.4.3 Logical block address, 1st paragraph
This is no such thing as a << partition volume >> there are partitions and
there are volumes. Is what is meant here << within a volume or partition
shall
begin with block zero and be contiguous up to the last logical block of that
logical unit or within that partition or volume. >>? If so it should be
changed as indicated.

IBM-037
PDF pg 72, pg 26, 4.3.4.4 Transfer length, 1st paragraph
This << See the following descriptions and the individual command >> should
be
<< See the descriptions in this subclause and the individual command >>

IBM-038
PDF pg 77, pg 31, 4.5.2.2 Information sense data descriptor, table 15
The VALID bit is always set to 1 so the table cell should be << VALID (1b)
>>

IBM-039
PDF pg 78, pg 32, 4.5.2.4.1 Sense key specific sense data descriptor
introduction, table 17
The SKSV bit is always set to 1 so the table cell should be << SKSV (1b) >>

IBM-040
PDF pg 79, pg 33, 4.5.2.4.2 Field pointer sense key specific data, table 19
The SKSV bit is always set to 1 so the table cell should be << SKSV (1b) >>

IBM-041
PDF pg 80, pg 34, 4.5.2.4.3 Actual retry count sense key specific data, table
20
The SKSV bit is always set to 1 so the table cell should be << SKSV (1b) >>

IBM-042
PDF pg 80, pg 34, 4.5.2.4.4 Progress indication sense key specific data,
table 21
The SKSV bit is always set to 1 so the table cell should be << SKSV (1b) >>

IBM-043
PDF pg 80, pg 34, 4.5.2.4.4 Progress indication sense key specific data, note
7

This << with the number of defects encountered, etc., it is reasonable >>
should be << with the number of defects encountered, it is reasonable >>

IBM-044
PDF pg 81, pg 35, 4.5.2.4.5 Segment pointer sense key specific data, table
22
The SKSV bit is always set to 1 so the table cell should be << SKSV (1b) >>

IBM-045
PDF pg 85, pg 39, 4.5.6 Sense key and sense code definitions, Table 27 - Key
2h
This << addressed cannot be accessed. >> should be << addressed is not able
to
be accessed. >>

IBM-046
PDF pg 102, pg 56, 5.2.1 Summary of commands implemented by all SCSI device
servers
This << implement - INQUIRY, REQUEST SENSE, and TEST UNIT READY. >> should
be
<< implement; INQUIRY, REQUEST SENSE, and TEST UNIT READY. >>
And no comments from the peanut galley !!!.

IBM-047
PDF pg 102, pg 56, 5.2.2 Using the INQUIRY command
This << this information (or whatever part of it that is available) upon
completing power-on initialization. >> should be << this information, or
whatever part of it that is available, upon completing power-on
initialization. >>

IBM-048
PDF pg 103, pg 57, 5.4 Parameter rounding, 3rd paragraph
This << cases, the type of rounding (up or down) is explicitly specified >>
should be << cases, the type of rounding (i.e., up or down) is explicitly
specified >>

IBM-049
PDF pg 103, pg 57, 5.5.2 The short and extended self-tests, 1st paragraph
This << SEND DIAGNOSTIC command: a short self-test and an extended
self-test.
>> should be << SEND DIAGNOSTIC command; a short self-test and an extended
self-test. >>

IBM-050
PDF pg 103, pg 57, 5.5.2 The short and extended self-tests, Item a
This << included are: a buffer RAM test, a read/write
circuitry test, and/or a test of the read/write heads; >> should be a new
list
of item under item a). << included are:
aa) a buffer RAM test;
bb) a read/write circuitry test, and/or;
cc) a test of the read/write heads; >>

IBM-051
PDF pg 104, pg 58, 5.5.3 Self-test modes, 1st paragraph
This << There are two modes for short and extended self-tests: a foreground
mode and a background mode. >> should be << There is a foreground mode and a
background mode for both the short and extended self-tests. >>

IBM-052
PDF pg 105, pg 59, 5.5.3.2 Background mode, Table 29
This << NOTE 1 >> should be << NOTE >>.

IBM-053
PDF pg 105, pg 59, 5.5.3.2 Background mode, Last paragraph
This << field set to 100b (Abort background self-test function). >> should
be
<< field set to 100b (i.e., abort background self-test function). >>

IBM-054
PDF pg 105, pg 59, 5.5.3.3 Features common to foreground and background

self-test modes, 2nd paragraph
This << about the twenty most recently completed >> should be << about the
20
most recently completed >>

IBM-055
PDF pg 107, pg 61, 5.6.1 Persistent Reservations overview, 1st paragraph
after
a,b,c, list.
This << RESERVATION >> should be << RESERVE >>

IBM-056
PDF pg 108, pg 62, 5.6.1 Persistent Reservations overview, 1st paragraph
above
table 31
The statement << (preferred) >> is meaningless and should be deleted as it
is
essentially a note to the committee itself to do something. There is nothing
an implentator can gain from the statement.

IBM-057
PDF pg 112, pg 66, 5.6.4 Preserving persistent reservations and
registrations,
1st paragraph after note 10
This << Any SCSI device and logical unit that supports >> should be << Any
SCSI device with a logical unit that supports >>

IBM-058 Technical
PDF pg 118, pg 72, 5.6.9 Persistent reservation holder
After the RESERVE AND MOVE service action the persistent reservation holder
is
no longer as stated in item b << the persistent reservation holder is the
I_T
nexus for which the reservation was established >>
I believe there should be a new item c that states something like << For
all
other persistent reservation types, the persistent reservation holder is the
I_T nexus to which the reservation is moved with a PERSISTENT RESERVE OUT
command with RESERVE AND MOVE service action. >> and the << RESERVE AND MOVE
service action >> should be deleted from item b.

IBM-059 Technical
PDF pg 120, pg 74, 5.6.10.1.2 Processing for released registrants only
persistent reservations, 1st paragraph
This <<becomes unregistered the persistent reservation shall be released. >>
should be << becomes unregistered by means other than a CLEAR reservation
action, PREEMPT service action, or PREEMPT AND ABORT service action the
persistent reservation shall be released. >> Without this change it
appears
that two unit attentions are generated if there is a clear or preempt.

IBM-060 Technical
PDF pg 120, pg 74, 5.6.10.1.2 Processing for released registrants only
persistent reservations, First item b
This << was PREEMPT or PREEMPT AND ABORT, the additional sense code >>
should
be << was PREEMPT or PREEMPT AND ABORT and the TYPE or SCOPE have not
changed,
the additional sense code >>. This now leads into the next paragraph and
eliminates the possibility of requiring multiple unit attentions.

IBM-061 Technical
PDF pg 120, pg 74, 5.6.10.1.2 Processing for released registrants only
persistent reservations, Last item b
The statement << If the service action was REGISTER or REGISTER AND IGNORE
with the SERVICE ACTION KEY field set to zero, the additional sense code
shall
be set to RESERVATIONS RELEASED. >> makes no sense as the type and scope are
ignored for register and register and ignore service actions. The statement
<< the service action was REGISTER or REGISTER AND IGNORE with the SERVICE
ACTION KEY field set to zero >> seems to be an example of what is being

described is the 1st paragraph of this section. I would move it as such <<
type reservation becomes unregistered the persistent reservation shall be
released (e.g., if the service action was REGISTER or REGISTER AND IGNORE
with
the SERVICE ACTION KEY field set to zero).>>

IBM-062
PDF pg 121, pg 75, 5.6.10.2 Releasing, item c
This << a registrants only or >> should be << registrants only type or >>
to
make it clear with the name of the type is.

IBM-063
PDF pg 121, pg 75, 5.6.10.2 Releasing, 2nd paragraph before the last a.b.c
list
This paragraph << The sense key shall be set to ILLEGAL REQUEST and the
additional sense code shall be set to INVALID RELEASE OF PERSISTENT
RESERVATION. >> appears to be the key/code/qual for the CC associated with
the
a,b,c list but this is not obvious. It should be move to before the list as
such << CHECK CONDITION status the sense key shall be set to ILLEGAL REQUEST
and the additional sense code shall be set to INVALID RELEASE OF PERSISTENT
RESERVATION for a PERSISTENT RESERVE OUT command that specifies the release
of
a persistent reservation if: >>

IBM-064
PDF pg 122, pg 76, 5.6.10.3 Unregistering, Last paragraph
This << than all registrants, >> should be << than all registrants type, >>
to
make the wording consistent.

IBM-065
PDF pg 124, pg 78, 5.6.10.4.3 Preempting persistent reservations and
registration handling, Last a.b.c. list
This << in the dormant, blocked, or enable state at the time >> should be <<

in the dormant, blocked, or enable state (see SAM-3) at the time >>

IBM-066
PDF pg 125, pg 79, 5.6.10.5 Preempting and aborting, First item A
This << if the NACA bit equals one in the CDB CONTROL >> should be << if the
NACA bit is set to one in the CDB CONTROL >>

IBM-067
PDF pg 125, pg 79, 5.6.10.5 Preempting and aborting, 1st item A
This<< if the NACA bit equals zero; >> should be << if the NACA bit is set
to
zero; >>

IBM-068
PDF pg 125, pg 79, 5.6.10.5 Preempting and aborting, item c)
This << being preempted (called preempted tasks) >> should be << being
preempted (i.e., preempted tasks) >>

IBM-069
PDF pg 126, pg 80, 5.6.10.5 Preempting and aborting, Item c
This << associated with the I_T nexus associated with the persistent
reservation >> should be << associated with the I_T nexus and the persistent
reservation >>

IBM-070
PDF pg 126, pg 80, 5.6.10.5 Preempting and aborting
item c
This << preempted (called the preempted initiator port), >> should be <<
preempted (i.e., the preempted initiator port), >>

IBM-071
PDF pg 132, pg 86, 5.8.2.7 Implicit asymmetric logical units access
management, item a)
This << identifier >> should be << designator >> to match the name change in

VPD page 83h.

IBM-072
PDF pg 132, pg 86, 5.8.2.8 Explicit asymmetric logical units access management, item a)
This << identifier >> should be << designator >> to match the name change in VPD page 83h.

IBM-073
PDF pg 141, pg 95, 6.2.1 CHANGE ALIASES command introduction, 1st paragraph
The term << SCSI device >> should be << SCSI target device>>

IBM-074
PDF pg 141, pg 95, 6.2.1 CHANGE ALIASES command introduction, 1st paragraph
The term << port >> should be << SCSI target port >>

IBM-075
PDF pg 141, pg 95, 6.2.1 CHANGE ALIASES command introduction, 1st paragraph
The term << SCSI device >> should be << SCSI target device>>

IBM-076
PDF pg 141, pg 95, 6.2.1 CHANGE ALIASES command introduction, 1st paragraph
The term << port >> should be << SCSI target port >>

IBM-077
PDF pg 141, pg 95, 6.2.1 CHANGE ALIASES command introduction, 2nd paragraph
This << or the SCCS bit equal to one >> should be << or the SCCS bit set to one >>

IBM-078
PDF pg 141, pg 95, 6.2.1 CHANGE ALIASES command introduction, 3rd paragraph after table 43
The term << SCSI device >> should be << SCSI target device>>

IBM-079
PDF pg 141, pg 95, 6.2.1 CHANGE ALIASES command introduction, 3rd paragraph after table 43
The term << port >> should be << SCSI target port >>

IBM-080
PDF pg 142, pg 96, 6.2.1 CHANGE ALIASES command introduction, note12
The term << SCSI device >> should be << SCSI target device>>

IBM-081
PDF pg 142, pg 96, 6.2.1 CHANGE ALIASES command introduction, note 12
The term << port >> should be << SCSI target port >>

IBM-082
PDF pg 142, pg 96, 6.2.1 CHANGE ALIASES command introduction, note 12
This << an alias target >> should be << an alias SCSI target >>

IBM-083
PDF pg 144, pg 98, 6.2.3 Alias designation validation, note 14
This << would be invalid. >> should be << is invalid>>.

IBM-084
PDF pg 144, pg 98, 6.2.3 Alias designation validation, note 14
This <<designation would be valid >> should be << designation is valid >>.

IBM-085
PDF pg 146, pg 100, 6.3.1 EXTENDED COPY command introduction, 1st paragraph after table 48
This <<command. These actions may include media changer commands, loading of tapes, MODE SELECT commands, reservation commands, positioning of tape, etc. After >> should be << command (e.g., these actions may include media changer commands, loading of tapes, MODE SELECT commands, reservation commands, positioning of tape). After >>

IBM-086
PDF pg 146, pg 100, 6.3.1 EXTENDED COPY command introduction, 2nd paragraph after table 48

This << internal state; this shall not be considered an error. >> should be
<<
 internal state. This condition shall not be considered an error. >>

IBM-087
PDF pg 147, pg 101, 6.3.1 EXTENDED COPY command introduction, 3rd paragraph
after table 48
This << begins with a sixteen byte header >> should be << begins with a 16
byte header >>

IBM-088
PDF pg 148, pg 102, 6.3.1 EXTENDED COPY command introduction, 3rd paragraph
after note 16
This << copy manager that disk references are not necessarily sequential. >>
should be << copy manager that disk references may not be sequential. >>

IBM-089
PDF pg 148, pg 102, 6.3.1 EXTENDED COPY command introduction, 6th paragraph
after note 16
This << copy target devices (the name given by the EXTENDED COPY command
description to source and/or the destination logical units). >> should be <<
copy target devices (i.e., the name given by the EXTENDED COPY command
description to source and/or the destination logical units). >>

IBM-090
PDF pg 148, pg 102, 6.3.1 EXTENDED COPY command introduction, 6th paragraph
after note 16
This << descriptor formats and shall list all target >> should be <<
descriptor formats, however, the copy manager shall list all target >>

IBM-091
PDF pg 149, pg 103, 6.3.1 EXTENDED COPY command introduction, last paragraph
This << as prescribed by the>> should be << as specified by the>>

IBM-092
PDF pg 149, pg 103, 6.3.2 Errors detected before starting processing of the
segment descriptors, 1st paragraph
This << include CRC or parity errors while transferring >> should be <<
include CRC errors while transferring >> as there are no more parity
errors
only CRC as parity errors only occur on parallel SCSI.

IBM-093
PDF pg 149, pg 103, 6.3.3 Errors detected during processing of segment
descriptors, 2nd paragraph
This << of a segment cannot complete because >> should be << of a segment is
not able to complete because >>

IBM-094
PDF pg 149, pg 103, 6.3.3 Errors detected during processing of segment
descriptors, 2nd paragraph
This<< target device, or because the copy target device does not respond to
INQUIRY, or because the data returned in response >> should be << target
device, because the copy target device does not respond to INQUIRY, or
because the data returned in response >>

IBM-095
PDF pg 149, pg 103, 6.3.3 Errors detected during processing of segment
descriptors, 3rd paragraph
This << of a segment cannot complete because >> should be << of a segment is
not able to complete because >>

IBM-096
PDF pg 150, pg 104, 6.3.3 Errors detected during processing of segment
descriptors, note 17
This << fruitless repetition of retries. >> should be << excessive retries.
>>

IBM-097
PDF pg 150, pg 104, 6.3.3 Errors detected during processing of segment
descriptors, item b

This << list. The first segment descriptor in the parameter list is assigned
descriptor number zero, the second is assigned one, etc.; >> should be <<
list
(i.e., The first segment descriptor in the parameter list is assigned
descriptor number zero, the second is assigned one, etc.); >>

IBM-098
PDF pg 151, pg 105, 6.3.3 Errors detected during processing of segment
descriptors, item f
This << copy target device; and >> should be << copy target device; >>

IBM-099
PDF pg 152, pg 106, 6.3.5 Descriptor type codes, table 50 footnote a
This << by 'tape' in the >> should be << by the term tape in the >>

IBM-100
PDF pg 155, pg 109, 6.3.6.1 Target descriptors introduction, 4th paragraph
under table 52
This << SCSI device >> should be << SCSI target device >>.

IBM-101
PDF pg 155, pg 109, 6.3.6.1 Target descriptors introduction, 1st paragraph
under table 53
This << field specifies the relative port identifier (see 7.6.8) of the >>
should be << field specifies the relative port (see 7.6.8) of the >> as
there
is no relative port identifier.

IBM-102
PDF pg 156, pg 110, 6.3.6.2 Identification descriptor target descriptor
format, 1st paragraph
This << identification >> should be << designation >> to go along with the
changes in VPD page 83h.

IBM-103
PDF pg 156, pg 110, 6.3.6.2 Identification descriptor target descriptor
format, 1st paragraph
This << IDENTIFIER TYPE, IDENTIFIER LENGTH, and IDENTIFIER field values. >>
should be << DESIGNATOR TYPE, DESIGNATOR LENGTH, and DESIGNATOR field
values.
>> to go along with the changes in VPD page 83h.

IBM-104
PDF pg 156, pg 110, 6.3.6.2 Identification descriptor target descriptor
format, 1st paragraph
This << target identifier >> should be << target port identifier >>

IBM-105
PDF pg 156, pg 110, 6.3.6.2 Identification descriptor target descriptor
format, 1st paragraph
This << target identifiers >> should be << target port identifiers >>

IBM-106
PDF pg 156, pg 110, 6.3.6.2 Identification descriptor target descriptor
format, table 54 in three places
This << IDENTIFIER >> should be << DESIGNATOR >> to go along with the
changes
in VPD page 83h.

IBM-107
PDF pg 156, pg 110, 6.3.6.2 Identification descriptor target descriptor
format, 3rd paragraph after table 54
This << IDENTIFIER TYPE, IDENTIFIER LENGTH, and IDENTIFIER fields. >> should
be << DESIGNATOR TYPE, DESIGNATOR LENGTH, and DESIGNATOR fields. >> to go
along with the changes in VPD page 83h.

IBM-108
PDF pg 156, pg 110, 6.3.6.2 Identification descriptor target descriptor
format, 4th paragraph after table 54 in 2 places
This << identifier >> should be << designator >> to go along with the
changes

in VPD page 83h.

IBM-109
PDF pg 157, pg 111, 6.3.6.2 Identification descriptor target descriptor format, 5th paragraph after table 54 in 3 places
This << identifier >> should be << designator >> to go along with the changes
in VPD page 83h.

IBM-110 Technical
PDF pg 157, pg 111, 6.3.6.3 Alias target descriptor format, 1st paragraph
This << a SCSI target device and >> should be << a SCSI target port and >>

IBM-111
PDF pg 158, pg 112, 6.3.6.4 Device type specific target descriptor parameters
for block device types, 1st paragraph
This << types (device type code values 00h, 04h, 05h, 07h, and 0Eh) is >> should be << types (i.e., device type code values 00h, 04h, 05h, 07h, and 0Eh) is >>

IBM-112
PDF pg 158, pg 112, 6.3.6.4 Device type specific target descriptor parameters
for block device types, last paragraph
This << type. That is, the copy manager may perform read operations from a source disk at any time and in any order during processing of an EXTENDED COPY
command, provided that the relative order of writes and reads on the same blocks within the same target descriptor does not differ from their order in the segment descriptor list. >> should be << type (i.e., the copy manager may
perform read operations from a source disk at any time and in any order during
processing of an EXTENDED COPY command, provided that the relative order of writes and reads on the same blocks within the same target descriptor does not
differ from their order in the segment descriptor list). >>

IBM-113
PDF pg 158, pg 112, 6.3.6.5 Device type specific target descriptor parameters
for sequential-access device types, 1st paragraph
This << sequential-access device type (device type code value 01h) is shown in
table 57. >> should be << sequential-access device type (i.e., device type code value 01h) is shown in table 57. >>

IBM-114
PDF pg 159, pg 113, 6.3.6.5 Device type specific target descriptor parameters
for sequential-access device types, Last paragraph
This << device type. That is, the read operations required by a segment descriptor for which the source is a stream device shall not be started until
all write operations for previous segment descriptors have completed. >> should be << device type (i.e., the read operations required by a segment descriptor for which the source is a stream device shall not be started until
all write operations for previous segment descriptors have completed). >>

IBM-115
PDF pg 159, pg 113, 6.3.6.6 Device type specific target descriptor parameters
for processor device types, 1st paragraph
This << type (device type code value 03h) is shown in table 59. >> should be << type (i.e., device type code value 03h) is shown in table 59. >>

IBM-116
PDF pg 160, pg 114, 6.3.7.1 Segment descriptors introduction, 3rd from last
This << descriptor. In most cases, the length is constant. >> should be <<

descriptor. The length should be constant. >>

IBM-117
PDF pg 161, pg 115, 6.3.7.2 Segment descriptor processing, Table 61
This << Otherwise, just as much data as needed shall be processed (which may involve reading data from the source device) so that the destination data (which includes any residual destination data from the previous segment) is sufficient. >> should be << Otherwise, just as much data as needed shall be processed (i.e., data may be read from the source device) so that the destination data, which includes any residual destination data from the previous segment, is sufficient>>

IBM-118
PDF pg 162, pg 116, 6.3.7.2 Segment descriptor processing, table 61
This << of bytes (starting with residual source data, if any) shall be processed. >> should be << of bytes, starting with residual source data, if any, shall be processed. >>

IBM-119
PDF pg 162, pg 116, 6.3.7.2 Segment descriptor processing, table 61 last cell
This << not involve 'processing' as >> should be << not involve processing as >>

IBM-120
PDF pg 163, pg 117, 6.3.7.2 Segment descriptor processing, Last paragraph
This << the PAD were equal to zero >> should be << the PAD bit is set to zero >>

IBM-121
PDF pg 163, pg 117, 6.3.7.2 Segment descriptor processing, Last paragraph
This << the PAD were equal to zero >> should be << the PAD bit is set to zero >>

IBM-122
PDF pg 164, pg 118, 6.3.7.3 Block device to stream device operations, 2nd paragraph after table 63 In two places
The arrow overlaps the s in stream. This needs to be fixed.

IBM-123
PDF pg 164, pg 118, 6.3.7.3 Block device to stream device operations, 3rd paragraph after table 63
The arrow overlaps the s in stream. This needs to be fixed.

IBM-124
PDF pg 165, pg 119, 6.3.7.4 Stream device to block device operations, 2nd paragraph in two places
The arrow overlaps the b in block. This needs to be fixed.

IBM-125
PDF pg 165, pg 119, 6.3.7.4 Stream device to block device operations, 3rd paragraph
The arrow overlaps the b in block. This needs to be fixed.

IBM-126
PDF pg 166, pg 120, 6.3.7.5 Block device to block device operations, 2nd paragraph under table 64 in two places
The arrow overlaps the b in block. This needs to be fixed.

IBM-127
PDF pg 166, pg 120, 6.3.7.5 Block device to block device operations, 4th paragraph under table 64 i
The arrow overlaps the b in block. This needs to be fixed.

IBM-128
PDF pg 167, pg 121, 6.3.7.5 Block device to block device operations, 3rd paragraph from the last
This << The BLOCK DEVICE NUMBER OF BLOCKS field specifies the number of blocks
to be processed (if DC is set to zero) or to be written to the destination device (if DC is set to one). A value of zero shall not be considered as an

error. >> should be << If the DC bit is set to zero, the BLOCK DEVICE NUMBER OF BLOCKS field specifies the number of blocks to be processed. If the DC bit is set to one the BLOCK DEVICE NUMBER OF BLOCKS field specifies the number of blocks to be written to the destination device. A value of zero shall not be considered as an error. >>

IBM-129
PDF pg 168, pg 122, 6.3.7.6 Stream device to stream device operations, 2nd paragraph after table 65 In two places
The arrow overlaps the s in stream. This needs to be fixed.

IBM-130
PDF pg 168, pg 122, 6.3.7.6 Stream device to stream device operations, 3rd paragraph after table 65
The arrow overlaps the s in stream. This needs to be fixed.

IBM-131
PDF pg 170, pg 124, 6.3.7.7 Inline data to stream device operation, 1st paragraph after table 66
The arrow overlaps the s in stream. This needs to be fixed.

