                                              T10/07-512r0

Voting Results on T10 Letter Ballot 07-511r0 on
Forwarding SES-2 to First Public Review
Ballot closed: 2007/12/13 12:00 noon MST

| Organization | Name | S | Vote | Add'l Info |
|---|---|---|---|---|
| Adaptec, Inc. | | | DNV | |
| AMCC | Paul von Stamwitz | P | Yes | |
| Amphenol Interconnect | Gregory McSorley | P | Yes | |
| ATL Technology | Jaremy Flake | P | Yes | |
| Brocade | David Peterson | P | Abs | Cmnts |
| Dell, Inc. | Kevin Marks | P | Yes | |
| EMC Corp. | David Black | A | Yes | |
| Emulex | William Martin | P | Yes | |
| ENDL | Ralph O. Weber | P | Yes | |
| FCI | Douglas Wagner | P | Yes | |
| Finisar Corp. | David Freeman | 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 Global Storage Tech. | Dan Colegrove | P | Yes | |
| IBM Corp. | Kevin Butt | P | No | Cmnts |
| Intel Corp. | | | DNV | |
| Iomega Corp. | Robert Payne | P | Yes | |
| Kawasaki Microelectronics Am | Joel Silverman | P | Yes | |
| KnowledgeTek, Inc. | Dennis Moore | P | Abs | Cmnts |
| Lexar Media, Inc. | John Geldman | P | Yes | |
| LSI Corp. | John Lohmeyer | P | Yes | |
| Marvell Semiconductor, Inc. | David Geddes | P | Yes | |
| Maxim Integrated Products | Gregory Tabor | P | Yes | |
| Microsoft Corp. | Robert Griswold | A | Yes | |
| Molex Inc. | Jay Neer | P | Yes | |
| NeoScale Systems Inc. | | | DNV | |
| Network Appliance | Frederick Knight | P | Yes | |
| Nvidia Corp. | | | DNV | |
| Panasonic Technologies, Inc | Takaharu Ai | A | Yes | |
| PMC-Sierra | Tim Symons | P | Yes | |
| Quantum Corp. | Paul Suhler | P | Yes | |
| Samsung | Michael Rogers | A | Yes | |
| SanDisk Corporation | Avraham Shimor | P | Yes | |
| Seagate Technology | Gerald Houlder | P | Yes | |
| STMicroelectronics, Inc. | Stephen Finch | P | Yes | |
| Sun Microsystems, Inc. | Vit Novak | A | Yes | |
| Symantec | Roger Cummings | P | No | Cmnts |
| TycoElectronics | Ashlie Fan | P | Yes | |
| Western Digital | Mark Evans | P | Yes | |

Ballot totals: (31:3:3:4=41)
 31 Yes
  3 No
  3 Abstain
  4 Organization(s) did not vote
 41 Total voting organizations

  6 Ballot(s) included comments


This 2/3rds majority ballot passed.
30 Yes are more than half the membership eligible to vote
  [greater than 20] AND
30 Yes are at least 22 (2/3rds of those voting YES or NO [33]).


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

[This report prepared by LB2 v2.3.]
****************************************************************


Comments attached to Abs ballot from David Peterson of
Brocade:

The work of our organization is not affected by the subject matter of this
standard.


****************************************************************


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

Lack of expertise.


****************************************************************


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

HPQ comment number 1
Page=24 Subtype=Text Subj=Note Author=relliott
Comment=
Add
GPIO general purpose input/output

---
HPQ comment number 2
Page=24 Subtype=Text Subj=Note Author=relliott
Comment=
Add
ESI Enclosure Services Interface (see SFF-8067)

---
HPQ comment number 3
Page=24 Subtype=Text Subj=Note Author=relliott
Comment=

Add
SBC SCSI Block Commands standard (any version)

(used in a figure)

---
HPQ comment number 4
Page=24 Subtype=Text Subj=Note Author=relliott
Comment=
Add
SCA-2

---
HPQ comment number 5
Page=25 Subtype=Text Subj=Note Author=relliott
Comment=Change to American numbering convention

---
HPQ comment number 6
Page=25 Subtype=Text Subj=Note Author=relliott
Comment=
12.142 is using American decimals.  Unless overall document changes, switch
to commas

---
HPQ comment number 7
Page=30 Subtype=Text Subj=Note Author=relliott
Comment=
Add:

4.xx Asynchronous event notification  (or maybe 4.6.xx)
For standalone enclosure services processes with a SCSI target port using a
SCSI transport protocol that supports notification of SES asynchronous
events (e.g., Broadcast (SES) in SAS-2), the enclosure services process:

[this may be better as a table]
a) shall report an asynchronous event when the enclosure configuration is
modified such that the Configuration diagnostic page changes (see 6.1.2.1);
and

b) shall report an asynchronous event when an element change results in a
change to the PRDFAIL bit or the ELEMENT STATUS CODE field in the status
element in the Enclosure Status diagnostic page (see 6.1.4);
NOTE - this includes elements exceeding thresholds.
c) may report an asynchronous event when an element change does not result
in a change to the PRDFAIL bit or the ELEMENT STATUS CODE field in the
status element  in the Enclosure Status diagnostic page;

g) should report an asynchronous event when the Element Descriptor
diagnostic page (see 6.1.13) changes;

g) should report an asynchronous event when the Short Enclosure Status
diagnostic page (see 6.1.13) changes;

g) should report an asynchronous event when the Additional Element Status

diagnostic page (see 6.1.13) changes;

f) should report an asynchronous event when the Download Microcode Status
diagnostic page (see 6.1.19) changes; and

g) should report an asynchronous event when the Subenclosure Nickname
Status diagnostic page (see 6.1.21) changes.

---
HPQ comment number 8
Page=33 Subtype=Text Subj=Note Author=relliott
Comment=Verify command list agrees with SPC-4

---
HPQ comment number 9
Page=35 Subtype=Text Subj=Note Author=relliott
Comment=Incorporate 08-026 SES-2 Element control and status nomenclature

---
HPQ comment number 10
Page=36 Subtype=Text Subj=Note Author=relliott
Comment=Verify diagnostic page list matches SPC-4

---
HPQ comment number 11
Page=37 Subtype=Highlight Subj=Highlight Author=relliott
Comment=
returns a list of elements in an enclosure
s/b
returns information about the enclosure, including the list of elements in
the enclosure.

---
HPQ comment number 12
Page=38 Subtype=Highlight Subj=Highlight Author=relliott
Comment=
contains the length in bytes of the diagnostic parameters that follow.
s/b
indicates the number of bytes that follow in the diagnostic page.

---
HPQ comment number 13
Page=38 Subtype=Highlight Subj=Highlight Author=relliott
Comment=
may use a fixed value of zero for the GENERATION CODE field
s/b
should set the GENERATION CODE field to zero

---
HPQ comment number 14
Page=39 Subtype=Highlight Subj=Highlight Author=relliott
Comment=
supported by
s/b
in

---
HPQ comment number 15
Page=39 Subtype=Highlight Subj=Highlight Author=relliott
Comment=
contained
s/b
that follow

---
HPQ comment number 16
Page=41 Subtype=Highlight Subj=Highlight Author=relliott
Comment=
specified
s/b
indicated

---
HPQ comment number 17
Page=41 Subtype=Highlight Subj=Highlight Author=relliott
Comment=
contains the length in bytes of the type
descriptor text string
s/b
indicates the number of bytes in the type descriptor text string

---
HPQ comment number 18
Page=69 Subtype=Highlight Subj=Highlight Author=relliott
Comment=
the
s/b
then the

---
HPQ comment number 19
Page=73 Subtype=Highlight Subj=Highlight Author=relliott
Comment=
After reporting a non-zero value

It should be allowed to return non-zero several times.  This seems to say
it only gets one shot.

---
HPQ comment number 20
Page=74 Subtype=Highlight Subj=Highlight Author=relliott
Comment=
00h
s/b
00h.

---
HPQ comment number 21
Page=78 Subtype=Text Subj=Note Author=relliott
Comment=

Update log page list to match SPC-4 (include log page subpage codes)

---
HPQ comment number 22
Page=78 Subtype=Text Subj=Note Author=relliott
Comment=Update mode page list to match SPC-4 (include subpages)

---
HPQ comment number 23
Page=79 Subtype=Text Subj=Note Author=relliott
Comment=Add SPF bit

---
HPQ comment number 24
Page=83 Subtype=Highlight Subj=Highlight Author=relliott
Comment=
element
s/b
element.

---
HPQ comment number 25
Page=88 Subtype=Highlight Subj=Highlight Author=relliott
Comment=
enable bypass A
s/b
enable bypass Port A

---
HPQ comment number 26
Page=88 Subtype=Highlight Subj=Highlight Author=relliott
Comment=
(enable bypass B)
s/b
(enable bypass port B)

---
HPQ comment number 27
Page=93 Subtype=Text Subj=Note Author=relliott
Comment=Join Reserved rows in table 75

---
HPQ comment number 28
Page=98 Subtype=Text Subj=Note Author=relliott
Comment=Join Reserved rows in table 83

---
HPQ comment number 29
Page=99 Subtype=Text Subj=Note Author=relliott
Comment=Join Reserved rows in table 85

---
HPQ comment number 30
Page=100 Subtype=Highlight Subj=Highlight Author=relliott
Comment=

INVOP TYPE is
s/b
the INVOP TYPE field is set to

---
HPQ comment number 31
Page=100 Subtype=Highlight Subj=Highlight Author=relliott
Comment=
INVOP TYPE of
s/b
the INVOP TYPE field is set to

---
HPQ comment number 32
Page=100 Subtype=Text Subj=Note Author=relliott
Comment=Join Reserved rows in table 88 (maybe keep all three rows though)

---
HPQ comment number 33
Page=101 Subtype=Highlight Subj=Highlight Author=relliott
Comment=
INVOP TYPE is
s/b
the INVOP TYPE field is set to

---
HPQ comment number 34
Page=101 Subtype=Highlight Subj=Highlight Author=relliott
Comment=
INVOP TYPE is
s/b
the INVOP TYPE field is set to

---
HPQ comment number 35
Page=101 Subtype=Highlight Subj=Highlight Author=relliott
Comment=
INVOP TYPE of
s/b
the INVOP TYPE field is set to

---
HPQ comment number 36
Page=101 Subtype=Highlight Subj=Highlight Author=relliott
Comment=
INVOP TYPE of
s/b
the INVOP TYPE field is set to

---
HPQ comment number 37
Page=101 Subtype=Text Subj=Note Author=relliott
Comment=Join Reserved rows in table 94

---

HPQ comment number 38
Page=104 Subtype=Text Subj=Note Author=relliott
Comment=Join Reserved rows in table 100

---
HPQ comment number 39
Page=105 Subtype=Text Subj=Note Author=relliott
Comment=Join Reserved rows in table 101

---
HPQ comment number 40
Page=111 Subtype=Text Subj=Note Author=relliott
Comment=Join Reserved rows in table 115

---
HPQ comment number 41
Page=112 Subtype=Text Subj=Note Author=relliott
Comment=Join Reserved rows in table 117

---
HPQ comment number 42
Page=114 Subtype=Text Subj=Note Author=relliott
Comment=Join Reserved rows in table 123

---
HPQ comment number 43
Page=115 Subtype=Text Subj=Note Author=relliott
Comment=Join Reserved rows in table 125

---
HPQ comment number 44
Page=115 Subtype=Text Subj=Note Author=relliott
Comment=Join Reserved rows in table 126


*************************************************************

Comments attached to No ballot from Kevin Butt of
IBM Corp.:

Comments on ses2r19.fdf

---
IBM comment number 1
Page=2 Subtype=Square Subj=Rectangle Author=George Penokie
Comment=
Points of Contact

T10 Vice-Chair should be:

Mark S. Evans
Western Digital Corporation
5863 Rue Ferrari
San Jose, CA 95138

8

USA
Telephone: (408) 363-5257
Email: mark.evans)wdc.com


---
IBM comment number 2
Page=5 Subtype=Text Subj=Note Author=George Penokie
Comment=Revision history needs to be removed.