IBM-132
PDF pg 171, pg 125, 6.3.7.8 Embedded data to stream device operation, 1st paragraph after table 67
The arrow overlaps the s in stream. This needs to be fixed.

IBM-133
PDF pg 172, pg 126, 6.3.7.9 Stream device to discard operation, 2nd paragraph
after table 68 in two places
The arrow overlaps the d in discard. This needs to be fixed.

IBM-134
PDF pg 173, pg 127, 6.3.7.9 Stream device to discard operation, 3rd paragraph
after table 68 in 3 places
The arrow overlaps the d in discard. This needs to be fixed.

IBM-135
PDF pg 174, pg 128, 6.3.7.10 Verify device operation, last paragraph
This << the TUR bit set to one, then a TEST >> should be << the TUR bit is set
to one, then a TEST >>

IBM-136
PDF pg 174, pg 128, 6.3.7.10 Verify device operation, last paragraph
This << the TUR bit set to one, then the EXTENDED COPY >> should be << the TUR
bit is set to one, then the EXTENDED COPY >>

IBM-137
PDF pg 174, pg 128, 6.3.7.10 Verify device operation, last paragraph
This << If the TUR bit contains zero, then the >> should be << If the TUR bit
is set to zero, then the >>

IBM-138
PDF pg 174, pg 128, 6.3.7.11 Block device with offset to stream device operation, 1st paragraph after table 70
The arrow overlaps the s in stream. This needs to be fixed.

IBM-139
PDF pg 175, pg 129, 6.3.7.12 Stream device to block device with offset operation, 2nd paragraph
The arrow overlaps the b in block. This needs to be fixed.

IBM-140
PDF pg 176, pg 130, 6.3.7.13 Block device with offset to block device with offset operation, 1st paragraph after table 71

The arrow overlaps the b in block. This needs to be fixed.

IBM-141
PDF pg 177, pg 131, 6.3.7.14 Write filemarks operation, 1st paragraph after table 72
The arrow overlaps the y in tape. This needs to be fixed.

IBM-142
PDF pg 178, pg 132, 6.3.7.15 Space operation, 1st paragraph after table 73
The arrow overlaps the t in tape. This needs to be fixed.

IBM-143
PDF pg 179, pg 133, 6.3.7.16 Locate operation, 1st paragraph after table 74
The arrow overlaps the t in tape. This needs to be fixed.

IBM-144
PDF pg 180, pg 134, 6.3.7.17 Tape device image copy operation, 1st paragraph after table 75
The arrow overlaps the < in <i>. This needs to be fixed.

IBM-145
PDF pg 180, pg 134, 6.3.7.17 Tape device image copy operation, item c
This << count field >> should have count in small caps.

IBM-146
PDF pg 180, pg 134, 6.3.7.17 Tape device image copy operation, item d
This << count field >> should have count in small caps.

IBM-147
PDF pg 180, pg 134, 6.3.7.17 Tape device image copy operation, item d
This << if the RSMK bit in the Device Configuration mode page (see SSC-2) of the source device is on. >> should be << if the RSMK bit in the Device Configuration mode page (see SSC-2) of the source device is set to one. >>

IBM-148
PDF pg 180, pg 134, 6.3.7.17 Tape device image copy operation, Last paragraph
This << In such cases, it is not possible to calculate a residue, so the information field in the sense data shall be set to zero. >> should be << If this occurs the information field in the sense data shall be set to zero. >>

IBM-149
PDF pg 181, pg 135, 6.3.7.18 Register persistent reservation key operation, NOTE 21
This note should be main line text.

IBM-150
PDF pg 181, pg 135, 6.3.7.18 Register persistent reservation key operation, note 21
This << command may need to remove the reservation >> should be << command may
 remove the reservation >>

IBM-151
PDF pg 185, pg 139, 6.4.2 Standard INQUIRY data, Table 79 footnote a
 _T_ One could make an argument for obsoleting all these bits as this standard
references SAM-3 which does not have support for parallel SCSI. << The meanings of these fields are specific to SPI-5 (see 6.4.3). For SCSI protocols
other than the SCSI Parallel Interface, these fields are reserved.>>

IBM-152
PDF pg 186, pg 140, 6.4.2 Standard INQUIRY data, Table 81
This table should be forced onto to one page to make it more readable.

IBM-153 Technical
PDF pg 196, pg 150, 6.4.2 Standard INQUIRY data
One could make an argument for obsoleting all these bits as this standard references SAM-3 which does not have support for parallel SCSI.

IBM-154
PDF pg 197, pg 151, 6.4.4 Vital product data, 1st paragraph
This << and specifying the page code of the desired vital product data. >>
should be << and specifying the page code of a vital product data. >>

IBM-155
PDF pg 197, pg 151, 6.4.4 Vital product data, NOTES 25, 26, 27
These three notes should be main line text.

IBM-156
PDF pg 199, pg 153, 6.5 LOG SELECT command, 1st paragraph
This << maintained by the device about the device or its logical units. >>
should be << maintained by the SCSI target device about the SCSI target
device
or its logical units. >>

IBM-157
PDF pg 199, pg 153, 6.5 LOG SELECT command, 1st paragraph
This << define the exact conditions and events that are logged. >> should be
<< define the conditions and events that are logged. >>

IBM-158
PDF pg 201, pg 155, 6.6 LOG SENSE command, 1st paragraph
This << maintained by the device about the device or its logical units. >>
should be << maintained by the SCSI target device about the SCSI target
device or its logical units. >>

IBM-159
PDF pg 205, pg 159, 6.9.1 MODE SENSE(6) command introduction, 2nd paragraph
This paragraph << A disable block descriptors (DBD) bit set to zero
indicates
that the device server may return zero or more block descriptors in the
returned MODE SENSE data (see 7.4). A DBD bit set to one specifies that the
device server shall not return any block descriptors in the returned MODE
SENSE data. >> needs to be placed under table 95.

IBM-160
PDF pg 207, pg 161, 6.9.1 MODE SENSE(6) command introduction, 2nd to last
paragraph
This << parameter header and block descriptor (if applicable). >> should be
<<
 parameter header and block descriptor, if applicable.>>

IBM-161
PDF pg 208, pg 162, 6.9.3 Changeable values, 2nd paragraph
This << Implementation of changeable mode page parameters is optional. >> is
redundant with the information stated in the next sentence and should be
deleted. Also, everything is optional unless stated otherwise.

IBM-162
PDF pg 208, pg 162, 6.9.5 Saved values, 1st paragraph
This <<Implementation of saved mode page parameters is optional. >> is
redundant with the information stated in the next sentence and should be
deleted. Also, everything is optional unless stated otherwise.

IBM-163
PDF pg 208, pg 162, 6.9.6 Initial responses, item c
This << application client (via a MODE SELECT command), >> should be <<
application client via a MODE SELECT command, >>

IBM-164
PDF pg 211, pg 165, 6.11.2 READ KEYS service action, 2nd to last paragraph
This << first portion of the list (byte 0 to the allocation length) shall be
sent >> should be << first portion of the list (i.e., byte 0 to the
allocation
length) shall be sent >>

IBM-165
PDF pg 211, pg 165, 6.11.2 READ KEYS service action, Last paragraph
This << The reservation key list contains the 8-byte reservation keys for

all
I_T nexuses that have registered with the device server through all
combinations of initiator ports and target ports. >> should be << The
reservation key list contains the 8-byte reservation keys for all I_T
nexuses
that have registered with the device server. >>. The deleted information is
redundant with the statement << for all I_O nexuses >>.
...

IBM-166
PDF pg 213, pg 167, 6.11.3.4 Persistent Reservations type, Table 105
There is no reasons why this table should be allowed to split across page
boundaries. Change the orphan count to force the entire table onto one page.

IBM-167
PDF pg 215, pg 169, 6.11.4 REPORT CAPABILITIES service action, 2n paragraph
above table 107
This << because the most recent successfully completed PERSISTENT RESERVE
OUT
command with REGISTER or REGISTER AND IGNORE EXISTING KEY service action had
the APTPL bit set to one in the parameter data. >> should be deleted as it
is
redundant with the information stated section 5.6.4 which is referenced in
this sentence.

IBM-168
PDF pg 217, pg 171, 6.11.5 READ FULL STATUS service action, item c
This statement << The I_T nexuses are either all reservation holders or all
not reservation holders. >> appears to contains no useful information as it
covers all possible cases. It should be deleted.

IBM-169
PDF pg 221, pg 175, 6.12.3 Basic PERSISTENT RESERVE OUT parameter list, 2nd
paragraph under a,b,c list
This << The SERVICE ACTION RESERVATION KEY field contains information needed
for four service actions: REGISTER, REGISTER AND IGNORE EXISTING KEY,
PREEMPT,
and PREEMPT AND ABORT. >> should be << The SERVICE ACTION RESERVATION KEY
field contains information needed for the REGISTER service action, REGISTER
AND IGNORE EXISTING KEY service action, PREEMPT service action, and PREEMPT
AND ABORT service action. >>

IBM-170 Technical
PDF pg 223, pg 177, 6.12.3 Basic PERSISTENT RESERVE OUT parameter list, 4th
paragraph above table 114
This << in the SCSI target device (i.e., as if the same >> should be << in
the
SCSI target device known to the device server (i.e., as if the same >>

IBM-171
PDF pg 223, pg 177, 6.12.3 Basic PERSISTENT RESERVE OUT parameter list, Table
114
The allowed scope columns cells should be centered vertically so the text
aligns with all the other cells in the table.

IBM-172
PDF pg 224, pg 178, 6.12.3 Basic PERSISTENT RESERVE OUT parameter list, Table
114
This table is shown in two parts but not along rows but rather columns. That
being the case the second table should be numbered as 115 and the << (part n
of n) >> in the title should be removed. In table 114 the << parameters
(part
1 of 2) >> should be changed to << parameters (continued in table 115) >>.
The
parameters in table 115 should be << parameters (continued from table 114)
>>.

IBM-173
PDF pg 226, pg 180, 6.13 PREVENT ALLOW MEDIUM REMOVAL command, table 117
This <<attached medium changer (if any). >> should be << attached medium
change, if any. >>

IBM-174
PDF pg 226, pg 180, 6.13 PREVENT ALLOW MEDIUM REMOVAL command, table 117
This <<attached medium changer (if any). >> should be << attached medium change, if any. >>

IBM-175
PDF pg 226, pg 180, 6.13 PREVENT ALLOW MEDIUM REMOVAL command, 2nd to last paragraph
The statement <<action of RESERVE, REGISTER AND IGNORE EXISTING KEY, or REGISTER service action, >> should be << action of RESERVE service action, REGISTER AND IGNORE EXISTING KEY service action, or REGISTER service action, >>

IBM-176
PDF pg 226, pg 180, 6.13 PREVENT ALLOW MEDIUM REMOVAL command, 2nd to last paragraph
This << command with a service action of PREEMPT AND ABORT using >> should be
<< command with a PREEMPT AND ABORT service action using >>

IBM-177
PDF pg 226, pg 180, 6.13 PREVENT ALLOW MEDIUM REMOVAL command, 2nd to last paragraph
This << value associated with the initiator port associated with that I_T nexus in the SERVICE ACTION RESERVATION KEY field. >> should be << value associated with the initiator port and the I_T nexus in the SERVICE ACTION RESERVATION KEY field. >>

IBM-178
PDF pg 228, pg 182, 6.14.1 READ ATTRIBUTE command introduction, 2nd to last paragraph
This << send a new READ
ATRRIBUTE command with >> should be << send a new READ
ATTRIBUTE command with >> A spelling error wow ;-}

IBM-179
PDF pg 232, pg 186, 6.15.2 Combined header and data mode (00h), 1st paragraph
after table 126
This << reflect the allocation length; nor is it reduced to reflect the actual
number >> should be << reflect the allocation length, nor is it reduced to reflect the actual number >>

IBM-180
PDF pg 237, pg 191, 6.17.1 RECEIVE COPY RESULTS command introduction, 1st paragraph under table 133
This << which information is desired. >> should be << which information is to
be transferred. >>

IBM-181
PDF pg 237, pg 191, 6.17.1 RECEIVE COPY RESULTS command introduction, 2nd paragraph under table 133
This << command in the same manner it would if the EXTENDED COPY command had never been received. >> should be << command as if the EXTENDED COPY command had never been received. >>

IBM-182
PDF pg 240, pg 194, 6.17.3 RECEIVE DATA service action, 1st paragraph
This << supports those segment descriptors require data to be held for transfer >> should be << supports those segment descriptors that require data
to be held for transfer >>

IBM-183
PDF pg 240, pg 194, 6.17.3 RECEIVE DATA service action, last paragraph
This << holding of data (called the oldest byte held) is returned in byte 4. >> should be << holding of data (i.e., the oldest byte held) is returned in byte 4. >>

IBM-184
PDF pg 240, pg 194, 6.17.3 RECEIVE DATA service action, last paragraph
This << prescribing the holding of data (called the newest byte held) is returned in byte n.>> should be << prescribing the holding of data (i.e., the
newest byte held) is returned in byte n.>>

IBM-185
PDF pg 244, pg 198, 6.17.5 FAILED SEGMENT DETAILS service action, 2nd paragraph
This << which copy target devices (in particular stream devices) have been left by incomplete processing. >> should be << which copy target devices, in
particular stream devices, have been left by incomplete processing. >>

IBM-186
PDF pg 245, pg 199, 6.17.5 FAILED SEGMENT DETAILS service action, NOTE 32
So what is this all about? << Specific uses of the reserved bytes 4 to 55 are
under discussion for SPC-3. >> this is SPC-3. Unless there is something that is going to happen here this should be deleted.

IBM-187
PDF pg 251, pg 205, 6.21 REPORT LUNS command, 1st paragraph
This << Logical unit numbers for logical units with PERIPHERAL QUALIFIER values of 001b, 100b, 101b, 110b, or 111b may be included in the logical unit
inventory. >> is a dangerous statement because the 010b value is not listed as
it is reserved. To fix this I suggest the sentence be moved to the end of the
paragraph and changed to << Logical unit numbers for logical units with valid
PERIPHERAL QUALIFIER values of other than 000b and 011b may be included in the
logical unit inventory. >>

IBM-188 Technical
PDF pg 252, pg 206, 6.21 REPORT LUNS command, 2nd paragraph above table 147
I don't see how this << installed logical unit shall clear the REPORTED LUNS DATA HAS CHANGED unit attention condition for all logical units accessible to
the I_T nexus on which >> can be a requirement because there is no requirement
in SAM-3 or elsewhere that requires every logical unit to have knowledge or every other logical unit accessible by a target port. This needs to be changed
to something like << installed logical unit shall clear the REPORTED LUNS DATA
HAS CHANGED unit attention condition for any logical units the addressed logical unit is aware of that is accessible to the I_T nexus on which >>

IBM-189
PDF pg 254, pg 208, 6.22 REPORT PRIORITY command, table 151
This << RELATIVE TARGET PORT IDENTIFIER >> should be << RELATIVE TARGET PORT

>> as a result of the changes to VPD page 83h.

IBM-190
PDF pg 254, pg 208, 6.22 REPORT PRIORITY command, 2nd paragraph after table 151
This << RELATIVE TARGET PORT IDENTIFIER >> should be << RELATIVE TARGET PORT

>> as a result of the changes to VPD page 83h.

IBM-191
PDF pg 254, pg 208, 6.22 REPORT PRIORITY command, 2nd paragraph after table 151
This << contains the relative target port identifier of the target port >> should be << specifies the SCSI target port relative to other SCSI ports in

the SCSI device. >>

IBM-192
PDF pg 260, pg 214, 6.24 REPORT SUPPORTED TASK MANAGEMENT FUNCTIONS command, 2nd to last paragraph
The target reset task management function has been removed from SAM-3 and therefore should be removed from this standard. Delete <<A TARGET RESET supported (TRS) bit set to one indicates the TARGET RESET task management function (see SAM-3) is supported by the logical unit. An TRS bit set to zero
indicates the TARGET RESET task management function is not supported. >> and the TRS bit from table 159.

IBM-193
PDF pg 260, pg 214, 6.24 REPORT SUPPORTED TASK MANAGEMENT FUNCTIONS command, last paragraph
The wake-up task management function has been removed from SAM-3 and therefore should be removed from this standard. Delete << A WAKEUP supported (WAKES) bit set to one indicates the WAKEUP task management function is supported by the logical unit. An WAKES bit set to zero indicates the WAKEUP task management function is not supported. >>

IBM-194
PDF pg 263, pg 217, 6.25 REPORT TARGET PORT GROUPS command, 1st paragraph under table 162
This<< A PREF bit set to one indicates >> should be << A preferred target port (PREF) bit set to one indicates >>.

IBM-195
PDF pg 263, pg 217, 6.25 REPORT TARGET PORT GROUPS command, 1st paragraph after table 163
This << If any of the U_SUP bit, S_SUP bit, AN_SUP bit, or AO_SUP bit is set to one, then the U_SUP bit, >> should be << If any of the U_SUP bit, S_SUP bit, AN_SUP bit, or AO_SUP bit are set to one, then the U_SUP bit, >>

IBM-196
PDF pg 263, pg 217, 6.25 REPORT TARGET PORT GROUPS command, 2nd paragraph under table 163
This << A U_SUP bit set to one indicates that the >> should be << An unavailable supported (U_SUP) bit set to one indicates that the >>

IBM-197
PDF pg 263, pg 217, 6.25 REPORT TARGET PORT GROUPS command, 3rd paragraph under table 163
This << A S_SUP bit set to one indicates that the >> should be << An standby
supported (s_SUP) bit set to one indicates that the >>

IBM-198
PDF pg 263, pg 217, 6.25 REPORT TARGET PORT GROUPS command, 4th paragraph under table 163
This << A AN_SUP bit set to one indicates that the >> should be << An active/non-optimized supported (AN_SUP) bit set to one indicates that the >>

IBM-199
PDF pg 263, pg 217, 6.25 REPORT TARGET PORT GROUPS command, 5th paragraph under table 163
This << A AO_SUP bit set to one indicates that the >> should be << An active/optimized supported (AO_SUP) bit set to one indicates that the >>

IBM-200
PDF pg 264, pg 218, 6.25 REPORT TARGET PORT GROUPS command, 1st paragraph before table 165
This << shall include exactly one target port descriptor for each target port
in the >> should be << shall include one target port descriptor for each target port in the >>

IBM-201
PDF pg 264, pg 218, 6.25 REPORT TARGET PORT GROUPS command, last paragraph

This << identifier >> should be << designator >>. This is a result of the change to VPD page 83h

IBM-202
PDF pg 264, pg 218, 6.26 REQUEST SENSE command, 1st paragraph after table 166
This << The DESC bit indicates which sense data format shall >> should be << The descriptor format (DESC) bit indicates which sense data format shall >>

IBM-203
PDF pg 265, pg 219, 6.26 REQUEST SENSE command, 5th paragraph after table 166
Make the << For example: >> a new paragraph.

IBM-204
PDF pg 265, pg 219, 6.26 REQUEST SENSE command, last paragraph
This << return at least eighteen bytes of data in response >> should be << return at least 18 bytes of data in response >>

IBM-205
PDF pg 265, pg 219, 6.26 REQUEST SENSE command, last paragraph
This << allocation length is eighteen or greater and the >> should be << allocation length is 18 or greater and the >>

IBM-206
PDF pg 266, pg 220, 6.27 SEND DIAGNOSTIC command, 1st paragraph after table 167
This << If the SELFTEST bit is set to one, >> should be << If the self-test (SELFTEST) bit is set to one, >>

IBM-207
PDF pg 266, pg 220, 6.27 SEND DIAGNOSTIC command, table 168 row 1
This << invoking a page format SEND DIAGNOSTIC function such as enclosure services (see SES) or the Translate Address diagnostic page (see SBC-2). >> should be deleted as it contains needless information. But if it does remain
it should be changed to << invoking a page format SEND DIAGNOSTIC function (e.g., enclosure services (see SES) or the Translate Address diagnostic page
(see SBC-2)). >>

IBM-208
PDF pg 267, pg 221, 6.27 SEND DIAGNOSTIC command, 2nd paragraph after note 37
This << with GOOD status; otherwise, the command shall >> should be << with GOOD status. If the self-test fails the command shall >>

IBM-209
PDF pg 267, pg 221, 6.27 SEND DIAGNOSTIC command, 3rd paragraph from end
This << The implementation of the UNITOFFL bit is optional. >> should be deleted as everything is optional unless specified otherwise.

IBM-210
PDF pg 267, pg 221, 6.27 SEND DIAGNOSTIC command, 2nd paragraph from end
This <<The implementation of the DEVOFFL bit is optional. >> should be deleted
as everything is optional unless specified otherwise.

IBM-211
PDF pg 268, pg 222, 6.28 SET DEVICE IDENTIFIER command, 3rd paragraph
This << device identifier saved by the device, >> should be << device identifier saved by the logical unit, >>

IBM-212 Technical
PDF pg 268, pg 222, 6.28 SET DEVICE IDENTIFIER command, 3rd paragraph
This << unit attention condition shall be generated for the initiator port associated with all I_T nexuses except the one that issued the command, >> is
completely unclear as to what initiators should receive a unit attention. I think it should be <<unit attention condition shall be generated for the initiator port associated with all I_T nexuses except the I_T nexus on which

the SET IDENTIFIER command was received (see SAM-3), >>

IBM-213
PDF pg 270, pg 224, 6.29 SET PRIORITY command, table 172 in 3 places
This << RELATIVE TARGET PORT IDENTIFIER >> should be << RELATIVE TARGET PORT

>> as a result of the changes to VPD page 83h.

IBM-214
PDF pg 270, pg 224, 6.29 SET PRIORITY command, table 173
This << RELATIVE TARGET PORT IDENTIFIER >> should be << RELATIVE TARGET PORT

>> as a result of the changes to VPD page 83h.

IBM-215
PDF pg 271, pg 225, 6.29 SET PRIORITY command, 2nd paragraph after table 173
in 2 places
This << RELATIVE TARGET PORT IDENTIFIER >> should be << RELATIVE TARGET PORT

>> as a result of the changes to VPD page 83h.

IBM-216
PDF pg 271, pg 225, 6.29 SET PRIORITY command, 2nd paragraph after table 173
This << contains the relative target port identifier of the target port >>
should be << specifies the SCSI target port relative to other SCSI ports in
the SCSI device. >>

IBM-217
PDF pg 275, pg 229, 6.32 WRITE ATTRIBUTE command, 4th paragraph after table
180
This << parameter data is present; this shall not be considered an error. >>
should be << parameter data is present transferred. This condition shall not
be considered an error. >>

IBM-218
PDF pg 277, pg 231, 6.32 WRITE ATTRIBUTE command, 1st item c
This << list shall be ignored; this shall not be considered an error. >>
should be << list shall be ignored. This condition shall not be considered
an
error.

IBM-219
PDF pg 278, pg 232, 6.33.1 WRITE BUFFER command introduction, 1st paragraph
above table 183
This << The MODE field is defined in table 77. >> it not pointing to the
right
table. It appears to be a cold link.

IBM-220
PDF pg 278, pg 232, 6.33.1 WRITE BUFFER command introduction, NOTES 39 and
40
Both of these notes should be moved to table footnotes in table 183.

IBM-221
PDF pg 279, pg 233, 6.33.6 Download microcode and save mode (05h), 2nd
paragraph
This << memory space (semiconductor, disk, or other). >> should be <<
memory
space (e.g., semiconductor or disk). >>

IBM-222
PDF pg 280, pg 234, 6.33.7 Download microcode with offsets (06h), 4th
paragraph
This << information change (one or more commands) are not received before >>
should be << information change (i.e., one or more commands) are not
received
before >>

IBM-223
PDF pg 281, pg 235, 6.33.8 Download microcode with offsets and save mode

(07h), 4th paragraph
This << control information change (one or more commands) are >> should be
<<
control information change (i.e., one or more commands) are >>

IBM-224
PDF pg 290, pg 244, 7.2.1 Log page structure and page codes for all device
types, 3rd paragraph after table 192
This << The DU, DS, TSD, ETC, TMC, LBIN, and LP fields are collectively
referred to as the PARAMETER CONTROL byte. >> should be << The DU, DS, TSD,
ETC, LBIN, and LP bits and the TMC field are collectively referred to as the
PARAMETER CONTROL byte. >>

IBM-225
PDF pg 290, pg 244, 7.2.1 Log page structure and page codes for all device
types, 3rd paragraph after table 192
This << These fields are described below in this subclause. >> should be <<
These fields are described in this subclause. >>

IBM-226
PDF pg 290, pg 244, 7.2.1 Log page structure and page codes for all device
types, item a
This << A zero value indicates that >> should be << DU set to zero indicates
that >>

IBM-227
PDF pg 290, pg 244, 7.2.1 Log page structure and page codes for all device
types, item b
This << A one value indicates that the >> should be << DU set to one
indicates
that the >>

IBM-228
PDF pg 291, pg 245, 7.2.1 Log page structure and page codes for all device
types, 2nd paragraph under table 193
This << The LBIN bit is only valid if the LP bit is set to one. >> should be
<< The list binary (LBIN) bit is only valid if the LP bit is set to one. >>

IBM-229
PDF pg 291, pg 245, 7.2.1 Log page structure and page codes for all device
types, 4th paragraph under table 193
This << page (see 7.4.6) is set to one; then the device server shall
terminate
>> should be << page (see 7.4.6) is set to one, then the device server shall
terminate >>

IBM-230
PDF pg 291, pg 245, 7.2.1 Log page structure and page codes for all device
types, item b
This << is set to one; then the command shall be >> should be << is set to
one, then the command shall be >>

IBM-231
PDF pg 292, pg 246, 7.2.1 Log page structure and page codes for all device
types, 2nd paragraph above table 194
This << page is one, then the device server >> should be << page is set to
one, then the device server >>

IBM-232
PDF pg 292, pg 246, 7.2.1 Log page structure and page codes for all device
types
The following paragraph should be added to the end of this section
<<Additional information about the LOG parameters may be found in Annex C.
>>

IBM-233
PDF pg 293, pg 247, 7.2.1 Log page structure and page codes for all device
types, table 194
The italicized << n >> in the << Last n Deferred Errors or Asynchronous
Events
>> and << Last n Error Events >> should be changed to normal text.

IBM-234
PDF pg 294, pg 248, 7.2.2 Application Client log page, 1st paragraph before table 196
This << but the exact definition of the data is application client >> should be << but the specific definition of the data is application client >>

IBM-235
PDF pg 295, pg 249, 7.2.2 Application Client log page, table 197
This << Ignored when ETC is 0 >> should be << Ignored when ETC is set to zero >>

IBM-236
PDF pg 295, pg 249, 7.2.3 Buffer Over-Run/Under-Run log page, 1st paragraph under table 198
This << 200), and a one-bit TYPE field. >> should be << 200), and TYPE bit. >>

IBM-237
PDF pg 296, pg 250, 7.2.3 Buffer Over-Run/Under-Run log page, 1st paragraph under table 200
This << The TYPE field indicates whether the counter records under-runs or over-runs. A value of zero specifies a buffer under-run condition and a value
of one specifies a buffer over-run condition. >> should be << The TYPE bit indicates whether the counter records under-runs or over-runs. A TYPE bit set
to zero specifies a buffer under-run condition and a TYPE bit set to one specifies a buffer over-run condition. >>

IBM-238
PDF pg 297, pg 251, 7.2.4 Error counter log pages, 1st paragraph
This << This subclause defines the optional >> should be << This subclause defines the >> as everything is optional unless otherwise specified.

IBM-239
PDF pg 297, pg 251, 7.2.4 Error counter log pages, 1st paragraph under table 201
This << Support of each log parameter is optional. >> should be deleted as everything is options unless stated otherwise.

IBM-240
PDF pg 299, pg 253, 7.2.5 Informational Exceptions log page, table 206
This << Ignored when ETC is 0 >> should be << Ignored when ETC is set to zero >>

IBM-241
PDF pg 299, pg 253, 7.2.6 Last n Deferred Errors or Asynchronous Events log page
The italicized << n >> should be made into a normal << n >> in this section and the next in all cases.

IBM-242
PDF pg 299, pg 253, 7.2.6 Last n Deferred Errors or Asynchronous Events log page, last paragraph
This << The fields DU, TSD, ETC, and TMC are reserved and shall be set to zero. >> should be << The DU, TSD, and ETC bits shall be set to zero and The
TMC field shall be set to zero. >>

IBM-243
PDF pg 300, pg 254, 7.2.7 Last n Error Events log page, 2nd paragraph
This << each log parameter is an ASCII data (see 4.4.1) that may >> should be
<< each log parameter is ASCII data (see 4.4.1) that may >>

IBM-244
PDF pg 300, pg 254, 7.2.7 Last n Error Events log page, 2nd paragraph
This << The exact contents of the character string is not defined by this standard. >> should be << The contents of the character string is not defined

by this standard. >>

IBM-245
PDF pg 301, pg 255, 7.2.7 Last n Error Events log page, 1st paragraph after table 209
This << contains the relative target port identifier (see 7.6.4.6) of the target port >> should be << specifies the SCSI target port relative to other SCSI ports (see 7.6.4.6) in the SCSI device. >>

IBM-246
PDF pg 302, pg 256, 7.2.10 Self-Test Results log page, 1st paragraph
This << the results from the twenty most recent self-tests (see 5.5). >> should be << the results from the 20 most recent self-tests (see 5.5). >>

IBM-247
PDF pg 302, pg 256, 7.2.10 Self-Test Results log page, 1st paragraph
This << If fewer than twenty self-tests have occurred, the unused >> should be
<< If fewer than 20 self-tests have occurred, the unused >>

IBM-248
PDF pg 303, pg 257, 7.2.10 Self-Test Results log page, table 212
This << Ignored when ETC is 0 >> should be << Ignored when ETC is set to zero >>

IBM-249
PDF pg 304, pg 258, 7.2.10 Self-Test Results log page, table 213
This << with the SELF-TEST CODE field set to 100b (Abort background self-test). >> should be << with the SELF-TEST CODE field set to 100b (e.g., Abort background self-test). >>

IBM-250
PDF pg 304, pg 258, 7.2.10 Self-Test Results log page, table 213
This << Another segment of the self-test failed (see the SELF-TEST SEGMENT NUMBER field). >> should be << Another segment of the self-test failed as defined in the SELF-TEST SEGMENT NUMBER field. >>

IBM-251
PDF pg 304, pg 258, 7.2.10 Self-Test Results log page, 2nd paragraph after table 213
This << When the segment in which the failure occurred cannot or need not be identified, >> should be << When the segment in which the failure occurred is
not able to be identified or need not be identified, >>

IBM-252
PDF pg 305, pg 259, 7.2.11 Start-Stop Cycle Counter log page, 1st paragraph
This << This subclause defines the optional >> should be << This subclause defines the >> as everything is optional unless otherwise specified.

IBM-253
PDF pg 306, pg 260, 7.2.11 Start-Stop Cycle Counter log page, table 215
This << Ignored when ETC is 0 >> should be << Ignored when ETC is set to zero >>

IBM-254
PDF pg 306, pg 260, 7.2.11 Start-Stop Cycle Counter log page, table 216
This << Ignored when ETC is 0 >> should be << Ignored when ETC is set to zero >>

IBM-255
PDF pg 306, pg 260, 7.2.11 Start-Stop Cycle Counter log page, 1st paragraph after table 216
This << parameter DS bit shall be one). >> should be << parameter DS bit shall
be set to one). >>

IBM-256
PDF pg 307, pg 261, 7.2.11 Start-Stop Cycle Counter log page, 1st paragraph after table 216

This << of the device without degrading the device's operation or
reliability
outside the limits specified by the manufacturer of the
device. >> should be << of the SCSI target device without degrading the SCSI
target device's operation or reliability outside the limits specified by the
manufacturer of the SCSI target device. >>

IBM-257
PDF pg 307, pg 261, 7.2.11 Start-Stop Cycle Counter log page, table 217
This << Ignored when ETC is 0 >> should be << Ignored when ETC is set to zero
>>

IBM-258
PDF pg 307, pg 261, 7.2.11 Start-Stop Cycle Counter log page, 1st paragraph
under table 217
This << (i.e., the log parameter DS bit shall be one). >> should be <<
(i.e.,
the log parameter DS bit shall be set to one). >>

IBM-259
PDF pg 308, pg 262, 7.2.13 Temperature log page, 1st paragraph
This << This subclause defines the optional >> should be << This subclause
defines the >> as everything is optional unless otherwise specified.

IBM-260
PDF pg 309, pg 263, 7.2.13 Temperature log page, table 220
This << Ignored when ETC is 0 >> should be << Ignored when ETC is set to zero
>>

IBM-261
PDF pg 309, pg 263, 7.2.13 Temperature log page, 1st paragraph after table
220
This << may optionally be provided by the device using parameter >> should
be
<< may be provided by the device using parameter >>

IBM-262
PDF pg 310, pg 264, 7.3.1 Attribute format
Rename the << READ ONLY>> bit to << READ_ONLY >>

IBM-263
PDF pg 310, pg 264, 7.3.1 Attribute format, 2nd paragraph under table 222
This <<The ATTRIBUTE VALUE field contains the current (READ ATTRIBUTE) or
desired (WRITE ATTRIBUTE) value of the attribute. >> should be << The
ATTRIBUTE VALUE field contains the current (i.e., READ ATTRIBUTE) or
intended
(i.e., WRITE ATTRIBUTE) value of the attribute. >>

IBM-264
PDF pg 312, pg 266, 7.3.2.2 Device type attributes, table 224
The << Attribute Length >> heading has no indication as to what units the
length is in. This needs to be fixed.

IBM-265
PDF pg 318, pg 272, 7.3.2.3 Medium type attributes, table 228
The << Attribute Length >> heading has no indication as to what units the
length is in. This needs to be fixed.

IBM-266
PDF pg 318, pg 272, 7.3.2.3.5 MEDIUM TYPE and MEDIUM TYPE INFORMATION:, Table
229
This table should not be permitted to split across pages. Fix this by change
to orphans count to 99.

IBM-267
PDF pg 319, pg 273, 7.3.2.4 Host type attributes, table 224
The << Attribute Length >> heading has no indication as to what units the
length is in. This needs to be fixed.

IBM-268
PDF pg 322, pg 276, 7.4.3 Mode parameter header formats, Last paragraph

This << or times sixteen if the LONGLBA bit is set to one, >> should be <<
or
times 16if the LONGLBA bit is set to one, >>

IBM-269
PDF pg 324, pg 278, 7.4.5 Mode page and subpage formats and page codes, 2nd
paragraph after table 237
This << with a SPF bit equal to one contains a SUBPAGE CODE field. >> should
be << with a SPF bit set to one contains a SUBPAGE CODE field. >>

IBM-270
PDF pg 324, pg 278, 7.4.5 Mode page and subpage formats and page codes, 3rd
paragraph under table 237
This << the supported parameters cannot be saved. >> should be << the device
server is not able to save the supported parameters. >>

IBM-271
PDF pg 331, pg 285, 7.4.8 Disconnect-Reconnect mode page, 1st paragraph
This << The name for this mode page, disconnect-reconnect, comes from the
SCSI
parallel interface. >> should be a note.

IBM-272
PDF pg 332, pg 286, 7.4.8 Disconnect-Reconnect mode page, note 53
The term << target port >> in the last sentence is the wrong font.

IBM-273
PDF pg 332, pg 286, 7.4.8 Disconnect-Reconnect mode page, 4th paragraph
after
note 53
This << 512 bytes (e.g., a value of one means >> should be <<   512 bytes
(i.e., a value of one means >>

IBM-274
PDF pg 332, pg 286, 7.4.8 Disconnect-Reconnect mode page, 4th paragraph
after
note 53
This << The relationship (if any) between data transfer operations and
interconnect >> should be << The relationship, if any, between data transfer
operations and interconnect >>

IBM-275
PDF pg 333, pg 287, 7.4.8 Disconnect-Reconnect mode page, 1st paragraph
after
table 247
This << of 512 bytes; a value of one means 512 bytes, two means 1024 bytes,
etc. >> should be << of 512 bytes (i.e., a value of one means 512 bytes,
two
means 1024 bytes, etc.) >>

IBM-276
PDF pg 335, pg 289, 7.4.11 Informational Exceptions Control mode page, 1st
paragraph
This << an additional sense code of FAILURE PREDICTION THRESHOLD EXCEEDED or
WARNING to the application client. >> should be << an additional sense code
of FAILURE PREDICTION THRESHOLD EXCEEDED or an additional sense code of
WARNING to the application client. >>

IBM-277
PDF pg 336, pg 290, 7.4.11 Informational Exceptions Control mode page, table
251
This << If the TEST bit equals zero, >> should be << If the TEST bit is set
to
zero, >>

IBM-278
PDF pg 336, pg 290, 7.4.11 Informational Exceptions Control mode page, table
251
This << If the TEST bit equals one, >> should be << If the TEST bit is set
to
one, >>

IBM-279
PDF pg 336, pg 290, 7.4.11 Informational Exceptions Control mode page, table 251
This << the TEST bit equals zero, >> should be << the TEST bit is set to zero, >>

IBM-280
PDF pg 337, pg 291, 7.4.11 Informational Exceptions Control mode page, table 251
This << the TEST bit equals zero, >> should be << the TEST bit is set to zero, >>

IBM-281
PDF pg 337, pg 291, 7.4.11 Informational Exceptions Control mode page, table 251
This << If the TEST bit equals one, >> should be << If the TEST bit is set to one, >>

IBM-282
PDF pg 337, pg 291, 7.4.11 Informational Exceptions Control mode page, table 251
This << the TEST bit equals zero, >> should be << the TEST bit is set to zero, >>

IBM-283
PDF pg 337, pg 291, 7.4.11 Informational Exceptions Control mode page, table 251
This << the TEST bit equals zero, >> should be << the TEST bit is set to zero, >>

IBM-284
PDF pg 337, pg 291, 7.4.11 Informational Exceptions Control mode page, table 251
This << If the TEST bit equals one, >> should be << If the TEST bit is set to one, >>

IBM-285
PDF pg 337, pg 291, 7.4.11 Informational Exceptions Control mode page, table 251
This << the TEST bit equals zero, >> should be << the TEST bit is set to zero, >>

IBM-286
PDF pg 338, pg 292, 7.4.12 Power Condition mode page, 4th paragraph
This << (e.g.,as a logical unit would do in response to a SYNCHRONIZE CACHE command as described in SBC-2) >> should be << (e.g., as a logical unit does in response to a SYNCHRONIZE CACHE command as described in SBC-2) >>

IBM-287
PDF pg 343, pg 297, 7.5.2.2.2 Fibre Channel world wide port name alias entry designation, Table 258
Table 258 appears to be part of another table as the bytes are numbered 16-23
but there is no wording that would point the reader to were that larger table
is. A reference needs to be added to the larger table.

IBM-288
PDF pg 343, pg 297, 7.5.2.2.3 Fibre Channel world wide port name with N_Port checking alias entry designation, Table 259
Table 259 appears to be part of another table as the bytes are numbered 16-27
but there is no wording that would point the reader to were that larger table
is. A reference needs to be added to the larger table.

IBM-289
PDF pg 344, pg 298, 7.5.2.3.2 RDMA target port identifier alias entry

designation, Table 261
Table 261 appears to be part of another table as the bytes are numbered
16-31
but there is no wording that would point the reader to were that larger
table
is. A reference needs to be added to the larger table.

IBM-290
PDF pg 345, pg 299, 7.5.2.3.3 InfiniBand global identifier with target port
identifier checking alias entry designation, Table 262
Table 262 appears to be part of another table as the bytes are numbered
16-47
but there is no wording that would point the reader to were that larger
table
is. A reference needs to be added to the larger table.

IBM-291
PDF pg 345, pg 299, 7.5.2.4.1 Introduction to Internet SCSI specific alias
entry designations, note 55
This << the named SCSI device may require a device server to have >> should
be
<< the named SCSI target device may require a device server to have >>

IBM-292
PDF pg 346, pg 300, 7.5.2.4.2 iSCSI name alias entry designation, Table 264
Table 264 appears to be part of another table as the bytes are numbered 16
to
4m-1 but there is no wording that would point the reader to were that larger
table is. A reference needs to be added to the larger table.

IBM-293
PDF pg 346, pg 300, 7.5.2.4.2 iSCSI name alias entry designation, 1st
paragraph under table 264
This << (see draft-ietf-ips-iscsi-16.txt). >> should be << (see RFC 3720) >>

IBM-294
PDF pg 346, pg 300, 7.5.2.4.3 iSCSI name with binary IPv4 address alias
entry
designation, Table 265
Table 265 appears to be part of another table as the bytes are numbered 16
to
4m+11 but there is no wording that would point the reader to were that
larger
table is. A reference needs to be added to the larger table.

IBM-295
PDF pg 346, pg 300, 7.5.2.4.3 iSCSI name with binary IPv4 address alias
entry
designation, 1st paragraph under table 265
This << (see draft-ietf-ips-iscsi-16.txt). >> should be << (see RFC 3720) >>

IBM-296
PDF pg 347, pg 301, 7.5.2.4.4 iSCSI name with IPname alias entry
designation,
Table 266
Table 266 appears to be part of another table as the bytes are numbered 16
to
4m+7 but there is no wording that would point the reader to were that larger
table is. A reference needs to be added to the larger table.

IBM-297
PDF pg 347, pg 301, 7.5.2.4.4 iSCSI name with IPname alias entry
designation,
1st paragraph under table 266
This << (see draft-ietf-ips-iscsi-16.txt). >> should be << (see RFC 3720) >>

IBM-298
PDF pg 348, pg 302, 7.5.2.4.4 iSCSI name with IPname alias entry
designation,
last paragraph
This << The Internet protocol domain name, port number and Internet protocol

number >> should be << The Internet protocol domain name, port number, and
Internet protocol number >>. Missing comma added

IBM-299
PDF pg 348, pg 302, 7.5.2.4.5 iSCSI name with binary IPv6 address alias
entry
designation, Table 267
Table 267 appears to be part of another table as the bytes are numbered 16
to
4m+23 but there is no wording that would point the reader to were that
larger
table is. A reference needs to be added to the larger table.

IBM-300
PDF pg 348, pg 302, 7.5.2.4.5 iSCSI name with binary IPv6 address alias
entry
designation, 1st paragraph under table 267
This << (see draft-ietf-ips-iscsi-16.txt). >> should be << (see RFC 3720) >>

IBM-301
PDF pg 348, pg 302, 7.5.2.4.5 iSCSI name with binary IPv6 address alias
entry
designation, last paragraph
This << The IPv6 address, port number and Internet protocol number provided
>>
should be << The IPv6 address, port number, and Internet protocol number
provided >> Missing comma added.

IBM-302
PDF pg 349, pg 303, 7.5.3.1 Introduction to EXTENDED COPY protocol specific
target descriptors, note 56
This << Target descriptors specify logical unit identifiers and may also >>
should be << Target descriptors specify logical unit numbers and may also >>
as there is no such thing as logical unit identifiers.

IBM-303
PDF pg 349, pg 303, 7.5.3.2 Fibre Channel world wide name EXTENDED COPY
target
descriptor format, 1st paragraph
This << Fibre Channel world wide name. >> should be << Fibre Channel
Name_Identifier. >>

IBM-304
PDF pg 349, pg 303, 7.5.3.2 Fibre Channel world wide name EXTENDED COPY
target
descriptor format, 2nd paragraph under table 268
This << field shall contain the port world wide name defined by the port
login
(PLOGI) extended link service (see FC-FS). >> should be << field shall
contain
the port Name_Identifier defined by the port login (PLOGI) extended link
service (see FC-FS). >>

IBM-305
PDF pg 349, pg 303, 7.5.3.2 Fibre Channel world wide name EXTENDED COPY
target
descriptor format, note 57
This << translating the world wide name to an N_Port identifier (see
7.5.3.3).
>> should be << translating the Name_Identifier to an N_Port identifier (see
7.5.3.3). >>

IBM-306
PDF pg 351, pg 305, 7.5.3.4 Fibre Channel N_Port with world wide name
checking
EXTENDED COPY target descriptor format
The title of this section should change to << Fibre Channel N_Port with
Name_Identifier checking EXTENDED COPY target descriptor format

IBM-307
PDF pg 351, pg 305, 7.5.3.4 Fibre Channel N_Port with world wide name

checking
EXTENDED COPY target descriptor format, 1st paragraph
This<< Fibre Channel N_Port with World Wide Name checking use the target descriptor format shown >> should be << Fibre Channel N_Port with Name_Identifier checking use the target descriptor format shown >>

IBM-308
PDF pg 351, pg 305, 7.5.3.4 Fibre Channel N_Port with world wide name checking
EXTENDED COPY target descriptor format, 2nd paragraph under table 270
This << contain the port world wide name defined by the port login (PLOGI) extended link service (see FC-FS). >> should be << contain the port Name_Identifier defined by the port login (PLOGI) extended link service (see FC-FS). >>

IBM-309
PDF pg 351, pg 305, 7.5.3.4 Fibre Channel N_Port with world wide name checking
EXTENDED COPY target descriptor format, last paragraph
This << associated with the world wide name in the WORLD WIDE NAME field. >> should be << associated with the Name_Identifier in the WORLD WIDE NAME field. >>

IBM-310
PDF pg 357, pg 311, 7.5.4.2 TransportID for initiator ports using SCSI over Fibre Channel, 1st paragraph
This << port based on the world wide unique initiator port name belonging to that initiator port. >> should be << port based on the Name_Identifier of the
initiator port name belonging to that initiator port. >>

IBM-311
PDF pg 357, pg 311, 7.5.4.2 TransportID for initiator ports using SCSI over Fibre Channel, 1st paragraph after table 278
This << the port World Wide Name defined by the Physical Log In (PLOGI) extended link service, defined in FC-FS.>> should be << the port Name_Identifier defined by the Physical Log In (PLOGI) extended link service,
defined in FC-FS.>>

IBM-312
PDF pg 358, pg 312, 7.5.4.3 TransportID for initiator ports using a parallel SCSI bus, 1st paragraph
This << the relative port identifier of the SCSI target >> should be<< the relative port of the SCSI target >> as a result of the changes to VPD page 83h.

IBM-313
PDF pg 358, pg 312, 7.5.4.3 TransportID for initiator ports using a parallel SCSI bus, table 279
This << RELATIVE TARGET PORT IDENTIFIER >> should be << RELATIVE TARGET PORT >> as a result of the changes to VPD page 83h.

IBM-314
PDF pg 358, pg 312, 7.5.4.3 TransportID for initiator ports using a parallel SCSI bus, 2nd paragraph after table 279 in 2 places
This << RELATIVE TARGET PORT IDENTIFIER >> should be << RELATIVE TARGET PORT

>> as a result of the changes to VPD page 83h.

IBM-315
PDF pg 358, pg 312, 7.5.4.3 TransportID for initiator ports using a parallel SCSI bus, 2nd paragraph after table 279
This << specifies the relative port identifier of the SCSI target >> should be
<< specifies the relative port of the SCSI target>> as a result of the changes
to VPD page 83h.

IBM-316

PDF pg 358, pg 312, 7.5.4.3 TransportID for initiator ports using a parallel SCSI bus, 2nd paragraph after table 279
This << The relative port identifier value shall >> should be << The relative
port value shall >> as a result of the changes to VPD page 83h.