---
IBM comment number 3
Page=16 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
Forward:
Should be: Mark S. Evans


---
IBM comment number 4
Page=19 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
Top of page

It would take a major miracle for SES-2 to be published in 2007. This
should be either 2008 or the more safe 200x.

BSR INCITS xxx-2007


---
IBM comment number 5
Page=22 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
3.1.1 application client
This << An object that is the source of SCSI commands and task management
function requests. >> should be << A class whose objects are, or an object
that is, the source of commands and task
management function requests. >>


---
IBM comment number 6
Page=22 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
3.1.6 device server
This << An object within a logical unit that processes SCSI tasks. >>
should be << A class whose objects process, or an object that processes,
SCSI commands according to the requirements for command management >>


---
IBM comment number 7
Page=22 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
3.1.10 element
This << An object related to an enclosure. The object can be controlled,
interrogated, or described by the enclosure services process. >> should be
<< A class related to an enclosure whose objects, or an object that is,
controlled, interrogated, or described by the enclosure services process.

>>

---
IBM comment number 8
Page=22 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
3.1.13 enclosure services process:
This << The object that manages and implements enclosure services; either a
standalone enclosure services process (see 3.1.29) or an attached enclosure
services process (see 3.1.3). >> should be << A class whose objects, or an
object that, manages and implements enclosure services; either a standalone
enclosure services process (see 3.1.29) or an attached enclosure services
process (see 3.1.3). >>

---
IBM comment number 9
Page=23 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
3.1.18 logical unit:
This << An externally addressable entity within a SCSI target device. >>
should be << A class whose objects implement, or an object that implements
a device model and manages and processes commands sent by an application
client. >>

---
IBM comment number 10
Page=23 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
3.1.19 logical unit number:

The title of this should be << logical unit number (LUN): >>

---
IBM comment number 11
Page=23 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
3.1.25 SCSI initiator device:
This << A SCSI device containing application clients and SCSI initiator
ports that
originate device service and task management requests to be processed by a
SCSI target device and receive device service and task management responses
from SCSI target devices. See SAM-4. >> should be << A class whose objects
originate, or an object that originates, device service and
command management requests to be processed by a SCSI target device and
receives device service and command management responses from SCSI target
devices. When used this term refers to SCSI initiator devices. See SAM-4.
>>

---
IBM comment number 12
Page=23 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
3.1.26 SCSI initiator port:
This << A SCSI initiator device object acts as the connection between
application clients

and the service delivery subsystem through which requests and responses are
routed. See SAM-4. >> should be << A class whose objects act, or an object
that acts, the connection between application clients and a service
delivery subsystem through which requests, indications, responses, and
confirmations are routed. In all cases when this term is used it refers to
a SCSI initiator port. See SAM-4. >>


---
IBM comment number 13
Page=23 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
3.1.27 SCSI target device:
This << A SCSI device containing logical units and SCSI target ports that
receives device service and task management requests for processing and
sends device service and task management responses to SCSI initiator
devices. See SAM-4. >> should be << A class whose objects receive, or an
object that receives, device service and task management requests for
processing and sends device service and task management responses to SCSI
initiator devices. When used this term refers toSCSI target devices. See
SAM-4 >>


---
IBM comment number 14
Page=23 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
3.1.28 SCSI target port:
This << A SCSI target device object that contains a task router and acts as
the connection between device servers and task managers and the service
delivery subsystem through which requests and responses are routed. See
SAM-4. >> should be << A class whose objects contain, or an object that
contains, a task router and acts as the connection between device servers
and task managers and a service delivery subsystem through which
indications and responses are routed. When this term is used it refers to a
SCSI target port. See SAM-4 >>


---
IBM comment number 15
Page=24 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
3.3.8 shall
This statement << (equivalent to "is required"). >> is not part of the
standard definition for shall and therefore should be deleted.


---
IBM comment number 16
Page=24 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
3.3.9 should
This << alternative (equivalent to "is
strongly recommended"). >> should be << alternative. Equivalent to the
phrase "it is strongly recommended". >>


---
IBM comment number 17
Page=24 Subtype=Highlight Subj=Highlight Author=George Penokie

Comment=
3.3.4 may not
This << preference (equivalent to "may or may not"). >> should be <<
preference. May not is synonymous with the phrase "may or may not". >>

---
IBM comment number 18
Page=24 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
3.3.3 may
This << preference (equivalent to "may or may not"). >> should be <<
preference. May is synonymous with the phrase "may or may not". >>

---
IBM comment number 19
Page=24 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
3.3.6 optional:
This << 3.3.6 optional; >> should be << 3.3.6 option, optional: >>.

---
IBM comment number 20
Page=24 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
3.3 Keywords
Should add in the following new keyword <<
prohibited: A keyword used to describe a feature, function, or coded value
that is defined in a a non-SCSI standard (i.e., a standard that is not a
member of the SCSI family of standards) to which this standard makes a
normative reference where the use of said feature, function, or coded value
is not allowed for implementations of this standard. >>

---
IBM comment number 21
Page=26 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
4.1.1 Access to the enclosure services process overview

This << enclosure services process. As an example, an Uninterruptible Power
Supply element may be located remotely and attached to the enclosure
services process by a serial link. >> should be << enclosure services
process (e.g., an Uninterruptible Power Supply element may be located
remotely and attached to the enclosure services process by a serial link).
>>

---
IBM comment number 22
Page=26 Subtype=Text Subj=Note Author=George Penokie
Comment=
4.1.1 Access to the enclosure services process overview

Global

The term << device >> should always me << SCSI device >>.