IBM-317
PDF pg 358, pg 312, 7.5.4.3 TransportID for initiator ports using a parallel SCSI bus, 2nd paragraph after table 279
This <<VPD page relative target port identifier >> should be << VPD page relative target port designator >> as a result of the changes to VPD page 83h.

IBM-318
PDF pg 359, pg 313, 7.5.4.6 TransportID for initiator ports using SCSI over Internet SCSI
The title of this section should be << TransportID for initiator ports using SCSI over iSCSI

IBM-319
PDF pg 360, pg 314, 7.5.4.6 TransportID for initiator ports using SCSI over Internet SCSI, 2nd paragraph under table 283
This << iSCSI name of an iSCSI initiator node (see iSCSI). >> should be << iSCSI name of an iSCSI initiator node (see RFC 3720). >>

IBM-320
PDF pg 360, pg 314, 7.5.4.6 TransportID for initiator ports using SCSI over Internet SCSI, 2nd paragraph under table 284
This << iSCSI name of an iSCSI initiator node (see iSCSI). >> should be << iSCSI name of an iSCSI initiator node (see RFC 3720). >>

IBM-321
PDF pg 361, pg 315, 7.5.4.6 TransportID for initiator ports using SCSI over Internet SCSI, last paragraph
This <<iSCSI initiator session identifier (see iSCSI) >> should be << iSCSI initiator session identifier (see RFC 3720). >>

IBM-322
PDF pg 362, pg 316, 7.6.1 Vital product data parameters overview and page codes, 1st paragraph
This << These VPD pages are optionally returned by the INQUIRY command >> should be << These VPD pages are returned by the INQUIRY command >>. It is not
optional as some VPD pages re now mandatory.

IBM-323
PDF pg 363, pg 317, 7.6.2 ASCII Implemented Operating Definition VPD page, last paragraph
This << The data in this field shall be formatted in lines (or character strings). >> should be << The data in this field shall be formatted in lines or character strings. >>

IBM-324
PDF pg 364, pg 318, 7.6.4.1 Device Identification VPD page overview, 1st paragraph two places
Change << identification descriptors >> to << designation descriptors >>

IBM-325
PDF pg 364, pg 318, 7.6.4.1 Device Identification VPD page overview, 1st paragraph
This <<associations of identifier are supported). >> should be << associations
of designator are supported). >>

IBM-326 Technical
PDF pg 364, pg 318, 7.6.4.1 Device Identification VPD page overview
Add to the 1st paragraph the following <<Device designators consist of one or
more of the following:
a) logical unit numbers;
b) logical unit names;

c) SCSI target port identifiers;
d) SCSI target port names;
e) SCSI target port relative numbers;
f) SCSI target device names;
g) SCSI target port group number; or
h) logical unit group number.

IBM-327 Technical
PDF pg 364, pg 318, 7.6.4.1 Device Identification VPD page overview
The terms << identification >> and << identifier >> in this section are intended to use the common English definition for those words. But in most other places in this standard and other SCSI standards the term << identifier
>> has a special definition. This is causing confusion. Also, in many cases the << identifier >> in this section is really a << name >> which is causing even more confusion. Unfortunately we cannot just change << identifier >> to << name >> because some of the identifiers are not names but things like relative numbers. I suggest we change the terms as follows in this section except for the titles and where identifier is really an identifier:
identification to designation
identifier to designator
I have indicted all the changes in this section that would be required. Note that not all identifiers are changed to designators as in some cases that would create an invalid case.

IBM-328
PDF pg 365, pg 319, 7.6.4.1 Device Identification VPD page overview, 2nd paragraph
This << Device identifiers >> should be << The device designators reported in
this VPD page >>

IBM-329
PDF pg 365, pg 319, 7.6.4.1 Device Identification VPD page overview, Second paragraph
This << use the device identifiers during system configuration >> should be <<
use the device designators reported in this VDP page during system configuration >>

IBM-330
PDF pg 365, pg 319, 7.6.4.1 Device Identification VPD page overview, Table 289
in 3 places
This << Identification >> should be << Designation >>

IBM-331
PDF pg 365, pg 319, 7.6.4.1 Device Identification VPD page overview, 3rd paragraph after table 289
This << Each identification descriptor >> should be << Each designation descriptor >>

IBM-332
PDF pg 365, pg 319, 7.6.4.1 Device Identification VPD page overview, 3rd paragraph after table 289
This << identifying >> should be << designating >>

IBM-333
PDF pg 365, pg 319, 7.6.4.1 Device Identification VPD page overview, 3rd paragraph after table 289
This << identification descriptors >> should be << designation descriptors >>

IBM-334
PDF pg 365, pg 319, 7.6.4.1 Device Identification VPD page overview, table 290
This << IDENTIFIER TYPE >> should be << DESIGNATOR TYPE >>.

IBM-335
PDF pg 365, pg 319, 7.6.4.1 Device Identification VPD page overview, table 290

two places
This << IDENTIFIER >> should be << DESIGNATOR >>

IBM-336
PDF pg 365, pg 319, 7.6.4.1 Device Identification VPD page overview, 1st paragraph after table 290 in two places
This << identification descriptor>> should be << designation descriptor>>

IBM-337
PDF pg 366, pg 320, 7.6.4.1 Device Identification VPD page overview, 2nd paragraph after table 290 in two palaces
This << IDENTIFIER field >> should be << DESIGNATOR field >>

IBM-338
PDF pg 366, pg 320, 7.6.4.1 Device Identification VPD page overview, table 291
in 3 palaces
This << IDENTIFIER field >> should be << DESIGNATOR field >>

IBM-339
PDF pg 366, pg 320, 7.6.4.1 Device Identification VPD page overview, 2nd paragraph after table 291
This << IDENTIFIER field >> should be << DESIGNATOR field >>

IBM-340
PDF pg 366, pg 320, 7.6.4.1 Device Identification VPD page overview, 2nd paragraph after table 291
This << Identification descriptor >> should be << Designation descriptor >>.

IBM-341
PDF pg 366, pg 320, 7.6.4.1 Device Identification VPD page overview, table 292
in 3 palaces
This << IDENTIFIER field >> should be << DESIGNATOR field >>

IBM-342
PDF pg 366, pg 320, 7.6.4.1 Device Identification VPD page overview, 1st after
table 292
This << IDENTIFIER TYPE field >> should be << DESIGNATOR TYPE field >>.

IBM-343
PDF pg 366, pg 320, 7.6.4.1 Device Identification VPD page overview, Table 293
The title of this table should be << Designator type >>.

IBM-344
PDF pg 367, pg 321, 7.6.4.1 Device Identification VPD page overview, 1st paragraph after table 293 in 3 places
This << identifier >> should be <<designator >>

IBM-345
PDF pg 367, pg 321, 7.6.4.1 Device Identification VPD page overview, 2nd paragraph after table 293 in 4 places
This << identifier >> should be <<designator >>

IBM-346
PDF pg 367, pg 321, 7.6.4.2 Vendor specific identifier format
Title of this section should be << Vendor specific designator format >>

IBM-347
PDF pg 367, pg 321, 7.6.4.2 Vendor specific identifier format, 1st paragraph in 4 places
This << identifier >> should be <<designator >>

IBM-348
PDF pg 367, pg 321, 7.6.4.2 Vendor specific identifier format, Table 294
This title should be << Vendor specific DESIGNATOR field format

IBM-349
PDF pg 367, pg 321, 7.6.4.2 Vendor specific identifier format, TABLE 294

This << VENDOR SPECIFIC IDENTIFIER >> should be << VENDOR SPECIFIC DESIGNATOR
>>

IBM-350
PDF pg 367, pg 321, 7.6.4.3 T10 vendor identification format, 1st paragraph
This << identifier type >> should be << designator type >>

IBM-351
PDF pg 367, pg 321, 7.6.4.3 T10 vendor identification format, 1st paragraph
This << identifier field>> should be << designator field >>

IBM-352
PDF pg 367, pg 321, 7.6.4.3 T10 vendor identification format, Table 295
The title should be << T10 vendor identifier DESIGNATOR field format

IBM-353
PDF pg 367, pg 321, 7.6.4.3 T10 vendor identification format, table 295
This << VENDOR SPECIFIC IDENTIFIER >> should be << VENDOR SPECIFIC
DESIGNATOR >>

IBM-354
PDF pg 367, pg 321, 7.6.4.3 T10 vendor identification format, 1st paragraph
after note 64
This << VENDOR SPECIFIC
IDENTIFIER field >> should be << VENDOR SPECIFIC
DESIGNATOR field >>

IBM-355
PDF pg 367, pg 321, 7.6.4.3 T10 vendor identification format, 1st paragraph
after note 64 in two places
This << IDENTIFIER field >> should be << DESIGNATOR field >>

IBM-356
PDF pg 368, pg 322, 7.6.4.4 EUI-64 based identifier format
This section title should be << EUI-64 based designator format >>

IBM-357
PDF pg 368, pg 322, 7.6.4.4.1 EUI-64 based identifier format overview, 1st
paragraph in 3 places
This << identifier >> should be <<designator >>

IBM-358
PDF pg 368, pg 322, 7.6.4.4.1 EUI-64 based identifier format overview
This section title should be << EUI-64 based designator format overview >>

IBM-359
PDF pg 368, pg 322, 7.6.4.4.1 EUI-64 based identifier format overview, 1st
paragraph in 3 places
This << identification >> should be << designation >>

IBM-360
PDF pg 368, pg 322, 7.6.4.4.1 EUI-64 based identifier format overview, Table
296
This title should be << EUI-64 based designator lengths >>

IBM-361
PDF pg 368, pg 322, 7.6.4.4.1 EUI-64 based identifier format overview, table
296 in 3 places
This << identifier >> should be <<designator >>

IBM-362
PDF pg 368, pg 322, 7.6.4.4.2 EUI-64 identifier format, 1st paragraph in 4
places
This << identifier >> should be <<designator >>

IBM-363
PDF pg 368, pg 322, 7.6.4.4.2 EUI-64 identifier format
This section title should be << EUI-64 designator format >>

IBM-364
PDF pg 368, pg 322, 7.6.4.4.2 EUI-64 identifier format, Table 297

This title should be << EUI-64 DESIGNATOR field format >>

IBM-365
PDF pg 368, pg 322, 7.6.4.4.2 EUI-64 identifier format, table 297
This << VENDOR SPECIFIC EXTENSION IDENTIFIER >> should be << VENDOR SPECIFIC EXTENSION DESIGNATOR>>

IBM-366
PDF pg 368, pg 322, 7.6.4.4.2 EUI-64 identifier format, 2nd paragraph after table 297
This << VENDOR SPECIFIC EXTENSION IDENTIFIER >> should be << VENDOR SPECIFIC EXTENSION DESIGNATOR>>

IBM-367
PDF pg 369, pg 323, 7.6.4.4.3 EUI-64 based 12-byte identifier format
This section title should be << EUI-64 based 12-byte designator format>>

IBM-368
PDF pg 369, pg 323, 7.6.4.4.3 EUI-64 based 12-byte identifier format, 1st paragraph in 4 places
This << identifier >> should be <<designator >>

IBM-369
PDF pg 369, pg 323, 7.6.4.4.3 EUI-64 based 12-byte identifier format, Table 298
This title should be << EUI-64 based 12-byte DESIGNATOR field format >>

IBM-370
PDF pg 369, pg 323, 7.6.4.4.3 EUI-64 based 12-byte identifier format, table 298
This << VENDOR SPECIFIC EXTENSION IDENTIFIER >> should be << VENDOR SPECIFIC EXTENSION DESIGNATOR>>

IBM-371
PDF pg 369, pg 323, 7.6.4.4.3 EUI-64 based 12-byte identifier format, 1st paragraph after table 298
This << VENDOR SPECIFIC EXTENSION IDENTIFIER >> should be << VENDOR SPECIFIC EXTENSION DESIGNATOR>>

IBM-372
PDF pg 369, pg 323, 7.6.4.4.4 EUI-64 based 16-byte identifier format
This section title should be << EUI-64 based 16-byte designator format >>

IBM-373
PDF pg 369, pg 323, 7.6.4.4.4 EUI-64 based 16-byte identifier format, 1st paragraph in 4 places
This << identifier >> should be <<designator >>

IBM-374
PDF pg 369, pg 323, 7.6.4.4.4 EUI-64 based 16-byte identifier format, Table 299
This title should be << EUI-64 based 16-byte DESIGNATOR field format

IBM-375
PDF pg 369, pg 323, 7.6.4.4.4 EUI-64 based 16-byte identifier format, table 299
This << VENDOR SPECIFIC EXTENSION IDENTIFIER >> should be << VENDOR SPECIFIC EXTENSION DESIGNATOR>>

IBM-376
PDF pg 369, pg 323, 7.6.4.4.4 EUI-64 based 16-byte identifier format, 2nd paragraph after table 299
This << VENDOR SPECIFIC EXTENSION IDENTIFIER >> should be << VENDOR SPECIFIC EXTENSION DESIGNATOR>>

IBM-377
PDF pg 370, pg 324, 7.6.4.5 NAA identifier format
This section title should be << NAA designator format >>

IBM-378
PDF pg 370, pg 324, 7.6.4.5.1 NAA identifier basic format

This section title should be << NAA designator basic format >>

IBM-379
PDF pg 370, pg 324, 7.6.4.5.1 NAA identifier basic format, 1st paragraph in
3
places
This << identifier >> should be <<designator >>

IBM-380
PDF pg 370, pg 324, 7.6.4.5.1 NAA identifier basic format, Table 300
The table title should be << NAA DESIGNATOR field format >>

IBM-381
PDF pg 370, pg 324, 7.6.4.5.1 NAA identifier basic format, 1st paragraph
after
table 300
This << identifier >> should be <<designator >>

IBM-382
PDF pg 370, pg 324, 7.6.4.5.2 NAA IEEE Extended identifier format, 1st
paragraph in 2 places
This << identifier >> should be <<designator >>

IBM-383
PDF pg 370, pg 324, 7.6.4.5.2 NAA IEEE Extended identifier format
This section title should be << NAA IEEE Extended designator format >>

IBM-384
PDF pg 370, pg 324, 7.6.4.5.2 NAA IEEE Extended identifier format, Table 302

The table title should be << NAA IEEE Extended DESIGNATOR field format >>

IBM-385
PDF pg 370, pg 324, 7.6.4.5.2 NAA IEEE Extended identifier format, table 302
in 2 places
This << VENDOR SPECIFIC IDENTIFIER >> should be << VENDOR SPECIFIC DESIGNATOR
>>

IBM-386
PDF pg 370, pg 324, 7.6.4.5.2 NAA IEEE Extended identifier format, 2nd
paragraph after table 302
This << VENDOR SPECIFIC IDENTIFIER A>> should be << VENDOR SPECIFIC
DESIGNATOR A>>

IBM-387
PDF pg 371, pg 325, 7.6.4.5.2 NAA IEEE Extended identifier format, 3rd
paragraph after table 302
This << VENDOR SPECIFIC IDENTIFIER B>> should be << VENDOR SPECIFIC
DESIGNATOR B>>

IBM-388
PDF pg 371, pg 325, 7.6.4.5.2 NAA IEEE Extended identifier format, NOTE 67
This << The EUI-64 identifier format >> should be << The EUI-64 designator
format >>

IBM-389
PDF pg 371, pg 325, 7.6.4.5.2 NAA IEEE Extended identifier format, note 67
This << The IEEE Extended identifier format >> should be << The IEEE
Extended
designator format >>

IBM-390
PDF pg 371, pg 325, 7.6.4.5.3 NAA IEEE Registered identifier format, 1st
paragraph in 2 places
This << identifier >> should be <<designator >>

IBM-391
PDF pg 371, pg 325, 7.6.4.5.3 NAA IEEE Registered identifier format, Table
303
The table title should be << NAA IEEE Registered DESIGNATOR field format >>

IBM-392
PDF pg 371, pg 325, 7.6.4.5.3 NAA IEEE Registered identifier format, table
303
This << VENDOR SPECIFIC IDENTIFIER >> should be << VENDOR SPECIFIC DESIGNATOR
>>

IBM-393
PDF pg 371, pg 325, 7.6.4.5.3 NAA IEEE Registered identifier format, 2nd
paragraph after table 303
This << VENDOR SPECIFIC IDENTIFIER>> should be << VENDOR SPECIFIC
DESIGNATOR>>

IBM-394
PDF pg 371, pg 325, 7.6.4.5.3 NAA IEEE Registered identifier format, NOTE 68
This << The EUI-64 identifier format >> should be << The EUI-64 designator
format >>

IBM-395
PDF pg 371, pg 325, 7.6.4.5.3 NAA IEEE Registered identifier format, note 68
This << The IEEE Extended identifier format >> should be << The IEEE
Extended
designator format >>

IBM-396
PDF pg 371, pg 325, 7.6.4.5.4 NAA IEEE Registered Extended identifier
format,
1st paragraph in 2 places
This << identifier >> should be <<designator >>

IBM-397
PDF pg 371, pg 325, 7.6.4.5.4 NAA IEEE Registered Extended identifier format
This section title should be << NAA IEEE Registered Extended designator
format >>

IBM-398
PDF pg 371, pg 325, 7.6.4.5.4 NAA IEEE Registered Extended identifier
format,
Table 304
The table title should be << NAA IEEE Registered Extended DESIGNATOR field
format >>

IBM-399
PDF pg 371, pg 325, 7.6.4.5.4 NAA IEEE Registered Extended identifier
format,
table 304 in 2 places
This << VENDOR SPECIFIC IDENTIFIER >> should be << VENDOR SPECIFIC DESIGNATOR
>>

IBM-400
PDF pg 372, pg 326, 7.6.4.5.4 NAA IEEE Registered Extended identifier
format,
2nd paragraph after table 304
This << VENDOR SPECIFIC IDENTIFIER>> should be << VENDOR SPECIFIC
DESIGNATOR>>

IBM-401
PDF pg 372, pg 326, 7.6.4.5.4 NAA IEEE Registered Extended identifier
format,
NOTE 69
This << The EUI-64 identifier format >> should be << The EUI-64 designator
format >>

IBM-402
PDF pg 372, pg 326, 7.6.4.5.4 NAA IEEE Registered Extended identifier
format,
note 69
This << The IEEE Extended identifier format >> should be << The IEEE
Extended
designator format >>

IBM-403

PDF pg 372, pg 326, 7.6.4.5.4 NAA IEEE Registered Extended identifier format,
3rd paragraph after table 304
This << VENDOR SPECIFIC IDENTIFIER EXTENSION >> should be << VENDOR SPECIFIC DESIGNATOR EXTENSION >>

IBM-404
PDF pg 372, pg 326, 7.6.4.6 Relative target port identifier format, 1st paragraph in 4 places
This << identifier >> should be <<designator >>

IBM-405
PDF pg 372, pg 326, 7.6.4.6 Relative target port identifier format
This section title should be << Relative target port designator format >>

IBM-406
PDF pg 372, pg 326, 7.6.4.6 Relative target port identifier format, Table 305
This table title should be << Relative target port DESIGNATOR field format >>

IBM-407
PDF pg 372, pg 326, 7.6.4.6 Relative target port identifier format, 1st paragraph after table 305
This << identifies the SCSI target >> should be << specifies the SCSI target >>

IBM-408
PDF pg 372, pg 326, 7.6.4.6 Relative target port identifier format, Table 306

The title of this table should be << Relative target port values >>

IBM-409
PDF pg 373, pg 327, 7.6.4.7 Target port group identifier format, 1st paragraph
in 4 places
This << identifier >> should be <<designator >>

IBM-410
PDF pg 373, pg 327, 7.6.4.7 Target port group identifier format
This section title should be << Target port group designator format >>

IBM-411
PDF pg 373, pg 327, 7.6.4.7 Target port group identifier format, Table 307
This table title should be << Target port group DESIGNATOR field format >>

IBM-412
PDF pg 373, pg 327, 7.6.4.7 Target port group identifier format, 1st paragraph
after table 307
This << field contains the identifier for the target port group >> should be
<< field specifics the target port group >>

IBM-413
PDF pg 373, pg 327, 7.6.4.8 Logical unit group identifier format
This section title should be << Logical unit group designator format >>

IBM-414
PDF pg 373, pg 327, 7.6.4.8 Logical unit group identifier format, 2nd paragraph in 4 places
This << identifier >> should be <<designator >>

IBM-415
PDF pg 373, pg 327, 7.6.4.8 Logical unit group identifier format, Table 308
This table title should be << Logical unit group DESIGNATOR field format >>

IBM-416
PDF pg 373, pg 327, 7.6.4.8 Logical unit group identifier format, 1st paragraph after table 308
This << field contains the identifier for the logical unit group >> should be

<< field specifies the logical unit group >>

IBM-417
PDF pg 373, pg 327, 7.6.4.9 MD5 logical unit identifier format, 1st paragraph
This << identifier >> should be <<designator >>

IBM-418
PDF pg 373, pg 327, 7.6.4.9 MD5 logical unit identifier format
This section title should be << MD5 logical unit identifier designator format >>

IBM-419
PDF pg 373, pg 327, 7.6.4.9 MD5 logical unit identifier format, 1st paragraph
This << identifier >> should be <<designator >>

IBM-420
PDF pg 373, pg 327, 7.6.4.9 MD5 logical unit identifier format, 1st paragraph
This << identifier >> should be <<designator >>

IBM-421
PDF pg 373, pg 327, 7.6.4.9 MD5 logical unit identifier format, 1st paragraph
This << identifier >> should be <<designator >>

IBM-422
PDF pg 373, pg 327, 7.6.4.9 MD5 logical unit identifier format, 1st paragraph
This << identifier >> should be <<designator >>

IBM-423
PDF pg 374, pg 328, 7.6.4.9 MD5 logical unit identifier format, 2nd paragraph
This << identifier >> should be <<designator >>

IBM-424
PDF pg 374, pg 328, 7.6.4.9 MD5 logical unit identifier format, Table 309
This table title should be << MD5 logical unit identifier DESIGNATOR field format >>

IBM-425
PDF pg 374, pg 328, 7.6.4.9 MD5 logical unit identifier format, item 4
This << The contents of a vendor specific IDENTIFIER field (type 0h) from >> should be << The contents of a vendor specific DESIGNATOR field (type 0h) from >>

IBM-426
PDF pg 374, pg 328, 7.6.4.9 MD5 logical unit identifier format, item 5
This << The contents of a T10 vendor identification IDENTIFIER field (type >>
should be << The contents of a T10 vendor identification DESIGNATOR field (type >>

IBM-427
PDF pg 374, pg 328, 7.6.4.9 MD5 logical unit identifier format, table 310
This << vendor specific IDENTIFIER field >> should be << vendor specific DESIGNATOR field >>

IBM-428
PDF pg 375, pg 329, 7.6.4.9 MD5 logical unit identifier format, Last paragraph
This << described in RFC 1321 will produce the value 2BE1 >> should be << described in RFC 1321 produces the value 2BE1 >>

IBM-429
PDF pg 375, pg 329, 7.6.4.10 SCSI name string identifier format
This section title should be << SCSI name string designator format >>

IBM-430

PDF pg 375, pg 329, 7.6.4.10 SCSI name string identifier format, 1st paragraph
in 2 places
This << identifier >> should be <<designator >>

IBM-431
PDF pg 375, pg 329, 7.6.4.10 SCSI name string identifier format, Table 312
This table title should be << SCSI name string DESIGNATOR field format >>

IBM-432
PDF pg 375, pg 329, 7.6.4.10 SCSI name string identifier format, 1st paragraph
after table 312
This << value in the IDENTIFIER LENGTH field) >> should be << value in the DESIGNATOR LENGTH field)

IBM-433
PDF pg 376, pg 330, 7.6.4.11 Device identification descriptor requirements
This section title should be << Device designation descriptor requirements >>

IBM-434
PDF pg 376, pg 330, 7.6.4.11.1 Identification descriptors for SCSI target devices, 1st paragraph in 2 places
This << identification descriptors >> should be << designation descriptors >>

IBM-435
PDF pg 376, pg 330, 7.6.4.11.1 Identification descriptors for SCSI target devices
This section title should be << Designation descriptors for SCSI target devices

IBM-436
PDF pg 376, pg 330, 7.6.4.11.1 Identification descriptors for SCSI target devices, 1st paragraph
This << identifier >> should be <<designator >>

IBM-437
PDF pg 376, pg 330, 7.6.4.11.1 Identification descriptors for SCSI target devices, last paragraph
This << identification descriptors >> should be << designation descriptors >>

IBM-438
PDF pg 376, pg 330, 7.6.4.11.2 Identification descriptors for SCSI target ports
This section title should be << Designation descriptors for SCSI target ports

IBM-439
PDF pg 376, pg 330, 7.6.4.11.2 Identification descriptors for SCSI target ports, 1st paragraph in 2 places
This << identification descriptors >> should be << designation descriptors >>

IBM-440
PDF pg 376, pg 330, 7.6.4.11.2 Identification descriptors for SCSI target ports, 1st paragraph
This << identifier >> should be <<designator >>

IBM-441
PDF pg 376, pg 330, 7.6.4.11.2 Identification descriptors for SCSI target ports, 2nd paragraph
This << identification descriptors >> should be << designation descriptors >>

IBM-442
PDF pg 376, pg 330, 7.6.4.11.2 Identification descriptors for SCSI target ports, 2nd paragraph
This << identifier >> should be <<designator >>

IBM-443
PDF pg 376, pg 330, 7.6.4.11.2 Identification descriptors for SCSI target ports, last paragraph in 2 places
This << identification descriptors >> should be << designation descriptors >>

IBM-444
PDF pg 376, pg 330, 7.6.4.11.3 Identification descriptors for logical units
This section title should be << Designation descriptors for logical units

IBM-445
PDF pg 376, pg 330, 7.6.4.11.3 Identification descriptors for logical units, 1st paragraph in 2 places
This << identification descriptors >> should be << designation descriptors >>

IBM-446
PDF pg 376, pg 330, 7.6.4.11.3 Identification descriptors for logical units, 1st paragraph
This << identifier >> should be <<designator >>

IBM-447
PDF pg 376, pg 330, 7.6.4.11.3 Identification descriptors for logical units, 2nd paragraph
This << identifier >> should be <<designator >>

IBM-448
PDF pg 376, pg 330, 7.6.4.11.3 Identification descriptors for logical units, 2nd paragraph
This << identification descriptors >> should be << designation descriptors >>

IBM-449
PDF pg 376, pg 330, 7.6.4.11.3 Identification descriptors for logical units, 3rd paragraph
This << identification descriptors >> should be << designation descriptors >>

IBM-450
PDF pg 376, pg 330, 7.6.4.11.3 Identification descriptors for logical units, 3rd paragraph
This << identifier >> should be <<designator >>

IBM-451
PDF pg 377, pg 331, 7.6.4.11.3 Identification descriptors for logical units, 4th paragraph
This << identifier >> should be <<designator >>

IBM-452
PDF pg 377, pg 331, 7.6.4.11.3 Identification descriptors for logical units, 4th paragraph
This << identification descriptors >> should be << designation descriptors >>

IBM-453
PDF pg 377, pg 331, 7.6.4.11.3 Identification descriptors for logical units, 2nd to last paragraph
This << identification descriptors >> should be << designation descriptors >>

IBM-454
PDF pg 377, pg 331, 7.6.4.11.3 Identification descriptors for logical units, last paragraph in 2 places
This << identification descriptors >> should be << designation descriptors >>

IBM-455
PDF pg 377, pg 331, 7.6.4.11.4 Identification descriptors for well known logical units
This section title should be << Designation descriptors for well known

logical units

IBM-456
PDF pg 377, pg 331, 7.6.4.11.4 Identification descriptors for well known logical units, 1st paragraph
This << identification descriptors >> should be << designation descriptors >>

IBM-457
PDF pg 377, pg 331, 7.6.4.11.4 Identification descriptors for well known logical units, 2nd paragraph
This << identification descriptors >> should be << designation descriptors >>

IBM-458
PDF pg 377, pg 331, 7.6.4.11.4 Identification descriptors for well known logical units, last paragraph in 2 places
This << identification descriptors >> should be << designation descriptors >>

IBM-459
PDF pg 378, pg 332, 7.6.5 Extended INQUIRY Data VPD page
It is not clear fro the description of the group_sup bit if set one indication
support for target port grouping or logical unit grouping or both. This needs
to be fixed.

IBM-460 Technical
PDF pg 378, pg 332, 7.6.5 Extended INQUIRY Data VPD page
For the headsup, ordsup, and simpsup bits the set to zero case in the not supported case. How is it possible that the normal default case (i.e., set to
zero) that would indicate past standards behavior is the set to one case. This
goes against backward compatibility. The polarity of all these bits should be
changed.

IBM-461
PDF pg 382, pg 336, 7.6.8 SCSI Ports page, 1st paragraph
This << identification descriptors >> should be << designation descriptors >>

IBM-462
PDF pg 382, pg 336, 7.6.8 SCSI Ports page, table 320 in three places
This << identification descriptors >> should be << designation descriptors >>

IBM-463
PDF pg 382, pg 336, 7.6.8 SCSI Ports page, 2nd paragraph after table 320
This << identification descriptors >> should be << designation descriptors >>

IBM-464
PDF pg 382, pg 336, 7.6.8 SCSI Ports page, 4th paragraph after table 320
This << identification descriptors >> should be << designation descriptors >>

IBM-465
PDF pg 383, pg 337, 7.6.8 SCSI Ports page, 5th paragraph after table 320
This << identification descriptors >> should be << designation descriptors >>

IBM-466
PDF pg 383, pg 337, 7.6.8 SCSI Ports page, 5th paragraph after table 320
This << identification descriptors >> should be << designation descriptors >>

IBM-467
PDF pg 383, pg 337, 7.6.8 SCSI Ports page, Table 321

The title of this table should be << SCSI port designation descriptor >>

IBM-468
PDF pg 383, pg 337, 7.6.8 SCSI Ports page, Table 322
The title of this table should be << Relative port values >>

IBM-469
PDF pg 384, pg 338, 7.6.8 SCSI Ports page, table 323
This << IDENTIFIER TYPE >> should be << DESIGNATOR TYPE >>

IBM-470
PDF pg 384, pg 338, 7.6.8 SCSI Ports page, table 323 in two places
This << IDENTIFIER >> should be << DESIGNATOR >>.

IBM-471
PDF pg 384, pg 338, 7.6.8 SCSI Ports page, 1st paragraph after table 323
This << identification descriptor >> should be << designation descriptor >>

IBM-472
PDF pg 384, pg 338, 7.6.8 SCSI Ports page, 2nd paragraph after table 323
This << IDENTIFIER >> should be << DESIGNATOR >>.

IBM-473
PDF pg 384, pg 338, 7.6.8 SCSI Ports page, 2nd paragraph after table 323
This << IDENTIFIER >> should be << DESIGNATOR >>.

IBM-474
PDF pg 384, pg 338, 7.6.8 SCSI Ports page, 2nd paragraph after table 323
This << IDENTIFIER >> should be << DESIGNATOR >>.

IBM-475
PDF pg 384, pg 338, 7.6.8 SCSI Ports page, 2nd paragraph after table 323
This << identification descriptor >> should be << designation descriptor >>

IBM-476
PDF pg 388, pg 342, 8.3.1.2 Access controls overview
All the access controls sections (8.3.1.2 through 8.3.3.12) should be moved
to
a new section after the well known logical units section and before annex A.

IBM-477
PDF pg 394, pg 348, 8.3.1.5.1.2 Not-enrolled state, item a) last a.b.c list
This << Honor the recommendation (results in the minimum effects on SCSI
initiator devices and requires no extra actions on the part of the access
controls coordinator); >> should be << Honor the recommendation which
results
in the minimum effects on SCSI initiator devices and requires no extra
actions
on the part of the access controls coordinator; >>

IBM-478
PDF pg 394, pg 348, 8.3.1.5.1.2 Not-enrolled state, item b) last a.b.c list
This << Ignore the recommendation and always place initiator ports in the
non-enrolled state (results in the maximum disruption for SCSI initiator
devices, but requires no extra resources on the part of the access controls
coordinator); >> should be << Ignore the recommendation and always place
initiator ports in the non-enrolled state which results in the maximum
disruption for SCSI initiator devices, but requires no extra resources on
the
part of the access controls coordinator; >>

IBM-479
PDF pg 398, pg 352, 8.3.1.7 Verifying access rights, item b) in last a,b,c
list
This << If the initiator port (in any enrollment state) has a TransportID >>
should be << If the initiator port, in any enrollment state, has a
TransportID >>

IBM-480

PDF pg 398, pg 352, 8.3.1.7 Verifying access rights, item c) in last a,b,c list
This << If the initiator port (in any enrollment state) has access to any >> should be << If the initiator port, in any enrollment state, has access to any >>

IBM-481
PDF pg 399, pg 353, 8.3.1.8.2.2 The override lockout timer, 3rd from the last
This << sufficient duration (up to about 18 hours). >> should be << sufficient
duration (i.e., up to about 18 hours). >>

IBM-482
PDF pg 402, pg 356, 8.3.1.12 Access controls information persistence and memory usage requirements, table 333
What does << VS >> stand for. There needs to be a note in this table with VS defined.

IBM-483
PDF pg 412, pg 366, 8.3.2.3.1 REPORT LU DESCRIPTORS introduction, 1st paragraph after table 347
This << GOOD status returning the twenty byte parameter list header >> should
be << GOOD status returning the 20 byte parameter list header >>

IBM-484
PDF pg 415, pg 369, 8.3.2.3.2 REPORT LU DESCRIPTORS parameter data format
Most of the changes in this section are required if the identifier to designator change is made to the VPD page 83h.

IBM-485
PDF pg 415, pg 369, 8.3.2.3.2 REPORT LU DESCRIPTORS parameter data format, table 350
This << EVPD IDENTIFICATION DESCRIPTOR LENGTH>> should be << EVPD DESIGNATION
DESCRIPTOR LENGTH>>

IBM-486
PDF pg 415, pg 369, 8.3.2.3.2 REPORT LU DESCRIPTORS parameter data format, table 350
This << EVPD IDENTIFICATION DESCRIPTOR >> should be << EVPD DESIGNATION DESCRIPTOR >>

IBM-487
PDF pg 415, pg 369, 8.3.2.3.2 REPORT LU DESCRIPTORS parameter data format, 4th
paragraph after table 350 in 2 places
This << IDENTIFICATION >> should be << DESIGNATION >>

IBM-488
PDF pg 416, pg 370, 8.3.2.3.2 REPORT LU DESCRIPTORS parameter data format, 6th
paragraph after table 350
This << IDENTIFICATION >> should be << DESIGNATION >>

IBM-489
PDF pg 416, pg 370, 8.3.2.3.2 REPORT LU DESCRIPTORS parameter data format, 6th
paragraph after table 350
This << identification >> should be << designation >>

IBM-490
PDF pg 416, pg 370, 8.3.2.3.2 REPORT LU DESCRIPTORS parameter data format, item a) 1st a,b,c list after table 350 in 5 places
This << identification >> should be << designation >>

IBM-491
PDF pg 416, pg 370, 8.3.2.3.2 REPORT LU DESCRIPTORS parameter data format, item b) 1st a,b,c list after table 350 in 4 places
This << identification >> should be << designation >>

IBM-492
PDF pg 416, pg 370, 8.3.2.3.2 REPORT LU DESCRIPTORS parameter data format, 1st
paragraph after 1st a,b,c list in 3 places
This << identification >> should be << designation >>

IBM-493
PDF pg 416, pg 370, 8.3.2.3.2 REPORT LU DESCRIPTORS parameter data format, Last paragraph
This << contain the same data that would have been returned by a successful READ CAPACITY command with LONGLBA bit set >> should be << contain data equivalent to that returned by a successful READ CAPACITY command with LONGLBA
bit set >>

IBM-494
PDF pg 425, pg 379, 8.3.3.1 ACCESS CONTROL OUT introduction, 1st paragraph
This << command (see Table 25) are >> should be<< command (see table 25) are >> but more important this is the wrong table reference and is not linked to any table.

IBM-495
PDF pg 430, pg 384, 8.3.3.2.2 The Grant/Revoke ACE page, Note 77
This << default LUN values to logical units (and the DLgeneration value for that association) prior to issuing this service action. >> should be << default LUN values to logical units and the DLgeneration value for that association prior to issuing this service action. >>

IBM-496
PDF pg 431, pg 385, 8.3.3.2.2 The Grant/Revoke ACE page, table 368
This << Take no action; this shall not be considered an error. >> should be <<
Take no action. This shall not be considered an error. >>

IBM-497
PDF pg 434, pg 388, 8.3.3.2.5 The Revoke All Proxy Tokens ACE page, item g
This << Clear the access controls log (including resetting counters to zero) with the exception >> should be << Clear the access controls log, including resetting counters to zero, with the exception >>

IBM-498
PDF pg 435, pg 389, 8.3.3.4 ACCESS ID ENROLL service action, 5th paragraph after table 373
This << enrolling the initiator port would create an ACL LUN conflict >> should be << enrolling the initiator port results in an ACL LUN conflict >>

IBM-499
PDF pg 445, pg 399, B.2 Replacing the reserve/release method with the PERSISTENT RESERVE OUT COMMAND, 1st paragraph
This << method (see SPC-2) is shown in table B.1. >> should be << method (see
SPC-2) are shown in table B.1. >>

IBM-500
PDF pg 448, pg 402, C.3 LOG SENSE command, table c.1
This << bits to see what 'allowed' means. >> should be << bits to see what allowed means. >>

IBM-501
PDF pg 480, pg 434, D.3.5 SERVICE ACTION IN and SERVICE ACTION OUT service actions, 1st paragraph after table D.6
This << standard is shown in table D.6. >> should be << standard is shown in table D.7. >>. This is a link to the wrong table.

IBM-502
PDF pg 484, pg 438, D.6 Mode Page Codes, table D.12
This << MMC-4 calls this page 'Fault/Failure Reporting Page', however, >> should be << MMC-4 calls this page the Fault/Failure Reporting Page, however, >>

****

Comments attached to Yes ballot from Robert Sheffield of
Intel Corp.:

Intel #1
PDF Page 364
Technical
identifier
s/b designation
Throughout this section use of the word "identifier" leads to confusion with

the SAM-3 use of the term, "SCSI identifier". Since nothing reported in the
Device Identification VPD page represents a SCSI identifier, I suggest using

a different term to describe the elements reported in the Device
Identification VPD page. Perhaps "designation" is an appropriate term.

****

Comments attached to Yes ballot from John Lohmeyer of
LSI Logic Corp.:

Annex E

In the first sentence of the first paragraph, delete 'SCSI'. This is the
only place in SPC-3 where we still use the term 'SCSI vendor
identifications'.

Elsewhere, we use 'T10 vendor identification' or just 'vendor
identification'. We should normalized these usages to either 'T10 vendor
identification' or 'vendor identification'.

****

Comments attached to No ballot from Mark Evans of
Maxtor Corp.:

Maxtor #1
PDF Page 2
Figure 1 - SCSI document relationships: This figure is different than its
counterparts in SBC-2 and SAS. I think that only one format should be used
in T10 documents, but I'm open for suggestions.

Maxtor #2
PDF Page 7
3.1.5 active condition: Change to, "When a device server is capable of
responding to all of its supported commands, including media access
requests, and operations complete in the shortest time (see 5.9)."

Maxtor #3
PDF Page 8
3.1.17 command descriptor block (CDB): Change to, "The structure used to
communicate commands from an application client to a device server (see
4.3)."

Maxtor #4
PDF Page 8
3.1.23 data-in buffer: Change "identified" to "specified".

Maxtor #5
PDF Page 8
3.1.24 data-out buffer: Change "identified" to "specified".

Maxtor #6
PDF Page 9

3.1.x I_T nexus: Add the definition for I_T nexus from SAM-3, "A nexus between a SCSI initiator port and a SCSI target port (seeSAM-3."

Maxtor #7
PDF Page 9
3.1.39 I_T_L nexus: Change to the definition in SAM-3, "A nexus between a SCSI initiator port, a SCSI target port, and a logical unit (see SAM-3)."

Maxtor #8
PDF Page 9
3.1.42 idle condition: Change to, "When a device server is capable of responding to all of its supported commands including media access requests, but operations may take longer to complete than when in the active power condition (see 5.9)."

Maxtor #9
PDF Page 10
3.1.y nexus: Add the definition for nexus from SAM-3, "A relationship between two SCSI devices, and the SCSI initiator port and SCSI target port objects within those SCSI devices (see SAM-3)."

Maxtor #10
PDF Page 10
3.1.61 name: I think, "world wide identification" is supposed to be, "worldwide identifier". However, it might be better to replace this example with "world wide name" and "WWN" as those are used in this document, and WWID isn't.

Maxtor #11
PDF Page 11
3.1.77 request for comment (RFC): Capitalize "Engineering Task Force".

Maxtor #12
PDF Page 12
3.1.99 standby condition: Change to, "When a device server is capable of accepting commands but not capable of processing media access commands (see 5.9)."

Maxtor #13
PDF Page 16
3.4 Conventions, second paragraph: Change, "...all CDB lengths for that command.", to, "...all forms of that command regardless of CDB length."

Maxtor #14
PDF Page 17
3.6.1 Notation for byte encoded character strings, first paragraph: Delete, "exactly".

Maxtor #15
PDF Page 17
3.6.1 Notation for byte encoded character strings, first paragraph: Change, "...contain specific encoded character," to, "...contain specific encoded characters,".

Maxtor #16
PDF Page 17
3.6.1 Notation for byte encoded character strings, first paragraph: Change "...to be encoded but are not themselves to encoded." to "...to be encoded but are not themselves to be encoded."

Maxtor #17
PDF Page 24
4.3.3 The variable length CDB formats, first paragraph: Replace, "Operation code 7Fh heads a variable length CDB." with, "The first byte of a variable length CDB contains the operation code 7Fh."

Maxtor #18
PDF Page 24
4.3.3 The variable length CDB formats, second paragraph: Delete the commas before and after the phrase, "with the sense key set to ILLEGAL REQUEST".

Maxtor #19
PDF Page 24
4.3.3 The variable length CDB formats, second paragraph: Change "...indicates the number..." to "...specifies the number...".

Maxtor #20
PDF Page 24
4.3.3 The variable length CDB formats, third paragraph: Change "...indicates the action..." to "...specifies the action...".

Maxtor #21
PDF Page 26
Table 10 - Group Code values: Change, "The format the commands using...", to, "The format of the commands using...".

Maxtor #22
PDF Page 26
4.3.4.4 Transfer length, second paragraph: Change "...indicates the number of blocks..." to "...specifies the number of blocks...".

Maxtor #23
PDF Page 27
4.3.4.4 Transfer length, third paragraph: Change "indicates" to "specifies" in two places.

Maxtor #24
PDF Page 27
4.3.4.5 Parameter list length: Change "indicates" to "specifies".

Maxtor #25
PDF Page 27
4.3.4.6 Allocation length, first paragraph: Change "indicates" to "specifies".

Maxtor #26
PDF Page 27
4.3.4.6 Allocation length, second paragraph: Delete, "specifically".

Maxtor #27
PDF Page 27
4.3.4.7 Control: Change, "The CONTROL field has a consistently defined meaning across all commands.", to, "The CONTROL field has the same definition for all commands."

Maxtor #28
PDF Page 28
4.4.2 Null data field termination and zero padding requirements, second paragraph: Change the first sentence to be three sentences: "A data field may be specified to be a fixed length. The length specified for a data field may be greater than the length required to contain the contents of the field. A data field may be specified to have a length that is a multiple of a given value (e.g., a multiple of four bytes)."

Maxtor #29
PDF Page 28
4.5.1 Sense data introduction: Change, "...either fixed or descriptor format sense data format...", to, "...either fixed format sense data or descriptor format sense data...", or to, "...either fixed sense data format or descriptor sense data format..." depending on what they are to be called.

Maxtor #30
PDF Page 28
4.5 Sense data, several places: Is it, "fixed format sense data", or is it, "fixed sense data format"? I think it's the second. One way or the other, the usage should be consistent. This goes for "descriptor sense data format", as well.

Maxtor #31
PDF Page 37
4.5.3 Fixed format sense data, second paragraph, first sentence: Does this

mean, "A VALID bit set to zero indicates that the content of the INFORMATION field is vendor specific (see 3.1.114)."? If so, that's what should be said.

Maxtor #32
PDF Page 37
4.5.3 Fixed format sense data, fourth paragraph: Demote "The obsolete byte 1 contained information used by the COPY command." to be a note.

Maxtor #33
PDF Page 57
5.4 Parameter rounding, third paragraph: Delete "explicitly".

Maxtor #34
PDF Page 58
5.5.3.1 Foreground mode, fourth paragraph: Change the last sentence to, "If a SEND DIAGNOSTIC command that requested a self-test in the foreground mode is terminated while the SCSI target device is performing the self-test, the device server shall abort the self-test and update the Self-Test Results log page (see 7.2.10)."

Maxtor #35
PDF Page 60
Table 30 - Self-test mode summary: Change column 3 row 2 to be, "One of the commands or task management functions that cause tasks to be aborted (see 5.5.3.1)."

Maxtor #36
PDF Page 62
5.6.1 Persistent Reservations overview, paragraph twenty: Change, "...the descriptions each specific command.", to, "...the descriptions of each specific command."

Maxtor #37
PDF Page 73
5.6.9 Persistent reservation holder, fifth paragraph: Delete "automatically" in two places.

Maxtor #38
PDF Page 81
5.8.2.1 Introduction to asymmetric logical unit access, first paragraph: Delete "need to".

Maxtor #39
PDF Page 89
5.9.2.x.y: Make all of the "Head4's" bold in this clause.

Maxtor #40
PDF Page 98
6.2.3 Alias designation validation, fourth paragraph: Change "declared" to "considered".

Maxtor #41
PDF Page 99
6.2.4.2 NULL DESIGNATION alias format, after the clause: I'm still trying to decipher the editor's algorithm used to determine which commands are started at the top of the following page regardless of available space on the previous page.

Maxtor #42
PDF Page 100
6.3.1 EXTENDED COPY command introduction, second paragraph: Delete "independently".

Maxtor #43
PDF Page 100
6.3.1 EXTENDED COPY command introduction, second paragraph: Change the second sentence to, "These actions may include sending media changer commands, sending MODE SELECT commands, sending reservation commands, loading of tapes, and positioning of tape."

Maxtor #44
PDF Page 100
6.3.1 EXTENDED COPY command introduction, third paragraph: Change "indicates" to "specifies".

Maxtor #45
PDF Page 102
6.3.1 EXTENDED COPY command introduction, seventh paragraph: Change "indicates" to "specifies" in two places.

Maxtor #46
PDF Page 102
6.3.1 EXTENDED COPY command introduction, tenth paragraph: I think that the "source and/or the destination logical units" are the same as the "copy source and/or copy destination devices" as they are called in the introduction clause. If this is true, then the wording should be made consistent.

Maxtor #47
PDF Page 103
6.3.2 Errors detected before starting processing of the segment descriptors, first paragraph: Change, "These conditions include...", to, "These errors include...".

Maxtor #48
PDF Page 103
6.3.3 Errors detected during processing of segment descriptors, first paragraph: Change, "These include...", to, "These errors include...".

Maxtor #49
PDF Page 104
6.3.3 Errors detected during processing of segment descriptors, a-b-c list, item c: Delete "solely".

Maxtor #50
PDF Page 104
6.3.3 Errors detected during processing of segment descriptors, a-b-c list, item c: Change, "...destination device, specifically commands completed by a destination device with GOOD status or with CHECK CONDITION status and the EOM bit set to one in the sense data.", to, "...destination copy device (i.e., commands completed by a destination device with GOOD status or with CHECK CONDITION status and the EOM bit set to one in the sense data)."