---
IBM comment number 23
Page=27 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
figure 2
This << (the interfaces to the objects are outside the scope of this
standard (e.g., GPIOs, serial buses) >> should be << (the interface
protocols used are outside the scope of this standard (e.g., GPIOs, serial
buses))  >> note missing << ) >>

---
IBM comment number 24
Page=27 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
4.1.3 Attached enclosure services process (1st paragraph)

This << its own logical unit; it transports the standard enclosure services
information through the addressed logical >> should be << its own logical
unit as the enclosure services process transports the standard enclosure
services information through the addressed logical >>

---
IBM comment number 25
Page=27 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
4.1.3 Attached enclosure services process (2nd paragraph)

This << The attached enclosure services process may or may not be currently
attached. >> should be << The attached enclosure services process may or
may not be attached. >>

---
IBM comment number 26
Page=27 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
4.1.3 Attached enclosure services process (4th paragraph)
This << An application client determines whether an enclosure services
process is actually attached to the device by >> should be << An
application client determines whether an enclosure services process is
attached to the device by >>

---
IBM comment number 27
Page=28 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
Figure 3
figure 2
This << (the interfaces to the objects are outside the scope of this
standard (e.g., GPIOs, serial buses) >> should be << (the interface
protocols used are outside the scope of this standard (e.g., GPIOs, serial
buses))  >> note missing << ) >>

---
IBM comment number 28
Page=29 Subtype=Highlight Subj=Highlight Author=George Penokie

13

Comment=
4.2 Management of indicators and controls (2nd paragraph)

This << an indicator. As an example, an application client may set the CRIT
bit to zero in the Enclosure Control diagnostic page (see 6.1.3) to specify
that it believes that a critical condition does not exist in the enclosure.
The enclosure may choose to ignore the instruction if a critical condition
still exists. >> should be << an indicator (e.g., an application client may
set the CRIT bit to zero in the Enclosure Control diagnostic page (see
6.1.3) to specify that the application client believes that a critical
condition does not exist in the enclosure. The enclosure may choose to
ignore the instruction if a critical condition still exists). >>

---
IBM comment number 29
Page=29 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
4.2 Management of indicators and controls (3rd paragraph)

This << enclosure. As an example, an application client may choose to save
energy by selecting low fan speeds, but the enclosure services process may
ignore the request because high ambient temperatures are present, requiring
high fan speeds. >> should be << enclosure (e.g., an application client may
choose to save energy by selecting low fan speeds, but the enclosure
services process may ignore the request because high ambient temperatures
are present, requiring high fan speeds). >>

---
IBM comment number 30
Page=29 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
4.2 Management of indicators and controls (3rd paragraph)

This << services process detects that the instructions would generate
udesirable conditions >> should be << services process detects it is
possible for the instructions to generate udesirable conditions >>

---
IBM comment number 31
Page=29 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
4.4 Use of the Enclosure Busy diagnostic page

This << diagnostic page when they are temporarily >> should be <<
diagnostic page if they are temporarily >>

---
IBM comment number 32
Page=30 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
4.6.2 Polling

This << page includes 5 bits that summarize >> should be << page includes
five bits that summarize >>

---
IBM comment number 33
Page=30 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
4.6.2 Polling

This << length greater than 1. >> should be << length greater than one. >>

---
IBM comment number 34
Page=30 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
4.6.2 Polling

This << The information returned in byte 1 of the Enclosure >> should be <<
The information returned in byte one of the Enclosure >>

---
IBM comment number 35
Page=30 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
4.6.3 Timed completion function

This << length greater than 1. >> should be << length greater than one. >>

---
IBM comment number 36
Page=30 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
4.6.3 Timed completion function

This << bits in byte 1 of the page are >> should be << bits in byte one of
the page are >>

---
IBM comment number 37
Page=32 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
Table 3 - Sense keys and additional sense codes

This << This additional sense code may be returned by any >> should be <<
may be returned by any >>

---
IBM comment number 38
Page=32 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
Table 3 - Sense keys and additional sense codes

This << This additional sense code should only be returned >> should be <<
Should only be returned >>

---
IBM comment number 39
Page=35 Subtype=Highlight Subj=Highlight Author=George Penokie

Comment=
6.1.1 Diagnostic parameters overview (1st paragraph)

This << with the SEND DIAGNOSTIC command; status pages are accessed >>
should be << with the SEND DIAGNOSTIC command and status pages are accessed
>>

---
IBM comment number 40
Page=37 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.2.1 Configuration diagnostic page overview (1st paragraph)

This << The Configuration diagnostic page optionally provides descriptive
text identifying element >> should be << The Configuration diagnostic page
may provide descriptive text identifying element >>

---
IBM comment number 41
Page=37 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.2.1 Configuration diagnostic page overview (2nd paragraph)

This << command shall be treated as having an invalid field error >> should
be <<  command shall fail with an invalid field error >>

---
IBM comment number 42
Page=37 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.2.1 Configuration diagnostic page overview (3rd paragraph)
This << Table 6 provides an overview of the components of the >> should be
<< Table 6 indicates the components of the >>

---
IBM comment number 43
Page=38 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.2.1 Configuration diagnostic page overview (3rd paragraph from end)