Maxtor #51
PDF Page 104
6.3.3 Errors detected during processing of segment descriptors, a-b-c list, item d: Change "source logical unit" to "copy source device" in three places.

Maxtor #52
PDF Page 104
6.3.3 Errors detected during processing of segment descriptors, a-b-c list, item e: Change "destination logical unit" to "copy destination device".

Maxtor #53
PDF Page 109
6.3.6.1 Target descriptors introduction, ninth paragraph: Change "indicates" to "specifies" in two places.

Maxtor #54
PDF Page 110
6.3.6.1 Target descriptors introduction, last paragraph: Does, "...the copy manager shall not issue any commands that change the position of read/write media on the copy target device without restoring it." actually mean, "...the copy manager shall not issue any commands that change the position of read/write media on the copy target device without returning the media to its original position."? One way or the other, change the sentence to say what it is supposed to mean.

Maxtor #55
PDF Page 118

6.3.7.3 Block device to stream device operations, third paragraph: Though it looks fine in the Frame file and where it occurs earlier in my pdf file, in this instance the arrowhead is superimposed on the "s" in "stream". I'm not sure if this is an issue with Frame or my Acrobat, but it would be good if it could be fixed. As this occurs in several other places following, I'll identify those only as "superimposed arrowhead" with a clause number to save space.

Maxtor #56
PDF Page 118
6.3.7.3: Superimposed arrowhead.

Maxtor #57
PDF Page 118
6.3.7.3: Superimposed arrowhead.

Maxtor #58
PDF Page 119
6.3.7.4: Superimposed arrowhead.

Maxtor #59
PDF Page 119
6.3.7.4: Superimposed arrowhead.

Maxtor #60
PDF Page 120
6.3.7.5: Superimposed arrowhead.

Maxtor #61
PDF Page 120
6.3.7.5: Superimposed arrowhead.

Maxtor #62
PDF Page 120
6.3.7.5: Superimposed arrowhead.

Maxtor #63
PDF Page 121
6.3.7.5 Block device to block device operations, seventh paragraph: Change "indicates" to "specifies" in three places.

Maxtor #64
PDF Page 121
6.3.7.5 Block device to block device operations, seventh paragraph: Change "indicates" to "specifies" in two places.

Maxtor #65
PDF Page 122
6.3.7.6: Superimposed arrowhead.

Maxtor #66
PDF Page 122
6.3.7.6: Superimposed arrowhead.

Maxtor #67
PDF Page 122
6.3.7.6: Superimposed arrowhead.

Maxtor #68
PDF Page 124
6.3.7.7: Superimposed arrowhead.

Maxtor #69
PDF Page 125
6.3.7.8: Superimposed arrowhead.

Maxtor #70
PDF Page 126
6.3.7.9: Superimposed arrowhead.

Maxtor #71

PDF Page 126
6.3.7.9: Superimposed arrowhead.

Maxtor #72
PDF Page 126
6.3.7.9 Stream device to discard operation, third paragraph: Change "indicated" to "specified".

Maxtor #73
PDF Page 127
6.3.7.9: Superimposed arrowhead.

Maxtor #74
PDF Page 127
6.3.7.9: Superimposed arrowhead.

Maxtor #75
PDF Page 127
6.3.7.9: Superimposed arrowhead.

Maxtor #76
PDF Page 128
6.3.7.11: Superimposed arrowhead.

Maxtor #77
PDF Page 129
6.3.7.12 Stream device to block device with offset operation, ninth paragraph: Change "is" to "specifies".

Maxtor #78
PDF Page 130
6.3.7.13: Superimposed arrowhead.

Maxtor #79
PDF Page 131
6.3.7.14: Superimposed arrowhead.

Maxtor #80
PDF Page 131
6.3.7.13 Block device with offset to block device with offset operation, last paragraph: Change "is" to "specifies".

Maxtor #81
PDF Page 132
6.3.7.15: Superimposed arrowhead.

Maxtor #82
PDF Page 133
6.3.7.16: Superimposed arrowhead.

Maxtor #83
PDF Page 134
6.3.7.17: Superimposed arrowhead.

Maxtor #84
PDF Page 134
6.3.7.17 Tape device image copy operation, fifth paragraph: Change "indicates" to "specifies".

Maxtor #85
PDF Page 142
6.4.2 Standard INQUIRY data, eighth paragraph: Change "specified" to "defined".

Maxtor #86
PDF Page 142
6.4.2 Standard INQUIRY data, ninth paragraph: Change "shall specify" to "indicates".

Maxtor #87
PDF Page 142

6.4.2 Standard INQUIRY data, ninth paragraph, second sentence: Change to, "If the allocation length specified in the CDB is too small to transfer all of the parameters, the content of the ADDITIONAL LENGTH field shall not be adjusted to reflect the truncation."

Maxtor #88
PDF Page 142
6.4.2 Standard INQUIRY data, tenth paragraph: Change "device" to "SCSI target device" in two places.

Maxtor #89
PDF Page 142
6.4.2 Standard INQUIRY data, eleventh paragraph: Change "device" to "SCSI target device" in two places.

Maxtor #90
PDF Page 142
6.4.2 Standard INQUIRY data, thirteenth paragraph: Change "device" to "SCSI target device" in two places.

Maxtor #91
PDF Page 142
6.4.2 Standard INQUIRY data, sixteenth paragraph: Change "device" to "SCSI target device" in two places.

Maxtor #92
PDF Page 143
6.4.2 Standard INQUIRY data, seventeenth paragraph: Change "device" to "SCSI target device" in two places.

Maxtor #93
PDF Page 143
6.4.2 Standard INQUIRY data, eighteenth paragraph: Change "device" to "SCSI target device" in two places.

Maxtor #94
PDF Page 144
6.4.2 Standard INQUIRY data, twenty-fourth paragraph: Change "device" to "SCSI target device".

Maxtor #95
PDF Page 150
6.4.3 SCSI Parallel Interface specific INQUIRY data, first paragraph: Change "...the SCSI Parallel Interface." to, "...by SCSI target devices implementing the SCSI Parallel Interface."

Maxtor #96
PDF Page 150
6.4.3 SCSI Parallel Interface specific INQUIRY data, second paragraph: Change "device" to "SCSI target device".

Maxtor #97
PDF Page 150
6.4.3 SCSI Parallel Interface specific INQUIRY data, third paragraph: Change "device" to "SCSI target device".

Maxtor #98
PDF Page 150
6.4.3 SCSI Parallel Interface specific INQUIRY data, fourth paragraph: Change "device" to "SCSI target device".

Maxtor #99
PDF Page 151
Table 88 - CLOCKING field: Three places in this table: I think that "device server" should be replaced by "SCSI target port".

Maxtor #100
PDF Page 151
6.4.3 SCSI Parallel Interface specific INQUIRY data, seventh paragraph: Again, I don't think that the "device server" has much to do with QAS. Change to "SCSI target port" in two places.

Maxtor #101
PDF Page 151
6.4.3 SCSI Parallel Interface specific INQUIRY data, eighth paragraph:
Also, I don't think that the "device server" has much to do with IUs.
Change to "SCSI target port" in two places.

Maxtor #102
PDF Page 153
6.5 LOG SELECT command, first paragraph: Change "device" to "SCSI target device" in two places.

Maxtor #103
PDF Page 153
6.5 LOG SELECT command, third paragraph: Change "indicates" to "specifies".

Maxtor #104
PDF Page 154
6.5 LOG SELECT command, sixth paragraph: Change "defines" to "specifies".

Maxtor #105
PDF Page 155
6.6 LOG SENSE command, first paragraph: Change "device" to "SCSI target device".

Maxtor #106
PDF Page 155
6.6 LOG SENSE command, first a-b-c list, item a: Change "indicates" to "specifies".

Maxtor #107
PDF Page 155
6.6 LOG SENSE command, first a-b-c list, item b: Change "indicates" to "specifies".

Maxtor #108
PDF Page 156
6.6 LOG SENSE command, fourth paragraph: Change "indicates" to "specifies" in two places.

Maxtor #109
PDF Page 156
6.6 LOG SENSE command, sixth paragraph: Change "identifies" to "specifies".

Maxtor #110
PDF Page 156
6.6 LOG SENSE command, fifth paragraph: Change "defines" to "specifies".

Maxtor #111
PDF Page 157
6.7 MODE SELECT(6) command, sixth paragraph: Change "indicates" to "specifies" in two places.

Maxtor #112
PDF Page 157
6.7 MODE SELECT(6) command, sixth paragraph: Change "specified" to "defined".

Maxtor #113
PDF Page 158
6.7 MODE SELECT(6) command, seventh paragraph: Change "indicates" to "specifies that".

Maxtor #114
PDF Page 158
6.7 MODE SELECT(6) command, seventh paragraph: Change "indicates" to "specifies".

Maxtor #115
PDF Page 158
6.7 MODE SELECT(6) command, seventh paragraph: Change "identified" to

"specified".

Maxtor #116
PDF Page 158
6.7 MODE SELECT(6) command, tenth paragraph: Change "uniquely" to "unique".

Maxtor #117
PDF Page 159
6.9.1 MODE SENSE(6) command introduction, second paragraph: Move this paragraph below table 95, and change "indicates" to "specifies".

Maxtor #118
PDF Page 160
6.9.1 MODE SENSE(6) command introduction, third paragraph: Change "defines" to "specifies".

Maxtor #119
PDF Page 160
6.9.1 MODE SENSE(6) command introduction, fifth paragraph: Change "SCSI devices" to "SCSI target devices".

Maxtor #120
PDF Page 160
6.9.1 MODE SENSE(6) command introduction, fourth paragraph: I don't understand what this paragraph is trying to convey starting at, "...however the PS bit, PAGE CODE and PAGE LENGTH fields should return current values [of what?] since they have no meaning when used with other types [of what?]. The mode parameter header and mode parameter block descriptor should return current values [like the length of the current parameter even when a default value is specified that may have a different length???]."

Maxtor #121
PDF Page 161
6.9.1 MODE SENSE(6) command introduction, ninth and tenth paragraphs: Make these two paragraphs be one paragraph that reads as follows, "If an application client requests all supported mode pages, then the device server shall return the supported pages in ascending order beginning with mode page 01h. If mode page 00h is implemented, then the device server shall return this mode page after all other mode pages have been returned." Then move this new paragraph up one paragraph above the paragraph beginning, "If the mode parameter list...".

Maxtor #122
PDF Page 162
6.9.3 Changeable values, first paragraph, second sentence: Change this sentence to, "In the mask, the bits in the fields of the mode parameters that are changeable shall all be set to one, and the bits in the fields of the mode parameters that are non-changeable (i.e., defined by the logical unit) shall be all be set to zero."

Maxtor #123
PDF Page 164
6.11.1 PERSISTENT RESERVE IN command introduction, second paragraph: Change "...in the CDB indicates..." to "...specifies...".

Maxtor #124
PDF Page 168
6.11.4 REPORT CAPABILITIES service action, fourth paragraph: Starting at this point it appears that the order of bit name and acronym are reversed throughout the description of the PERSISTENT RESERVE commands from what they are in the rest of the draft (e.g., "A CRH (Compatible Reservation Handling) bit" versus "A Compatible Reservation Handling (CRH) bit." Should these be made consistent?

Maxtor #125
PDF Page 186
Table 126 - READ BUFFER header: The "(MSB)" and "(LSB)" are missing.

Maxtor #126
PDF Page 186
6.15.4 Data mode (02h), first paragraph: Change "identifies a specific

buffer" to "specifies a buffer".

Maxtor #127
PDF Page 187
6.15.6 Read Data from echo buffer, clause title: Change to "Echo buffer mode (0Ah)".

Maxtor #128
PDF Page 187
6.15.6 Read Data from echo buffer: Change as follows to be the first two paragraphs in this clause:

In this mode the device server transfers data to the application client from the echo buffer that was written by the most recent WRITE BUFFER command with the mode set to echo buffer received on the same I_T nexus.

The BUFFER ID and BUFFER OFFSET fields are ignored in this mode. The device server transfers the same number of bytes of data as received in the most recent WRITE BUFFER command with the mode set to echo buffer received on the same I_T nexus limited by the allocation length as described in 4.3.4.6.

Maxtor #129
PDF Page 187
6.15.6 Read Data from echo buffer: Change as follows to be the third paragraph in this clause:

If a WRITE BUFFER command with the mode set to echo buffer has not been received on this I_T nexus or no WRITE BUFFER command with the mode set to echo buffer received on this I_T nexus has been completed without error, then the device server shall terminate the READ BUFFER command with CHECK CONDITION status, with the sense key set to ILLEGAL REQUEST, and the additional sense code set to COMMAND SEQUENCE ERROR. If the data in the echo buffer has been overwritten by a WRITE BUFFER command for another I_T nexus, then the device server shall terminate the READ BUFFER command with CHECK CONDITION status, with the sense key set to ABORTED COMMAND, and the additional sense code set to ECHO BUFFER OVERWRITTEN.

Maxtor #130
PDF Page 188
6.15.6 Read Data from echo buffer, third paragraph: I think what is supposed to be conveyed here is something like: "A READ BUFFER command with the mode set to echo buffer descriptor may be used to determine the buffer capacity before a WRITE BUFFER command with the mode set to echo buffer is completed, and shall not be terminated with CHECK CONDITION status, with the sense key set to ABORTED COMMAND, and the additional sense code set to ECHO BUFFER OVERWRITTEN." Regardless, this concept belongs in the next clause about the echo buffer descriptor mode.

Maxtor #131
PDF Page 188
6.15.6 Read Data from echo buffer, fourth paragraph: Change to, "If a WRITE BUFFER command with the mode set to echo buffer is completed without error, then the application client may send multiple READ BUFFER commands with the mode set to echo buffer in order to read the echo buffer data multiple times.

Maxtor #132
PDF Page 191
6.17.1 RECEIVE COPY RESULTS command introduction, third paragraph: Change "identifies" to "specifies".

Maxtor #133
PDF Page 191
6.17.1 RECEIVE COPY RESULTS command introduction, fourth paragraph: Change "identifies the" to "specifies an".

Maxtor #134
PDF Page 192
6.17.2 COPY STATUS service action, first paragraph: Change "identified" to "specified".

Maxtor #135
PDF Page 193
6.17.2 COPY STATUS service action, sixth paragraph: Change "identified" to "specified".

Maxtor #136
PDF Page 193
6.17.2 COPY STATUS service action, seventh paragraph: Change "identified" to "specified".

Maxtor #137
PDF Page 193
6.17.2 COPY STATUS service action, ninth paragraph: Change "identified" to "specified".

Maxtor #138
PDF Page 194
6.17.3 RECEIVE DATA service action, first paragraph: Change "require" to "requiring".

Maxtor #139
PDF Page 198
6.17.5 FAILED SEGMENT DETAILS service action, first paragraph: Change "identified" to "specified".

Maxtor #140
PDF Page 200
6.18 RECEIVE DIAGNOSTIC RESULTS command, a-b-c list, item b: Change "was" to "has".

Maxtor #141
PDF Page 201
6.19 REPORT ALIASES command, third paragraph: Change "indicates" to "specifies".

Maxtor #142
PDF Page 202
6.19 REPORT ALIASES command, sixth paragraph: Change "indicates" to "specifies".

Maxtor #143
PDF Page 202
6.19 REPORT ALIASES command, seventh paragraph: Change "indicates" to "specifies".

Maxtor #144
PDF Page 203
6.20 REPORT DEVICE IDENTIFIER command, fifth paragraph: Change "indicates" to "specifies".

Maxtor #145
PDF Page 208
6.22 REPORT PRIORITY command, sixth paragraph: Change "specifies" to "indicates".

Maxtor #146
PDF Page 211
6.23.2 All_commands parameter data format, second paragraph: Change "specifies" to "indicates".

Maxtor #147
PDF Page 213
6.24 REPORT SUPPORTED TASK MANAGEMENT FUNCTIONS command, third paragraph: Change "indicates" to "specifies".

Maxtor #148
PDF Page 214
6.24 REPORT SUPPORTED TASK MANAGEMENT FUNCTIONS command, eleventh paragraph: The TARGET RESET task management function has been removed from SAM-3. We'll need a different "see" here.

Maxtor #149
PDF Page 215
6.25 REPORT TARGET PORT GROUPS command, third paragraph: Change "indicates" to "specifies".

Maxtor #150
PDF Page 216
6.25 REPORT TARGET PORT GROUPS command, sixth paragraph: Change "specifies" to "indicates".

Maxtor #151
PDF Page 218
6.26 REQUEST SENSE command, second paragraph: Change "indicates" to "specifies".

Maxtor #152
PDF Page 221
6.27 SEND DIAGNOSTIC command, fifth paragraph: Change to "...specifies that the device server shall perform...".

Maxtor #153
PDF Page 221
6.27 SEND DIAGNOSTIC command, sixth paragraph: Change to "...specifies that the device server shall perform...".

Maxtor #154
PDF Page 221
6.27 SEND DIAGNOSTIC command, seventh paragraph: Change to, "...specifies that the device server may perform diagnostic operations that may affect..."

Maxtor #155
PDF Page 221
6.27 SEND DIAGNOSTIC command, eighth paragraph: Change to, "...specifies that the device server may perform diagnostic operations that may affect..."

Maxtor #156
PDF Page 222
6.28 SET DEVICE IDENTIFIER command, fifth paragraph: Change "indicates" to "specifies".

Maxtor #157
PDF Page 224
Table 172 - I_T_L NEXUS TO SET field, second column, fourth row: Is this supposed to be a separate paragraph and there is an line feed missing, or is there a superfluous line feed here?

Maxtor #158
PDF Page 225
6.29 SET PRIORITY command, ninth paragraph: Change "indicates" to "specifies".

Maxtor #159
PDF Page 226
6.30 SET TARGET PORT GROUPS command, third paragraph: Change "indicates" to "specifies".

Maxtor #160
PDF Page 233
6.33.5 Download microcode mode (04h), first paragraph: I think that error conditions should follow description, so this paragraph should be moved below the following paragraph.

Maxtor #161
PDF Page 233
6.33.6 Download microcode and save mode (05h), first paragraph: I think that error conditions should follow description, so this paragraph should be moved below the following paragraph.

Maxtor #162
PDF Page 233
6.33.7 Download microcode with offsets (O6h), first paragraph: I think that error conditions should follow description, so this sentence should be moved down in the clause. The first sentence of this paragraph could then be combined with the following paragraph to make a new first paragraph.

Maxtor #163
PDF Page 234
6.33.7 Download microcode with offsets (O6h), fifth paragraph: Change "...identifies a specific..." to "...specifies...".

Maxtor #164
PDF Page 234
6.33.7 Download microcode with offsets (O6h), fifth paragraph: Change "identified" to "specified".

Maxtor #165
PDF Page 234
6.33.7 Download microcode with offsets (O6h), seventh paragraph: Delete "attempt to".

Maxtor #166
PDF Page 234
6.33.8 Download microcode with offsets and save mode (O7h), eighth paragraph: I think that error conditions should follow description, so this sentence should be moved down in the clause. The first sentence of this paragraph could then be combined with the following paragraph to make a new first paragraph.

Maxtor #167
PDF Page 234
6.33.7 Download microcode with offsets (O6h), seventh paragraph: For the sentence, "The capacity of the buffer may be determined by the BUFFER CAPACITY field in the READ BUFFER descriptor." I'm not satisfied with the "may be determined" and recommend that this be changed to "is determined" or at least "should be determined", as the only other option is trial and error.

Maxtor #168
PDF Page 235
6.33.8 Download microcode with offsets and save mode (O7h), fifteenth paragraph: Change "may be determined" to "is determined" or at least "should be determined" (see comment above).

Maxtor #169
PDF Page 235
6.33.8 Download microcode with offsets and save mode (O7h), thirteenth paragraph: Change "identifies a specific" to "specifies".

Maxtor #170
PDF Page 235
6.33.8 Download microcode with offsets and save mode (O7h), thirteenth paragraph: Change "identified" to "specified".

Maxtor #171
PDF Page 235
6.33.8 Download microcode with offsets and save mode (O7h), fifteenth paragraph: Delete "attempt to".

Maxtor #172
PDF Page 235
6.33.9 Write data to echo buffer (OAh): Change clause title to "Echo buffer mode (OAh)".

Maxtor #173
PDF Page 235
6.33.9 Write data to echo buffer (OAh), second paragraph: Change "it" to "the data".

Maxtor #174

PDF Page 235
6.33.9 Write data to echo buffer (0Ah), third paragraph: Delete "attempt to".

Maxtor #175
PDF Page 235
6.33.9 Write data to echo buffer (0Ah), third paragraph: Change "may be determined" to "is determined" or at least "should be determined" (see comment above).

Maxtor #176
PDF Page 243
7.2.1 Log page structure and page codes for all device types, third paragraph: Change "specifies" to "contains the number of the log page being transferred."

Maxtor #177
PDF Page 243
7.2.1 Log page structure and page codes for all device types, fourth paragraph: Change "specifies" to "contains".

Maxtor #178
PDF Page 244
7.2.1 Log page structure and page codes for all device types, ninth paragraph: Change "indicated" to "specified".

Maxtor #179
PDF Page 244
7.2.1 Log page structure and page codes for all device types, tenth paragraph: Change "indicated" to "specified".

Maxtor #180
PDF Page 249
7.2.3 Buffer Over-Run/Under-Run log page, fourth paragraph: Change "...is a 16-bit value..." to "...contains a 16-bit value...".

Maxtor #181
PDF Page 253
7.2.5 Informational Exceptions log page, fifth paragraph: Change "is" to "are".

Maxtor #182
PDF Page 254
7.2.7 Last n Error Events log page, second paragraph: Delete "an".

Maxtor #183
PDF Page 255
7.2.9 Protocol Specific Port log page, sixth paragraph: Change to, "The PROTOCOL IDENTIFIER field contains one of the values shown in table 256 (see 7.5.1) to identify the SCSI transport protocol standard that defines the SCSI transport protocol specific data in this log parameter."

Maxtor #184
PDF Page 260
7.2.11 Start-Stop Cycle Counter log page, second paragraph, first sentence: Change to, "The year and week in the year that the SCSI target device was manufactured shall be contained in the PARAMETER VALUE field of the log parameter in which the parameter code value is 0001h."

Maxtor #185
PDF Page 260
7.2.11 Start-Stop Cycle Counter log page, third paragraph, first sentence: Change "device" to "SCSI target device".

Maxtor #186
PDF Page 260
7.2.11 Start-Stop Cycle Counter log page, second paragraph, second sentence: Change the beginning to, "The date of manufacture parameter shall not be changeable by the application client using..."

Maxtor #187

PDF Page 260
7.2.11 Start-Stop Cycle Counter log page, fourth paragraph, all but the last sentence: Change to, "The specified cycle count over device lifetime parameter value shall be contained in the log parameter in which the parameter code is 0003h. This value is the number of stop-start cycles that may typically be performed over the lifetime of the SCSI target device without degrading the device's operation or reliability beyond the limits specified by the manufacturer of the device. The specified cycle count over device lifetime parameter shall not be changeable by the application client using the LOG SELECT command (i.e., the log parameter DS bit shall be one). The parameter value is a 4-byte binary number."

Maxtor #188
PDF Page 260
7.2.11 Start-Stop Cycle Counter log page, second paragraph, last sentence: Change to, "The state of the parameter control bits for the log parameter in which the parameter code value is 0001h is defined in table 215."

Maxtor #189
PDF Page 260
7.2.11 Start-Stop Cycle Counter log page, third paragraph, last sentence: Change to, "The state of the parameter control bits for the log parameter in which the parameter code value is 0002h is defined in table 216."

Maxtor #190
PDF Page 261
7.2.11 Start-Stop Cycle Counter log page, fourth paragraph: Delete as part of above.