This << enclosure configuration is modified such that the Configuration
diagnostic
page changes. The counter shall not be changed by status changes for
elements already described by the Configuration diagnostic page. Changes in
the Configuration diagnostic page may be caused by changes in the number or
configuration of subenclosures. Enclosures
 >> should be << enclosure configuration is modified resulting in any
Configurationdiagnostic page change (e.g., changes in the number or
configuration of subenclosures). The counter shall not be changed by status
changes for elements already described by the Configuration diagnostic
page. Enclosures>>

---
IBM comment number 44
Page=39 Subtype=Highlight Subj=Highlight Author=George Penokie

Comment=
6.1.2.2 Enclosure descriptor list (2nd paragraph)

This << A value of 0h is reserved. >> should be << A value of zero is reserved. >>

---
IBM comment number 45
Page=39 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.2.2 Enclosure descriptor list (3rd paragraph)

This << A value of 0h means the number is not known. >> should be <<  A value of zero indicates the number is not known. >>

---
IBM comment number 46
Page=39 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.2.2 Enclosure descriptor list (5th paragraph)

This << to the sum of the contents of the NUMBER OF ELEMENT TYPE DESCRIPTOR HEADERS fields >> should be << to the sum of the contents of all the NUMBER OF ELEMENT TYPE DESCRIPTOR HEADERS fields >>

---
IBM comment number 47
Page=40 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.2.2 Enclosure descriptor list (2nd to last paragraph)

This << The PRODUCT REVISION LEVEL field shall contain the product revision level string for the subenclosure in the >> should be << The PRODUCT REVISION LEVEL field contains the product revision level string for the subenclosure in the >>. There are no shalls in any other field so I see no reason for one being in this one.

---
IBM comment number 48
Page=40 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.2.2 Enclosure descriptor list (2nd to last paragraph)

This << The VENDOR-SPECIFIC ENCLOSURE INFORMATION field is optional. >> should be << The VENDOR-SPECIFIC ENCLOSURE INFORMATION field may contain vendor specific information. >>

---
IBM comment number 49
Page=40 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.2.3 Type descriptor header list (2nd paragraph after table 9)

This << given ELEMENT TYPE value. As an example, there may be two power supplies that provide +12 volts, and five power supplies that provide +5

volts. In this case, a separate TYPE DESCRIPTOR HEADER may be used for the
+12 volt power supplies and for the +5 volt power supplies. >> should be <<
given ELEMENT TYPE value (e.g,. there may be two power supplies that
provide +12 volts, and five power supplies that provide +5 volts. In this
case, a separate TYPE DESCRIPTOR HEADER may be used for the +12 volt power
supplies and for the +5 volt power supplies). >>

---
IBM comment number 50
Page=40 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.2.3 Type descriptor header list (3rd paragraph after table 9)

This << indicating that only the OVERALL CONTROL, OVERALL STATUS, or
OVERALL THRESHOLD field is present in the applicable control, status, or
threshold page, but that individual ELEMENT CONTROL, ELEMENT STATUS, or
ELEMENT THRESHOLD fields are absent >> should be <<  indicating that only
the OVERALL CONTROL field, OVERALL STATUS field, or OVERALL THRESHOLD field
is present in the applicable control, status, or threshold page, but that
individual ELEMENT CONTROL field, ELEMENT STATUS field, or ELEMENT
THRESHOLD field are absent >>


---
IBM comment number 51
Page=40 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
This << and the length of an optional text string (see 3.1.31) >> should be
<<  and, if implemented, the length of a text string (see 3.1.31) >>


---
IBM comment number 52
Page=41 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.2.3 Type descriptor header list (2nd to last 3rd paragraph)

This << SUBENCLOSURE IDENTIFIER field shall be set to 00h. >> should be <<
SUBENCLOSURE IDENTIFIER field shall be set to zero. >>


---
IBM comment number 53
Page=41 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.2.4 Type descriptor text list

This << displaying the configuration of the enclosure. The type descriptor
texts shall be placed in the same order as the type descriptor headers,
except that type descriptor texts of zero length shall be omitted.

Examples of information that may be included in the type descriptor text
include the manufacturer's part number for a replacement element, a brief
description of the element and its properties, or instructions about
configuration limitations and redundancy requirements of the elements of
that type. >> should be
<< displaying the configuration of the enclosure (e.g., the manufacturer's
part number for a replacement element, a brief description of the element

and its properties, or instructions about configuration limitations and redundancy requirements of the elements of that type). The type descriptor texts shall be placed in the same order as the type descriptor headers, except that type descriptor texts of zero length shall be omitted.

---
IBM comment number 54
Page=41 Subtype=StrikeOut Subj=Cross-Out Author=George Penokie
Comment=
6.1.2.4 Type descriptor text list (1st paragraph)

This << optional >> should be deleted as everything is optional unless otherwise stated.

---
IBM comment number 55
Page=43 Subtype=StrikeOut Subj=Cross-Out Author=George Penokie
Comment=
6.1.3 Enclosure Control diagnostic page (4th paragraph before table 11)

This << To prevent the misinterpretation of the OVERALL CONTROL and ELEMENT CONTROL fields, >> should be deleted as it contains a justification for the required action. Standards should not justify requirements.

---
IBM comment number 56
Page=43 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.3 Enclosure Control diagnostic page (3rd paragraph before table 11)

This << There is exactly one OVERALL CONTROL field for each >> should be << There is one OVERALL CONTROL field for each >>. There is no difference between 'exactly one' and 'one'.