Maxtor #191
PDF Page 261
7.2.11 Start-Stop Cycle Counter log page, fifth paragraph, first four sentences: Change to, "The accumulated start-stop cycles parameter value shall be contained in the log parameter in which the parameter code is 0004h. This value is the number of stop-start cycles that the SCSI target device has detected since its date of manufacture. The accumulated start-stop cycles parameter shall not be changeable by the application client using the LOG SELECT command (i.e., the log parameter DS bit shall be one). The parameter value is a 4-byte binary number."

Maxtor #192
PDF Page 261
7.2.12 Supported Log Pages log page, third paragraph: Change "specifies" to "indicates".

Maxtor #193
PDF Page 261
7.2.11 Start-Stop Cycle Counter log page, fourth paragraph, last sentence: Change to, "The state of the parameter control bits for the log parameter in which the parameter code value is 0003h is defined in table 217."

Maxtor #194
PDF Page 261
7.2.11 Start-Stop Cycle Counter log page, fifth paragraph, last sentence: Change to, "The state of the parameter control bits for the log parameter in which the parameter code value is 0004h is defined in table 217."

Maxtor #195
PDF Page 263
7.2.13 Temperature log page, second paragraph: Change to, "The temperature parameter value shall be contained in the log parameter in which the parameter code is 0000h. This value is the temperature sensed in the SCSI target device when the LOG SENSE command is processed. The parameter value is a one-byte binary number indicating the temperature of the SCSI target device in degrees Celsius. Temperatures equal to or less than zero degrees Celsius shall be indicated by a value of zero. If the device server is unable to detect a valid temperature because of a sensor failure or other condition, the value returned shall be FFh. The temperature should be reported with an accuracy of plus or minus three Celsius degrees while the SCSI target device is operating at a steady state within the environmental limits specified for the device. The state of the parameter control bits

for the log parameter in which the parameter code value is 0000h is defined in table 220."

Maxtor #196
PDF Page 263
7.2.13 Temperature log page, third paragraph: Change to, "A reference temperature for the SCSI target device may optionally be provided in the log parameter in which the parameter code is 0001h. The parameter value is a one-byte binary number indicating the maximum reported sensor temperature in degrees Celsius at which the SCSI target device is capable of operating continuously without degrading the device's operation or reliability beyond manufacturer accepted limits. The reference temperature may change for vendor specific reasons. If no reference temperature is provided, the parameter may omitted or the reference temperature value may be set to the value of FFh. The state of the parameter control bits for the log parameter in which the parameter code value is 0001h is defined in table 220. No comparison is performed between the temperature value specified in parameter 0000h and the reference temperature specified in parameter 0001h."

Maxtor #197
PDF Page 269
7.3.2.2.8 MEDIUM USAGE HISTORY below the sixteenth paragraph: Is this supposed to be some kind of note?

Maxtor #198
PDF Page 271
7.3.2.2.9 PARTITION USAGE HISTORY, below the fifteenth paragraph: Is this supposed to be some kind of note?

Maxtor #199
PDF Page 275
7.4.3 Mode parameter header formats, first paragraph: Does, "The six-byte CDB mode parameter header..." mean, "The mode parameter header to be used in a mode parameter list for MODE SELECT (6) and MODE SENSE (6) commands..."? If so, it should be changed.

Maxtor #200
PDF Page 275
7.4.1 Mode parameters overview: It might be redundant, but I think it would be helpful to add the following paragraph, "Values in fields in mode parameters may or may not be changeable by application clients (see 6.9.3)."

Maxtor #201
PDF Page 276
7.4.3 Mode parameter header formats, second paragraph: Does, "The ten-byte CDB mode parameter header..." mean, "The mode parameter header to be used in a mode parameter list for MODE SELECT (10) and MODE SENSE (10) commands..."? If so, it should be changed.

Maxtor #202
PDF Page 276
7.4.3 Mode parameter header formats, third paragraph: Change "specifies" to "indicates".

Maxtor #203
PDF Page 276
7.4.3 Mode parameter header formats, seventh paragraph: Change "specifies" to "contains".

Maxtor #204
PDF Page 276
7.4.3 Mode parameter header formats, sixth paragraph: Change to, "If the Long LBA (LONGLBA) bit is set to zero, then the mode parameter block descriptors are eight bytes long and have the format described in 7.4.4.1. If the LONGLBA bit is set to one, then the mode parameter block descriptors are sixteen bytes long and have a format described in a command standard (see 3.1.18)."

Maxtor #205

PDF Page 280
Table 239 - Control mode page: Change "TAS" to "VS".

Maxtor #206
PDF Page 282
7.4.6 Control mode page, paragraph thirteen: Delete this paragraph.

Maxtor #207
PDF Page 282
7.4.6 Control mode page, below paragraph thirteen: Add the following note:
Some device servers may implement bit 7 in byte 4 as the TAS bit (see
SPC-2). Some device servers may implement bit 7 in byte 4 as the EECA bit
(see SCSI-2).

Maxtor #208
PDF Page 284
7.4.7 Control Extension mode page, first paragraph: Change "provides" to
"...and provides".

Maxtor #209
PDF Page 286
7.4.8 Disconnect-Reconnect mode page, third paragraph: Change the last
sentence to, "If a parameter value is changed, all the device servers for
all logical units accessible through the target port shall establish a unit
attention condition for all initiator ports associated with all I_T nexuses
associated with the target port except the I_T nexus on which the MODE
SELECT command was received, with the additional sense code set to MODE
PARAMETERS CHANGED."

Maxtor #210
PDF Page 286
7.4.8 Disconnect-Reconnect mode page, fifth paragraph: Change to, "...a
given pair of SCSI ports (i.e., an initiator port and a target port)..."

Maxtor #211
PDF Page 286
7.4.8 Disconnect-Reconnect mode page, seventh paragraph: Change the
beginning to, "The BUFFER FULL RATIO field specifies to the target port how
full the buffer should be during read operations prior to requesting an
interconnect tenancy. Target..."

Maxtor #212
PDF Page 286
7.4.8 Disconnect-Reconnect mode page, eighth paragraph: Change the
beginning to, "The BUFFER EMPTY RATIO field specifies to the target port
how empty the buffer should be during write operations prior to requesting
an interconnect tenancy. Target..."

Maxtor #213
PDF Page 286
7.4.8 Disconnect-Reconnect mode page, thirteenth paragraph: Change
"indicates" to "specifies" in two places (the second is on the following
page).

Maxtor #214
PDF Page 286
7.4.8 Disconnect-Reconnect mode page, tenth paragraph: Change "indicates
the maximum time" to "specifies the maximum time".

Maxtor #215
PDF Page 286
7.4.8 Disconnect-Reconnect mode page, tenth paragraph: Change "indicates
that there is no bus inactivity limit" to "specifies that there is no bus
inactivity limit".

Maxtor #216
PDF Page 286
7.4.8 Disconnect-Reconnect mode page, tenth paragraph: Change "specify
different units" to "define different units".

Maxtor #217

PDF Page 286
7.4.8 Disconnect-Reconnect mode page, twelfth paragraph: Change "specify different units" to "define different units".

Maxtor #218
PDF Page 286
7.4.8 Disconnect-Reconnect mode page, eleventh paragraph: Change "indicates the minimum time" to "specifies the minimum time".

Maxtor #219
PDF Page 286
7.4.8 Disconnect-Reconnect mode page, eleventh paragraph: Change "specify different units" to "define different units".

Maxtor #220
PDF Page 286
7.4.8 Disconnect-Reconnect mode page, twelfth paragraph: Change "indicates the maximum duration" to "specifies the maximum duration".

Maxtor #221
PDF Page 287
7.4.8 Disconnect-Reconnect mode page, fifteenth paragraph: Change "indicates" to "specifies".

Maxtor #222
PDF Page 287
7.4.8 Disconnect-Reconnect mode page, sixteenth paragraph: Change "indicates" to "specifies".

Maxtor #223
PDF Page 287
7.4.8 Disconnect-Reconnect mode page, sixteenth paragraph: Change "indicate" to "specify".

Maxtor #224
PDF Page 287
7.4.8 Disconnect-Reconnect mode page, seventeenth paragraph: Change "indicates" to "specifies" in two places.

Maxtor #225
PDF Page 287
7.4.8 Disconnect-Reconnect mode page, nineteenth paragraph: Change "indicates" to "specifies".

Maxtor #226
PDF Page 287
7.4.8 Disconnect-Reconnect mode page, sixteenth paragraph: Change "specified" to "defined".

Maxtor #227
PDF Page 287
7.4.8 Disconnect-Reconnect mode page, thirteenth paragraph: Change "specified in the individual SCSI protocol standards." to "defined in the individual SCSI protocol standards."

Maxtor #228
PDF Page 289
7.4.11 Informational Exceptions Control mode page, fourth paragraph: Change to, "If the log errors (LOGERR) bit set to zero, then the logging of informational exception conditions by a device server is vendor specific. If the LOGERR bit set to one, then the device server shall log informational exception conditions."

Maxtor #229
PDF Page 289
7.4.11 Informational Exceptions Control mode page, seventh paragraph: Change the first sentence to, "If the enable warning (EWASC) bit set to zero, then the device server shall disable reporting of the warning."

Maxtor #230
PDF Page 289

7.4.11 Informational Exceptions Control mode page, seventh paragraph: Change the third sentence to, Change to, "If the EWASC bit is set to one, then warning reporting shall be enabled." (The sentence is continued on the next page.)

Maxtor #231
PDF Page 290
7.4.11 Informational Exceptions Control mode page, seventh paragraph, third sentence: see above.

Maxtor #232
PDF Page 290
7.4.11 Informational Exceptions Control mode page, eighth and ninth paragraph: Change to one paragraph as follows, "If background functions are supported and the Enable Background Function (EBF) bit set to one, then the device server shall enable background functions. If the EBF bit set to zero, then the device server shall disable the functions. For the purposes of the EBF bit, background functions are defined as idle time functions that may impact performance that are performed by a device server operating without errors but do not impact the reliability of the logical unit (e.g., read scan)."

Maxtor #233
PDF Page 290
7.4.11 Informational Exceptions Control mode page, tenth paragraph: Change to, "If the performance (PERF) bit is set to zero, then the informational exception operations that are the cause of delays are acceptable. If the PERF bit is set to one, then the device server shall not cause delays while doing informational exception operations.

Maxtor #234
PDF Page 290
7.4.11 Informational Exceptions Control mode page, eleventh paragraph: Change to, "The value in the method of reporting informational exceptions field (MRIE) defines the method that shall be used by the device server to report informational exception conditions (see table 251)."

Maxtor #235
PDF Page 290
Table 251 - Method of reporting informational exceptions (MRIE) field: In six places change "This method instructs the device server to report..." to, "The device server shall..."

Maxtor #236
PDF Page 290
Table 251 - Method of reporting informational exceptions (MRIE) field: see above.

Maxtor #237
PDF Page 290
Table 251 - Method of reporting informational exceptions (MRIE) field: see above.

Maxtor #238
PDF Page 291
Table 251 - Method of reporting informational exceptions (MRIE) field: see above.

Maxtor #239
PDF Page 291
Table 251 - Method of reporting informational exceptions (MRIE) field: see above.

Maxtor #240
PDF Page 291
Table 251 - Method of reporting informational exceptions (MRIE) field: see above.

Maxtor #241
PDF Page 291
7.4.11 Informational Exceptions Control mode page, twelfth paragraph:

Change "The INTERVAL TIMER field indicates..." to, "The value in the INTERVAL TIMER field is..."

Maxtor #242
PDF Page 291
7.4.11 Informational Exceptions Control mode page, thirteenth paragraph: Change "The REPORT COUNT field indicates..." to, "The value in the INTERVAL TIMER field is..." to, "The value in the REPORT COUNT field is..."

Maxtor #243
PDF Page 294
7.4.13 Protocol Specific Logical Unit mode page, sixth paragraph: Change "The PROTOCOL IDENTIFIER field (see 7.5.1) indicates..." to, "The value in the PROTOCOL IDENTIFIER field (see 7.5.1) defines...".

Maxtor #244
PDF Page 295
7.4.14 Protocol Specific Port mode page, fifth paragraph: Change "The PROTOCOL IDENTIFIER field (see 7.5.1) indicates..." to, "The value in the PROTOCOL IDENTIFIER field (see 7.5.1) defines...".

Maxtor #245
PDF Page 297
7.5.2.2.1 Introduction to Fibre Channel specific alias entry designations, first paragraph: Change "...specifies the Fibre Channel protocol..." to, "...contains the Fibre Channel protocol identifier...".

Maxtor #246
PDF Page 298
7.5.2.3.1 Introduction to RDMA specific alias entry designations, first paragraph: Change "...specifies the SCSI RDMA protocol..." to, "...contains the SCSI RDMA protocol identifier...".

Maxtor #247
PDF Page 299
7.5.2.4.1 Introduction to Internet SCSI specific alias entry designations, first paragraph: Change "...specifies the iSCSI protocol..." to, "contains the iSCSI protocol identifier..."

Maxtor #248
PDF Page 305
7.5.3.4 Fibre Channel N_Port with world wide name checking EXTENDED COPY target descriptor format, first paragraph: Change to, "The target descriptor format shown in table 270 is used by an EXTENDED COPY command to specify a copy target device using its Fibre Channel N_Port and World Wide Name."

Maxtor #249
PDF Page 305
Table 270 - Fibre Channel N_Port with world wide name checking target descriptor format title: Capitalize "World Wide Name".

Maxtor #250
PDF Page 306
7.5.3.5 SCSI Parallel T_L EXTENDED COPY target descriptor format, first paragraph: Change to, "The target descriptor format shown in table 271 is used by an EXTENDED COPY command to specify a copy target device using its SCSI parallel protocol SCSI bus target identifier and logical unit number."

Maxtor #251
PDF Page 307
7.5.3.6 IEEE 1394 EUI-64 EXTENDED COPY target descriptor format, first paragraph: Change to, "The target descriptor format shown in table 272 is used by an EXTENDED COPY command to specify a copy target device using its 64-bit IEEE 1394 Extended Unique Identifier (EUI-64) and configuration ROM Read-Only Memory) directory identifier."

Maxtor #252
PDF Page 308
7.5.3.7 RDMA EXTENDED COPY target descriptor format, first paragraph: Change to, "The target descriptor format shown in table 273 is used by an

EXTENDED COPY command to specify a copy target device using its RDMA SRP target port identifier (see SRP)."

Maxtor #253
PDF Page 309
7.5.3.8 iSCSI binary IPv4 address EXTENDED COPY target descriptor format, first paragraph: Change to, "The target descriptor format shown in table 274 is used by an EXTENDED COPY command to specify a copy target device using its Internet protocol binary IPv4 address and logical unit number."

Maxtor #254
PDF Page 310
7.5.3.9 SAS serial SCSI protocol target descriptor format, first paragraph: Change to, "The target descriptor format shown in table 275 is used by an EXTENDED COPY command to specify a copy target device using its Serial SCSI protocol address (see SAS)."

Maxtor #255
PDF Page 310
7.5.4.1 Overview of TransportID identifiers, first paragraph: Change "identify" to "specify".

Maxtor #256
PDF Page 311
7.5.4.1 Overview of TransportID identifiers, third paragraph: Change "identifies" to "specifies".

Maxtor #257
PDF Page 311
7.5.4.1 Overview of TransportID identifiers, fourth paragraph: Change "identifies" to "specifies".

Maxtor #258
PDF Page 311
7.5.4.2 TransportID for initiator ports using SCSI over Fibre Channel, first paragraph: Change "identifies" to "specifies".

Maxtor #259
PDF Page 312
7.5.4.3 TransportID for initiator ports using a parallel SCSI bus, first paragraph: Change "identifies" to "specifies".

Maxtor #260
PDF Page 312
7.5.4.4 TransportID for initiator ports using SCSI over IEEE 1394, first paragraph: Change "identifies" to "specifies".

Maxtor #261
PDF Page 313
7.5.4.5 TransportID for initiator ports using SCSI over an RDMA interface, first paragraph: Change "identifies" to "specifies".

Maxtor #262
PDF Page 313
7.5.4.6 TransportID for initiator ports using SCSI over Internet SCSI, first paragraph: Change "identifies" to "specifies".

Maxtor #263
PDF Page 313
7.5.4.6 TransportID for initiator ports using SCSI over Internet SCSI, third paragraph: Change "identifies" to "specifies".

Maxtor #264
PDF Page 314
7.5.4.6 TransportID for initiator ports using SCSI over Internet SCSI, eighth paragraph: Change "identifies" to "specifies".

Maxtor #265
PDF Page 314
7.5.4.6 TransportID for initiator ports using SCSI over Internet SCSI, sixth paragraph: Change "...OOb is appears..." to "OOb appears..."

Maxtor #266
PDF Page 314
7.5.4.6 TransportID for initiator ports using SCSI over Internet SCSI, seventh paragraph: Change "...OOb is appears..." to "OOb appears..."

Maxtor #267
PDF Page 315
7.5.4.7 TransportID for initiator ports using SCSI over SAS serial SCSI protocol, first paragraph: Change "identifies" to "specifies".

Maxtor #268
PDF Page 319
7.6.4.1 Device Identification VPD page overview, fifth paragraph: Change "specifies" to "indicates".

Maxtor #269
PDF Page 320
7.6.4.1 Device Identification VPD page overview, eleventh paragraph: Change "specifies" to "indicates".

Maxtor #270
PDF Page 320
7.6.4.1 Device Identification VPD page overview, twelfth paragraph: Change "specifies" to "indicates".

Maxtor #271
PDF Page 321
7.6.4.1 Device Identification VPD page overview, thirteenth paragraph: Change "specifies" to "indicates".

Maxtor #272
PDF Page 321
7.6.4.2 Vendor specific identifier format, first paragraph: Delete "consequently".

Maxtor #273
PDF Page 321
7.6.4.3 T10 vendor identification format, first paragraph: Change "...the identifier field has..." to, "...then the IDENTIFIER field shall have...".

Maxtor #274
PDF Page 322
7.6.4.4.2 EUI-64 identifier format, first paragraph: Change "...the identifier field has..." to, "...then the IDENTIFIER field shall have...".

Maxtor #275
PDF Page 323
7.6.4.4.3 EUI-64 based 12-byte identifier format, first paragraph: Change "...the identifier field has..." to, "...then the IDENTIFIER field shall have...".

Maxtor #276
PDF Page 323
7.6.4.4.4 EUI-64 based 16-byte identifier format, first paragraph: Change "...the identifier field has..." to, "...then the IDENTIFIER field shall have...".

Maxtor #277
PDF Page 324
7.6.4.5.1 NAA identifier basic format, first paragraph: Change "...the identifier field has..." to, "...then the IDENTIFIER field shall have...".

Maxtor #278
PDF Page 324
7.6.4.5.2 NAA IEEE Extended identifier format, first paragraph: Change "When NAA is 2h (i.e., IEEE Extended), the eight byte fixed length IDENTIFIER field..." to, "If NAA is 2h (i.e., IEEE Extended), then the IDENTIFIER field...".

Maxtor #279

PDF Page 325
7.6.4.5.3 NAA IEEE Registered identifier format, first paragraph: Change "When NAA is 5h (i.e., IEEE Registered), the eight byte fixed length IDENTIFIER field..." to, "If NAA is 5h (i.e., IEEE Registered), then the IDENTIFIER field..."

Maxtor #280
PDF Page 325
7.6.4.5.4 NAA IEEE Registered Extended identifier format, first paragraph: Change "When NAA is 6h (i.e., IEEE Registered Extended), the sixteen byte fixed length IDENTIFIER field..." to, "If NAA is 6h (i.e., IEEE Registered Extended), then the IDENTIFIER field...".

Maxtor #281
PDF Page 326
7.6.4.6 Relative target port identifier format, first paragraph: Change "...(i.e. SCSI target port), the
four byte fixed length IDENTIFIER field..." to, "(i.e., SCSI target port), then the IDENTIFIER field..."

Maxtor #282
PDF Page 326
7.6.4.6 Relative target port identifier format, second paragraph: Change "identifies" to "indicates".

Maxtor #283
PDF Page 342
8.3.1.2 Access controls overview, fifth paragraph: I know that ACL is in the list of acronyms, but I recommend that this first occurrence of "ACL" be changed to "access control list (ACL)".

Maxtor #284
PDF Page 343
8.3.1.2 Access controls overview, eleventh paragraph: I know that ACE is in the list of acronyms, but I recommend that this first occurrence of "ACE" be changed to "access control list entry (ACE)".

Maxtor #285
PDF Page 343
8.3.1.2 Access controls overview, eleventh paragraph: I know that LUACD is in the list of acronyms, but I recommend that this first occurrence of "LUACD" be changed to "logical unit access control descriptor (LUACD)".

Maxtor #286
PDF Page 408
C.5.1 Overview of exception conditions during logging, first paragraph: Change, "...setup...[one-word noun]", to, "...set up...[two-word verb/adverb]", or change to, "...configured...[better English]".

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Comments attached to Yes ballot from Paul Entzel of
Quantum Corp.:

Letter ballot comments from Quantum on SPC-3

1. PDF-72 Last P on page I believe this set of rules is specific to disk drives. No commands in SPC-3 define a TRANSFER LENGTH field within the CDB. Perhaps this should be moved to SBC.
2. PDF-73 1st P, past sentence "blocks" SB "blocks or bytes".
3. PDF-73 4.3.4.6, 1st P, 1st S "for returned data" should be "within the
Data-In buffer" to avoid confusion with status and sense data that is also returned.
4. PDF-73 4.3.4.6, 1st P, e.g. "sense data" SB "sense data for a REQUEST
SENSE command", or remove sense data to avoid confusion with autosense data.
5. PDF-73 4.3.4.6, 2nd P Are there any cases where this can happen except for MODE SENSE(6)? If not, then this should be moved to that command since

it is confusing without context.
6. PDF-75 last sentence on page The paragraph above states that the "additional sense code shall be set to NO ADDITIONAL SENSE INFORMATION" if the device server does not have further information. The addition sense code of NO ADDITONAL SENSE INFORMATION defines both the ASC and ASCQ value, so this sentence is not required.
7. PDF-106 5.6.1, 3rd P The first 2 sentences in this paragraph were use to justify the existence of PRs in a world where old style reservations existed. Now that standard reservations are gone, they lack context. For instance, "to provide application clients with more detailed control over reservations recovery". More detailed control than what? I think the 2 sentences can be removed since the 3rd sentence provides the requirements. If we chose not to remove them, they should be fixed so they no longer indirectly reference old style reservations.
8. PDF-106 5.6.1, 4th P "as part of the recovery process" SB "as part of a recovery process".
9. PDF-106 5.6.1, 5th P "using logical units with multiple target ports",
Persistent reservations are useful even in devices with a single target port.
Change "using logical units with multiple ports" to "accessing a logical unit".
10. PDF-107 1st P on page "register each I_T nexus" SB "register one or more I_T nexus".
11. PDF-111 list before Note 10 Since the scope is always the entire logical unit (see 5.6.1), is it really necessary to preserve this information? If we drop this requirement, NOTE 10 can go away also.
12. PDF-113 last P on page "(see 5.6.10.10.4)", this cross reference is incorrect. It should be 5.6.10.3. Although, an argument could be made for removing this paragraph as it is already covered in 5.6.10.3.
13. PDF-119 1st P and list These paragraphs are redundant with subclause 5.6.5.3 which discusses READ RESERVATION service action at length. Suggest instead that a reference be added to 5.6.5.3.
14. PDF-119 4th P This sentence is redundant with 5.6.10.2 and should be removed.
15. PDF-119 5th P "released until the registrations" SB "released unless the registrations"
16. PDF-137 2nd P on page The RESERVE ELEMENT and RELEASE ELEMENT commands are obsolete in SMC-2. This sentence should be removed.
17. PDF-184 4th P after table 78 This sentence seems to contradict several other paragraphs in this section that state reasons to return CC.
18. PDF-187 last P, last 2 S According to table 42, REPORT LUNS command is always mandatory.
19. PDF-189 1st P, last S "device has a single port and does not" SB "device has a single port or does not", or else we need a description of what to report for 2 other cases.
20. PDF-189 2nd P, 1st S "is associated with or attached to a medium transport element" SB "supports the commands to control an attached media changer (See SMC-2)".
21. PDF-189 2nd P, 4th S "is not embedded within or attached to a medium transport element" SB "does not support the commands to control an attached media changer".
22. PDF-204 1st P, 4th S "The SP bit is optional" SB "Support for the SP bit set to one is optional".
23. PDF-205 1st P, 5th S The term "page header" is not defined in this standard, but in this case I believe it means "the first byte of the page or sub-page".
24. PDF-226 lettered list Either we need to add I_T Nexus loss to the list of things that terminate prevention state, or we need to add a status code so the device server can report it is out of resources. Quantum prefers that I_T Nexus loss clear prevention state.
25. PDF-286 1st P after table 188 What exactly constitutes a "page header" is not defined by this standard, but I believe it means "the first four bytes
of the diagnostics pages as defined in Table 188". Although I think the sentence should be re-worded into something like: "Each diagnostics page shall be formatted as shown in Table 188 with the Diagnostics parameters determined by the page code specified."
26. PDF-289 7.2.1, 2nd P The term "page header" is not defined in this standard. Suggested re-wording" "Each log page shall be formatted as shown in Table 191 and shall contain zero or more variable-length log parameters

defined for that page.
27. PDF-321 7.4.1, 1st P, 1st S "This subclause describes the block descriptors and" SB "This subclause describes the mode parameter headers, blocks descriptors and".
28. PDF-323 last P on page "transfer length" SB small caps.
29. PDF-332 5th and 6th P Capitalize target.
30. PDF-334. 7.4.9 1st P It is unclear why reserving subpage code 0 causes
all mode pages to use the sub_page format. Indicating that SPF shall be set to one for this page code would mandate that all Extended mode pages use the sub_page format.
31. PDF-334 7.4.10, 1st P, 2nd S It is unclear why reserving subpage code

0 causes all mode pages to use the sub_page format. Indicating that SPF shall be set to one for this page code would mandate that all Extended Device-Type Specific mode pages use the sub_page format.
32. PDF-337 Table 322 This table is identical to table 306. Remove the table and change the reference to table 306.