---
IBM comment number 57
Page=43 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.3 Enclosure Control diagnostic page (2nd paragraph before table 11)
This << Each ELEMENT CONTROL field optionally contains control information for >> should be << Each ELEMENT CONTROL field may contain control information for >>

---
IBM comment number 58
Page=43 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.4 Enclosure Status diagnostic page (1st paragraph)

This << provides the status about many functions within the addressed enclosure. >> should be << provides the status about functions within the addressed enclosure. >>

---
IBM comment number 59

Page=44 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.4 Enclosure Status diagnostic page (2nd paragraph after table 12)

This << allocation length greater than 1 and >> should be << allocation
length greater than one and >>

---
IBM comment number 60
Page=44 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.4 Enclosure Status diagnostic page (3rd paragraph after table 12)

This << the application client of the error. >> should be <<  the
application client of the invalid field error. >>

---
IBM comment number 61
Page=44 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.4 Enclosure Status diagnostic page (4th paragraph after table 12)

This << Each time the INVOP bit is set to one: >> should be << Each time
the INVOP bit is set to one the: >>

---
IBM comment number 62
Page=45 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.4 Enclosure Status diagnostic page (paragraph above 2nd a,b list)

This << bit is set to one by any mechanism: >> should be << bit is set to
one by any mechanism the: >>

---
IBM comment number 63
Page=45 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.4 Enclosure Status diagnostic page (3rd paragraph from end)

This << There is exactly one OVERALL CONTROL field for each >> should be <<
There is one OVERALL CONTROL field for each >>. There is no difference
between 'exactly one' and 'one'.

---
IBM comment number 64
Page=45 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.4 Enclosure Status diagnostic page (3rd paragraph from end)

THis << The OVERALL STATUS optionally indicates a summary >> should be <<
The OVERALL STATUS may indicate a summary >>

---
IBM comment number 65

20

Page=45 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.4 Enclosure Status diagnostic page (3rd paragraph from end)

This << overall status.
An example of an enclosure that uses the OVERALL STATUS field is an
enclosure with three temperature sensors. If the enclosure only reports the
average of the three sensors, the OVERALL STATUS field contains the
temperature information. If the enclosure reports the output of each sensor
separately, the ELEMENT STATUS fields contain the information. Both the
OVERALL STATUS field and the ELEMENT STATUS field may contain information.
>> should be << overall status (e.g., an enclosure that uses the OVERALL
STATUS field with three temperature sensors. If the enclosure only reports
the average of the three sensors, the OVERALL STATUS field contains the
temperature information. If the enclosure reports the output of each sensor
separately, the ELEMENT STATUS fields contain the information. Both the
OVERALL STATUS field and the ELEMENT STATUS field may contain information).
>>

---
IBM comment number 66
Page=46 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.4 Enclosure Status diagnostic page (last paragraph)

This << Each ELEMENT STATUS field
optionally indicates >> should be << Each ELEMENT STATUS field
may indicate >>

---
IBM comment number 67
Page=46 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.5 Help Text diagnostic page (1st paragraph)

This << actions, if any, are desirable to
bring the enclosure to its fully operational state. >> should be <<
actions, if any, should occur to
bring the enclosure to its operational state. >>

---
IBM comment number 68
Page=46 Subtype=StrikeOut Subj=Cross-Out Author=George Penokie
Comment=
6.1.5 Help Text diagnostic page (1st paragraph)

This << The page is optional.>> should be deleted as everything is optional
unless otherwise stated.

---
IBM comment number 69
Page=46 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.5 Help Text diagnostic page (1st paragraph)

This << This page does not support subenclosures; the Subenclosure Help
Text diagnostic page (see 6.1.14) does. >> should be << This page does not
support subenclosures for subenclosures see the Help Text diagnostic page
(see 6.1.14). >>

---
IBM comment number 70
Page=46 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.5 Help Text diagnostic page (2nd paragraph)

This << command shall be treated as having an invalid field error >> should
be <<  command shall fail with an invalid field error >>

---
IBM comment number 71
Page=46 Subtype=StrikeOut Subj=Cross-Out Author=George Penokie
Comment=
6.1.5 Help Text diagnostic page (last paragraph)

The term << fully >> should be deleted as there is no difference between <<
fully operation state >> and << operation state >> defined anywhere.

---
IBM comment number 72
Page=46 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.6 String Out diagnostic page (1st paragarph)

This << This page does not support subenclosures; the Subenclosure String
Out diagnostic page (see 6.1.15) does. >> should be << This page does not
support subenclosures, for subenclosures see the Subenclosure String Out
diagnostic page (see 6.1.15). >>

---
IBM comment number 73
Page=46 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.6 String Out diagnostic page (1st paragarph)

This << The format is vendor specific. >> should be << The format of the
binary string is vendor specific. >>

---
IBM comment number 74
Page=47 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.7 String In diagnostic page (2nd paragraph)

This << This page does not support subenclosures; the Subenclosure String
In diagnostic page (see 6.1.16) does. >> should be << This page does not
support subenclosures, for subenclosures see the Subenclosure String In
diagnostic page (see 6.1.16). >>

---

IBM comment number 75
Page=48 Subtype=StrikeOut Subj=Cross-Out Author=George Penokie
Comment=
6.1.8 Threshold Out diagnostic page (3rd paragraph)

This << Implementation of this page is optional.>> should be deleted as
everything is optional unless otherwise stated.

---
IBM comment number 76
Page=48 Subtype=StrikeOut Subj=Cross-Out Author=George Penokie
Comment=
6.1.8 Threshold Out diagnostic page (3rd paragraph after table 16)

This << To prevent the misinterpretation of the OVERALL THRESHOLD and
ELEMENT THRESHOLD fields, >> should be deleted as it contains a
justification for the required action. Standards should not justify
requirements.

---
IBM comment number 77
Page=49 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.8 Threshold Out diagnostic page (4th paragraph after table 16)

This << There is exactly one OVERALL THRESHOLD field for each >> should be
<< There is one OVERALL THRESHOLD field for each >>. There is no difference
between 'exactly one' and 'one'.

---
IBM comment number 78
Page=49 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.8 Threshold Out diagnostic page (5th paragraph after table 17)

This should be an a,b,c list <<For those elements that have a sensor value
to compare with a threshold,
the enclosure services process may accept the fields transmitted in the
overall threshold or the element
threshold, may set the actual thresholds to a more appropriate value, or
may ignore the contents of any or all
of the threshold fields >>

---
IBM comment number 79
Page=49 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.8 Threshold Out diagnostic page (6th paragraph after table 17)

This << of the thresholds. As an example, voltage sensor elements provide a
threshold based on the allowable percentage variation in the sensed
voltage. The threshold value is defined in 7.3.20 as a percentage of the
nominal voltage in units of 0,5 %. A HIGH CRITICAL THRESHOLD field value of
14 specifies that a critical condition shall be indicated when the voltage
is 7 % over the nominal maximum supply voltage, while a LOW WARNING

THRESHOLD field value of 10 specifies that a noncritical condition shall be indicated when the voltage is 5 % under the nominal minimum supply voltage. >> should be
<< of the thresholds (e.g., voltage sensor elements provide a threshold based on the allowable percentage variation in the sensed voltage. The threshold value is defined in 7.3.20 as a percentage of the nominal voltage in units of 0,5 %. A HIGH CRITICAL THRESHOLD field value of 14 specifies that a critical condition shall be indicated when the voltage is 7 % over the nominal maximum supply voltage, while a LOW WARNING THRESHOLD field value of 10 specifies that a noncritical condition shall be indicated when the voltage is 5 % under the nominal minimum supply voltage). >>

---
IBM comment number 80
Page=49 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.8 Threshold Out diagnostic page (6th paragraph after table 17)

This << clauses that specify the >> should be << subclauses that specify the >>

---
IBM comment number 81
Page=50 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.9 Threshold In diagnostic page

This << limited sensing capability, for example voltage sensors, current sensors, and temperature sensors. >> should be << limited sensing capability, (e.g., voltage sensors, current sensors, and temperature sensors). >>

---
IBM comment number 82
Page=50 Subtype=StrikeOut Subj=Cross-Out Author=George Penokie
Comment=
6.1.9 Threshold In diagnostic page (3rd paragraph)

This << Implementation of this page is optional.>> should be deleted as everything is optional unless otherwise stated.

---
IBM comment number 83
Page=51 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.9 Threshold In diagnostic page (3rd paragraph before table 19)

This << There is exactly one OVERALL THRESHOLD field for each >> should be << There is one OVERALL THRESHOLD field for each >>. There is no difference between 'exactly one' and 'one'.

---
IBM comment number 84
Page=51 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=

6.1.9 Threshold In diagnostic page (3rd paragraph before table 19)

This << The OVERALL THRESHOLD optionally contains a summary >> should be <<
The OVERALL THRESHOLD may contain a summary >>

---
IBM comment number 85
Page=51 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.9 Threshold In diagnostic page (2nd paragraph before table 19)

This << Each ELEMENT THRESHOLD field optionally contains the actual
threshold >> should be << Each ELEMENT THRESHOLD field may contain the
actual threshold >>

---
IBM comment number 86
Page=52 Subtype=StrikeOut Subj=Cross-Out Author=George Penokie
Comment=
6.1.10 Element Descriptor diagnostic page (3rd paragraph)

This << The Element Descriptor diagnostic page is optional. >>  should be
deleted as everything is optional unless otherwise stated.

---
IBM comment number 87
Page=54 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.11 Short Enclosure Status diagnostic page (last paragraph)

This << The PAGE LENGTH field is 0000h. >> should be << The PAGE LENGTH
field is set to 0000h. >>

---
IBM comment number 88
Page=54 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.12 Enclosure Busy diagnostic page (last paragraph)

This << The PAGE LENGTH field is 0000h. >> should be << The PAGE LENGTH
field is set to 0000h. >>

---
IBM comment number 89
Page=55 Subtype=StrikeOut Subj=Cross-Out Author=George Penokie
Comment=
6.1.13.1 Additional Element Status diagnostic page overview (1st paragarph)

This << optional >> should be deleted as everything is optional unless
otherwise stated.

---
IBM comment number 90
Page=55 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=

6.1.13.1 Additional Element Status diagnostic page overview (2nd paragraph before table 25)

This << command contains a PAGE CODE field set to OAh, the command shall be treated as having an invalid field error >> should be << command contains a PAGE CODE field set to OAh, then the command shall be treated as having an invalid field error >>

---
IBM comment number 91
Page=56 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.13.1 Additional Element Status diagnostic page overview (1st paragraph after table 27)

This << or 7h (not available). >> should be << or 7h (i.e., not available). >>

---
IBM comment number 92
Page=56 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.13.1 Additional Element Status diagnostic page overview (2nd paragraph after table 27)

This << The PROTOCOL IDENTIFIER field is defined in SPC-4 and identifies the protocol of the device being described by the Additional Element Status descriptor. >> should be << The PROTOCOL IDENTIFIER field identifies the protocol of the device being described by the Additional Element Status descriptor (see SPC-4). >>

---
IBM comment number 93
Page=56 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.13.2 Additional Element Status descriptor protocol-specific information for Fibre Channel (1st paragraph)

This << that may contain a Fibre Channel device, or a SCSI Initiator Port, SCSI Target Port, or Enclosure Services Controller Electronics element that is a Fibre Channel device. >> would be clearer if it was an a,b list << that may contain:
a) a Fibre Channel device; or
b) a SCSI Initiator Port, SCSI Target Port, or Enclosure Services Controller Electronics element that is a Fibre Channel device. >>

---
IBM comment number 94
Page=57 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.13.2 Additional Element Status descriptor protocol-specific information for Fibre Channel (3rd paragraph after table 29)
This << The NODE NAME field contains the node Name_Identifier of the corresponding Fibre Channel node. >> should be << The NODE NAME field contains the node Name_Identifier (see FC-FS-2) of the corresponding Fibre

Channel node. >>.  Note: This will require a new reference be added to
section 2.