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Comments attached to DUPLICATE Yes ballot from Charles Binford of Sun Microsystems, Inc.:

SPC-3 r21 Letter Ballot Comments
Sun Microsystems, Inc.
Charles Binford

SUN 1: Page 32, 4.5.2.4.1, 1st paragraph
Sentence missing the word 'on'. The text 'specific data depends the value...'
s.b. 'specific data depends on the value...'.

SUN 2: Page 56, 5.3, last sentence
The sentence

'An application client should not send a command with the ORDERED task attribute if the command may be processed as if it has a task attribute of HEAD OF QUEUE because whether the ORDERED task attribute is honored is vendor
specific.'

implies that general honoring of ORDERED task attribute is vendor specific. I
believe the vendor specific honoring (or not) of ORDERED task is limited to the two commands listed in this section. I suggest the phrase 'for these commands' be inserted into the sentence as follows:

'An application client should not send a command with the ORDERED task attribute if the command may be processed as if it has a task attribute of HEAD OF QUEUE because whether the ORDERED task attribute is honored for these
commands is vendor specific.'

SUN 3: Page 64, Table 32, Register and Move row
Thus in table 32 the 'Allowed' in the entry for the Register and Move row, first column should be 'Conflict'.
(note, the resolution of SUN 4 may override this comment)

SUN 4: Pages 71-72, 5.6.7, and Page 64, Table 32
It is unclear whether or not a Resister and Move action is restricted to only
the reservation holder. Table 32, Register and Move row says this service action is 'Allowed' from a registered I_T nexus that is not the reservation holder. However, the sentence in 5.6.7, item f) 'Release the persistent reservation for the persistent reservation holder (i.e. the I_T nexus on which

the command was received)' indicates to me that a Register and Move action can
only be performed by the reservation holder.

There is text in 5.6.7 that clearly states that Register and Move does not work if the reservation type is All Registrants. It is silent on the reservation type of Registrants Only. If Register and Move is valid with a reservation type of Registrants Only, then the next question is whether or not
the I_T nexus sending the Register and Move has to the the Reservation Holder
or merely registered.

FIX: Add a paragraph (it would fit well with the text at the bottom of page 71) that clearly states the rules for Register and Move with a Registrants Only reservation. Ensure table 32 and item f) on page 72 match.

SUN 5: Page 72, 5.6.7, a) - h) list of actions
Several items in this list of actions refer to the 'reservation key'. Since the PR-OUT parameter list contains both a Reservation Key and a Service Action
Reservation Key this list needs to be more specific about which key it is referring to (this is especially confusing when the reader cross references table 36 when reading this section). I believe that in c), d), and e) the text is really referring to the Service Action Reservation Key, not the Reservation Key as stated.

Add the phrase 'service action' to the appropriate items.

SUN 6: Page 79, 5.6.10.4.4, last paragraph of section
The 'It is not an error' paragraph needs to state clearly whether or not the registration is removed when an initiator preempts itself and it is not the reservation holder. This point is confusing because in the previous section (5.6.10.4.3) there is an exception to the rule that the preempt removes the registrations matched by the SA Key (see first paragraph at top of page 79).

I suggest appending the sentence:

'The registration is removed.'

SUN 7: Page 79, 5.6.10.5
In a) A) and a) B) (bottom of page 79) there are several places where 'initiator ports' should be replaced with 'I_T nexus' per the general direction established by document T10/04-088.

SUN 8: Page 79, 5.6.10.5
In a) A), a) B), and c) the phrase 'the persistent reservation being preempted' is used. All of these rules apply even if the I_T nexus being aborted is not the reservation holder - in which case a 'reservation' is not being preempted, but a registration is being removed. I'd suggest changing 'the persistent reservation being preempted' to 'the persistent reservation or
registration being preempted'

SUN 9: Page 80, 5.6.10.5
In both item e) and in the last sentence of the section (middle of page 80) there seems to be an assumption that when the reservation type is all registrants, then the Preempt service action reservation key is 0. Per the flow chart in figure 3, one can preempt and specific (non-zero) registration when the reservation type is all registrants. Both of these sentences need 'and the service action reservation key is 0' added as follows:

'e) If the persistent reservation is an all registrants type and the service action reservation key is 0, then the device server shall clear any ACA condition and shall clear any tasks with an ACA attribute; and'

'If an all registrants persistent reservation is present and the service action reservation key in the PREEMPT AND ABORT parameter data is 0, the device server shall abort all tasks for all registered I_T nexuses.'

SUN 10: Page 81, 5.7, item e)

'Reservations' are not defined in either SPC-3 or SAM-3 and should be removed
from this list.

SUN 11: Pages 154-155, 6.5
In the paragraph that splits pages 154 and 155 the references to 'initiators'
needs to be changed to I_T nexus as follows (2 places, changed text marked
with *'s):

'The SCSI target device may provide independent sets of log parameters for
each logical unit or for each combination of logical units and *I_T nexuses*.
If the SCSI target device does not support independent sets of log parameters
and any log parameters are changed that affect other *I_T nexuses*, then the
device server shall generate a unit attention condition for the initiator port
associated with each I_T nexus except the I_T nexus on which the LOG SELECT
command was received (see SAM-3), with the additional sense code set to LOG
PARAMETERS CHANGED.'

SUN 12: Page 157, 6.7,
Associated with the changes in T10/04-088 make the 3 following changes:

1. remove the 'Per initiator port' row of Table 93

2. strike 'all initiator ports and' from first sentence following table 92

'Logical units shall share mode parameter header and block descriptor values
across all <deleted text> I_T nexuses.'

3. strike 'initiator ports' from the second to last paragraph on the page

'If an application client sends a MODE SELECT command that changes any
parameters applying to other <deleted text> I_T nexuses, the device server
shall generate a unit attention condition for the initiator port associated
with all I_T nexuses except the I_T nexus on which the MODE SELECT command was
received (see SAM-3), with the additional sense code set to MODE PARAMETERS
CHANGED.'

SUN 13: Page 175, 6.12.3
The last sentence on the page is no longer accurate with the new Register and
Move service action:

'The SERVICE ACTION RESERVATION KEY field is ignored for all other service
actions.'

This is the section describing the *Basic* parameter list, and Register and
Move action is described later, but I still think the above sentence needs to
be softened. Also, it may be appropriate to add a note to see 6.12.4 where
the Register and Move is described.

SUN 14: Page 177-178, 6.12.3, Table 114
Similar to the previous comment - with the addition of Register and Move this
table no longer covers all service actions as claimed by the sentence
preceding table 114.

The editor may choose to fix this in another manner, but I'd suggest added
Register and Move to table 114 with <not applicable> applied to the cells when
the field does not exist in the R&M parameter list.

Alternatively, the sentence preceding table 114 could be changed to state that
it only applies to service actions that use the basic parameter format.

SUN 15: Page 206, 6.21
The second paragraph from the top of the page has two instances where 'initiator port' should be 'I_T nexus'. (Changes marked with *'s)

'If a REPORT LUNS command is received from an *I_T nexus* with a pending unit attention condition (i.e., before the device server reports CHECK CONDITION status), the device server shall perform the REPORT LUNS command. If the unit attention condition was established because of a change in the logical unit inventory, that unit attention condition shall be cleared for that *I_T nexus* by the REPORT LUNS command. Unit attention conditions established for other reasons shall not be cleared by the REPORT LUNS command (see SAM-3).'

SUN 16: Page 206, 6.21
The paragraph 2 in front of table 147, starting 'The processing of a REPORT LUNS command...' expanding on the same theme as the last half of the second paragraph on the page(referenced in previous comment). I suggest either combing the paragraphs into one, or moving this paragraph up to immediately following the ''If a REPORT LUNS command is received from...' paragraph.

SUN 17: Page 207-208, 6.22
Multiple places in this command description the term I_T_L nexus is used. I believe they should all be changed to I_T nexus for the following reasons:

1. consistency with rest of the document
2. it adds confusion

One might argue against my point 2 claiming that I_T_L is more specific then I_T, thus it is clearer. However, consider table 149, code 01b row. It says 'The priority for each I_T_L nexsus... shall be reported.' To me that says I should report the priority for each *lun* as well as each I_T nexus. Clearly that is not the case (the parameter list does not include a LUN field). I think it would be much clearer if the text only said I_T nexus and the LU was left implied as it is in the rest of the document.

This comment also applies to:
6.28, pages 223-225, and
7.4.7, page 285 (last paragraph of section).

SUN 18: Page 214, 6.24
The TARGET RESET paragraph references SAM-3. TARGET RESET was removed from SAM-3. Need to refer back to older version.

SUN 19: Page 217, 6.25
The sentence/paragraph describing the TARGET PORT GROUP field (2 in front of table 164)should refer to the Inqiury VPD identifier as is done in the paragraph describing the RELATIVE TARGET PORT (e.g. see 7.6.4)

SUN 20: Page 217, 6.25, table 164
The rows for values 01h and 02h both use the phrase 'access state changed by'.
I find the connotations of the term 'changed' a bit confusing in this context. Maybe it is just me, but I find myself thinking it implies some time limit on the status. I like 'determined' or 'set' better.

SUN 21: Page 219, 6.26
Third paragraph from top of page needs 'initiator port' changed to 'I_T nexus'.

'If a REQUEST SENSE command is received from an *I_T nexus* with a pending unit attention condition...'

SUN 22: Page 280, 7.4.6
Consistent with comment SUN 12 - remove 'per initiator port' and change

'initiator port' to I_T nexus from the first paragraph and the last two paragraphs on the page as follows:

(first paragraph)
'The mode page policy (see 6.7) for this mode page shall be shared, <deleted text> or per I_T nexus'

(last two paragraphs on page)
Even if the mode page policy for this mode page is <deleted text> per-I_T nexus, the TST field, if changeable, shall reflect in the mode pages for all *I_T nexuses* the state selected by the most recent MODE SELECT from any *I_T
nexus* (i.e., the TST field is always shared). If the most recent MODE SELECT
changes the setting of this field, then the device server shall establish a unit attention condition for the initiator port associated with all I_T nexuses except the I_T nexus on which the MODE SELECT command was received (see SAM-3), with the additional sense code set to MODE PARAMETERS CHANGED.

The allow task management functions only (TMF_ONLY) bit set to zero specifies
tasks with a task attribute of ACA may be sent from the faulted *I_T nexus* when an ACA condition has been established (see SAM-3). A TMF_ONLY bit set to
one specifies that all tasks sent from the faulted *I_T nexus* when an ACA condition has been established shall be terminated with an ACA ACTIVE status.

SUN 23: Page 280, 7.4.6
I believe the last paragraph on the page (TMF_ONLY paragraph) needs an introduction sentence to help set the stage for the TMF_ONLY bit. I'd suggest
something like:

'The TMF_ONLY bit controls whether new tasks can be created while a logical unit is in ACA or only task management functions are allowed.'

SUN 24: Page 280, Table 240
Table rows should be changed as follows:

000b The logical unit maintains one task set for all *I_T nexuses*
001b The logical unit maintains separate task sets for each *I_T nexus*

SUN 25: Page 282, 7.4.6
First paragraph at top of page - change 'initiator port' to 'I_T nexus'.

'If the TST field equals 001b, then only tasks from the *same I_T nexus* as the task that is terminated with CHECK CONDITION status are affected.'

SUN 26: Page 282, 7.4.6, table 242
I think it would clarify the interaction of TST with QErr if there was a note
stating that when TST=001b, the behavior of QErr=01b and QErr=11b are the same.

SUN 27: Page 288, 7.4.9 & 7.4.10
These two sections both say 'Subpage code 00h is reserved, therefore all Extended <xxx> pages use the sub_page format.' I'm not following and need more info. What does subpage code 00 being reserved have to do with saying extended mode page have to use the sub_page format?

SUN 28: Page 289, 7.4.11
Remove 'per initiator port' from last sentence of first paragraph of page/section.

SUN 29: Page 330, 7.6.4.11.2
This section is clear about the relative port descriptor, but it is not clear
to me the if a port name id descriptor is required or a 'should', or a 'may' exist. It says the descriptor 'shall' have an association value of 1, but it

never says if the descriptor needs to be present.

SUN 30: Page 335, Table 319
Remove 10b - 'Per initiator port' row from table.

SUN 31: Page 340, 7.6.11
Last paragraph on page says to 'right-align' the serial number. I think it should be 'left-aligned'.

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Comments attached to No ballot from Roger Cummings of
Veritas Software:

VERITAS 001
PDF pg 48, pg 2, Figure 1

Label in Shared Command Set box does not match the text

Proposed Resolution:
Label box "Shared Command Sets (for all device types)"

VERITAS 002
PDF pg 52, pg 6, 2.4 IETF References

The IETF regards RFC 790 as obsolete. The latest RFC that covers the fields of interest in section 7.5.2.45 is RFC1700. RFC3232 defines the fact that RFC1700 is replaced by an online database.

Proposed Resolution:
Replace the RFC790 reference by:
"RFC 1700 Assigned Numbers"
"RFC 3232 Assigned Numbers: RFC 1700 is Replaced by an On-line Database."
"NOTE xx The latest information on Assigned Number can be found at the Internet Assigned Numbers Authority Web Site at http://www.iana.org/numbers.html"

VERITAS 003
PDF pg 52, pg 6, 2.4 IETF References

While the reference to RFC 1035 is probably still correct, there are two additional references that would be useful - RFC 1591 and the IANA main page on Domain Addresses.

Proposed Resolution:
1) Add "RFC 1591, Domain Name System Structure and Delegation.
2) Add "NOTE xx The latest information on domain names can be found at the Internet Assigned Numbers Authority Web Site at http://www.iana.org/domain-names.htm."

VERITAS 004
PDF pg 52, pg 6, 2.4 IETF References

Update reference to iSCSI with RFC number

Proposed Resolution:
"RFC 3720, Internet Small Computer Systems Interface (iSCSI)"

VERITAS 005
PDF pg 53, pg 7, 3.1.13 Blocked Task

Definition format inconsistent with others

Proposed Resolution:
Replace "A blocked task" by "A task"

VERITAS 006
PDF pg 55, pg 9, 3.1.37 Host

Two instances of "or" in a list

Proposed Resolution:
"A SCSI device with the characteristics of a primary computing device, typically a personal computer, workstation, minicomputer, or mainframe computer, or a auxiliary computing device or a server."

VERITAS 007
PDF pg 57, pg 11, 3.1.77 request for comment

Correctly capitalize body name

Proposed Resolution:
"The name given to standards developed by the Internet Engineering Task Force (IETF) (see 2.4)"

VERITAS 008
PDF pg 60, pg 14, 3.2 Acronyms

incorrect clause reference

Proposed Resolution:
"ASCII American Standard Code for Information Interchange (see 2.2)

VERITAS 009
PDF pg 60, pg 14, 3.2 Acronyms

Add clause reference

Proposed Resolution:
"IETF Internet Engineering Task Force (see 2.4)

VERITAS 10
PDF pg 60, pg 14, 3.2 Acronyms

Add SSC-3 to acronym list (occurs in 6 places)

Proposed Resolution:
"SSC-3 SCSI Stream Commands -3 (see clause 1)"

VERITAS 11
PDF pg 73, pg 27, 4.4.2 Null data field termination and zero padding requirements

UTF-8 needs to be added to the list of acronyms and a reference standard identified

Proposed Resolution:
Add to 3.2 "UTF-8 A character set defined by a transformation format of the Universal Character Set"
Add to 2.4 "RFC 2279, UTF-8, a transformation format of ISO 10646"

VERITAS 12
PDF pg 102, pg 56, 5.2.1 Summary of commands implemented by all SCSI device servers

The contents of this paragraph are inconsistent with Table 42 in 6.1

Proposed Resolution:
"This standard defines three commands that all SCSI device servers shall implement - INQUIRY, REPORT LUNS, and TEST UNIT READY."

VERITAS 13
PDF pg 108, pg 62, 2nd paragraph from top of page

Is SPC-3 a command standard? By the definition in 3.1.18 it seems not and therefore this text is incorrect.

Proposed Resolution:
"For each command, this standard or a command standard (see 3.1.18) defines the..."

VERITAS 14
PDF pg 108, pg 62, Table 31

The handling of MODE SENSE and LOG SENSE in this table is completely different, and this difference has been the subject of many questions from developers. VERITAS has understood that the reason that MODE SENSE generates Conflict is that reading some Mode Pages have side effects, but this is even more true of Log Pages. We have experienced issues in some field configurations where over-zealous OS drivers read log pages of unreserved devices and thereby applications with reserved access to miss seeing vital information (e.g. in TapeAlert pages where information is cleared after a read).

Proposed Resolution:
1) Change Table 31 to note that the present behavior defined for LOG SENSE is the default behavior, but that the command set standards are allowed to diverge from this default behavior.
2) Document in a new paragraph in 5.6.1 the reason for the difference in handling of MODE SENSE and LOG SENSE.

VERITAS 15
PDF pg 109, pg 63, Table 31

VERITAS understands that the behavior of TEST UNIT READY defined in Table 31 reflects common industry practice. However the behavior change reflected in SPC-3 has removed a useful feature from the SCSI command sets, namely a command (that is mandatory for all devices and that does not require the provision of a data buffer) that can be used to check for the existence of a reservation or persistent reservation at a Logical Unit.

Proposed Resolution:
1) Determine a replacement command for TEST UNIT READY to test for the existence of a reservation or persistent reservation;
2) Add that command to the mandatory list in 5.2.1 and 6.1;
3) Add a paragraph to 5.6.1 documenting how this test is performed.

VERITAS 16
PDF pg 109, pg 63, Table 31

Several times implementers have been confused by the fact that READ and WRITE do not appear in this table

Proposed Resolution:
Add one line each for READ and WRITE with text across all of the columns (as for RESERVE and RELEASE) with the words "defined in command set standards".

VERITAS 17
PDF pg 111, pg 65, Note 10

As this is the 1st occurrence of LU_SCOPE in the draft, add a reference to its definition.

Proposed Resolution:
"NOTE 10 - The scope of a persistent reservation is always LU_SCOPE (see 6.11.3.3)."

VERITAS 18
PDF pg 116, pg 70, Table 35

The definition of the ALL_TG_PT bit does not address the impact of this bit upon a SCSI device that contains hierarchical Logical Units as defined in SAM-3, or the situation where a multiple port bridge device is reporting "proxy" logical units for devices behind it that also have multiple ports.

Proposed Resolution:
Add new wording in concert with changes to section 6.12.2 below. A reference to section 5.7 is also in order.

VERITAS 19
PDF pg 134, pg 88, Table 39

Add references in this table to the condition definitions

Proposed Resolution:
"While in the active power condition (see 3.1.5):"
"While in the idle power condition (see 3.1.42):"
"While in the standby power condition (see 3.1.99):"

VERITAS 20
PDF pg 139, pg 93, Table 42

Amend Note b to reference the MAINTENANCE OUT and MAINTENANCE In commands referenced throughout the draft.

Proposed Resolution:
"b This command is defined by a combination of operation code and service action. The operation code value is shown preceding the slash and the service action value is shown after the slash. Operation Code A4 references the MAINTENANCE OUT command. Operation Code A3 references the MAINTENANCE IN command. "

VERITAS 21
PDF pg 139, pg 93, Table 42

Several times implementers have been confused by the fact that READ and WRITE do not appear in this table, especially as READ ELEMENT STATUS ATTACHED is included

Proposed Resolution:
Add one line each for READ and WRITE with the reference "command set standards".

VERITAS 22
PDF pg 201, pg 155, 6.5 LOG SELECT

The last paragraph of this section is the ONLY place in the draft where a reference to an annex is qualified by its type.

Proposed Resolution:
"Additional information about the LOG SELECT command may be found in Annex C."

VERITAS 23

PDF pg 222, pg 176, last paragraph

The definition of the ALL_TG_PT bit does not address the impact of this bit upon a SCSI device that contains hierarchical Logical Units as defined in SAM-3, or the situation where a multiple port bridge device is reporting "proxy" logical units for devices behind it that also have multiple ports.

Proposed Resolution:
Add new wording in concert with changes to section 5.6.6 above.

VERITAS 24
PDF pg 346, pg 300, 7.5.2.4.2 iSCSI name alias entry designation

Update reference to iSCSI

Proposed Resolution:
Replace "(see draft-ietf-ips-iscsi-16.txt)" by "(See RFC 3720)"

VERITAS 25
PDF pg 346, pg 300, 7.5.2.4.3 iSCSI name with binary IPv4 address alias entry designation

Update references to iSCSI and RFC 790

Proposed Resolution:
Replace "(see draft-ietf-ips-iscsi-16.txt)" by "(See RFC 3720)"
Replace two instances of "(see RFC 790)" by "(see RFC 3232)"

VERITAS 26
PDF pg 347, pg 301, 7.5.2.4.4 iSCSI name with IPName alias entry designation

Update references to iSCSI and RFC 790

Proposed Resolution:
Replace "(see draft-ietf-ips-iscsi-16.txt)" by "(See RFC 3720)"
Replace two instances of "(see RFC 790)" by "(see RFC 3232)"

VERITAS 27
PDF pg 348, pg 302, 7.5.2.4.3 iSCSI name with binary IPv6 address alias entry designation

Update references to iSCSI and RFC 790

Proposed Resolution:
Replace "(see draft-ietf-ips-iscsi-16.txt)" by "(See RFC 3720)"
Replace two instances of "(see RFC 790)" by "(see RFC 3232)"

********** End of Ballot Report **********