---
IBM comment number 95
Page=58 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.13.2 Additional Element Status descriptor protocol-specific information
for Fibre Channel (1st paragraph after table 30)
This << The PORT LOOP POSITION field indicates the position of the
corresponding Fibre Channel port on a Fibre Channel Arbitrated Loop. >>
should be << The PORT LOOP POSITION field indicates the position of the
corresponding Fibre Channel port on a Fibre Channel Arbitrated Loop (see
FC-AL-2). >> Note: This will require a new reference be added to section 2.

---
IBM comment number 96
Page=59 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.13.2 Additional Element Status descriptor protocol-specific information
for Fibre Channel (1st paragraph after table 31)
This << The PORT REQUESTED HARD ADDRESS field contains the Fibre Channel
Arbitrated Loop requested hard address of the corresponding Fibre Channel
port. >> should be << The PORT REQUESTED HARD ADDRESS field contains the
Fibre Channel Arbitrated Loop requested hard address of the corresponding
Fibre Channel port (see FC-AL-2). >> Note: This will require a new
reference be addedto section 2.

---
IBM comment number 97
Page=59 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.13.2 Additional Element Status descriptor protocol-specific information
for Fibre Channel (last paragraph)
This << The N_PORT_NAME field contains the Name_Identifier of the
corresponding Fibre Channel port. >> should be << The N_PORT_NAME field
contains the Name_Identifier (see FC-FS-2) of the corresponding Fibre
Channel port. >>.  Note: This will require a new reference be added to
section 2.

---
IBM comment number 98
Page=62 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.13.3.2 Additional Element Status descriptor protocol-specific
information for Device and Array
Device elements for SAS (note 7)

This << attached phy (usually an expander phy in an expander device). >>
should be << attached phy (e.g., an expander phy in an expander device). >>

---
IBM comment number 99
Page=62 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=

6.1.13.3.2 Additional Element Status descriptor protocol-specific
information for Device and Array
Device elements for SAS (1st paragraph after table 36)

This << If the device currently associated with the element is a SAS
device: >> should be << If the device associated with the element is a SAS
device: >>


---
IBM comment number 100
Page=62 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.13.3.2 Additional Element Status descriptor protocol-specific
information for Device and Array
Device elements for SAS (1st paragraph after note 7)

This << If the device currently associated with the element is a SATA
device: >> should be <<  If the device associated with the element is a
SATA device: >>


---
IBM comment number 101
Page=62 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.13.3.2 Additional Element Status descriptor protocol-specific
information for Device and Array Device elements for SAS (item h after note
7)
This << h) the SATA PORT SELECTOR bit shall be set to one if the SATA
device is attached to a SATA port selector and the SATA PORT SELECTOR bit
shall be set to zero if it is not; >> should be << h) the SATA PORT
SELECTOR bit shall be set to one if the SATA device is attached to a SATA
port selector;
i) the SATA PORT SELECTOR bit shall be set to zero if the SATA device is
not attached to a SATA port selector; >>


---
IBM comment number 102
Page=63 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.13.3.3 Additional Element Status descriptor protocol-specific
information for SAS Expander
elements (1st paragraph after table 38)

This << If the expander phy is not attached to a connector represented by a
SAS Connector element, this field shall be set to FFh. >> should be << If
the expander phy is not attached to a connector represented by a SAS
Connector element, then this field shall be set to FFh. >>


---
IBM comment number 103
Page=63 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.13.3.3 Additional Element Status descriptor protocol-specific
information for SAS Expander
elements (2nd paragraph after table 38)

This << If the expander phy is not attached to one of those elements, this field shall be set to FFh. >> should be << If the expander phy is not attached to one of those elements, then this field shall be set to FFh. >>

---
IBM comment number 104
Page=64 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.13.3.4 Additional Element Status descriptor protocol-specific information for SCSI Initiator Port, SCSI Target Port, and Enclosure Services Controller Electronics elements for SAS (3rd from last paragraph)
This << If the phy is not attached to a connector represented by a SAS Connector element, this field shall be set to FFh. >> should be <<  If the phy is not attached to a connector represented by a SAS Connector element, then this field shall be set to FFh. >>

---
IBM comment number 105
Page=65 Subtype=StrikeOut Subj=Cross-Out Author=George Penokie
Comment=
6.1.14 Subenclosure Help Text diagnostic page (1st paragraph)

This << The page is optional. >> should be deleted as everything is optional unless otherwise stated.

---
IBM comment number 106
Page=65 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.14 Subenclosure Help Text diagnostic page (1st paragraph)

This << The Subenclosure Help Text diagnostic page is intended to allow the writing of enclosure independent application clients that return enclosure specific text >> should be << The Subenclosure Help Text diagnostic page allows the writing of enclosure independent application clients that return enclosure specific text >>

---
IBM comment number 107
Page=66 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.14 Subenclosure Help Text diagnostic page (1st paragraph above table 42)

This << Table 42 defines the format of each subenclosure help text. The first subenclosure help text shall be for the primary subenclosure; subenclosure help text for the remaining subenclosures may follow in any order. >> should be << Table 42 defines the format of each subenclosure help text. The first subenclosure help text shall be for the primary subenclosure. Subenclosure help text for the remaining subenclosures may follow in any order. >>

---
IBM comment number 108

Page=66 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.14 Subenclosure Help Text diagnostic page (2nd to last  paragraph)
This << the SUBENCLOSURE HELP TEXT LENGTH field shall contain 0000h. >>
should be <<  the SUBENCLOSURE HELP TEXT LENGTH field shall be set to
0000h. >>

---
IBM comment number 109
Page=67 Subtype=StrikeOut Subj=Cross-Out Author=George Penokie
Comment=
6.1.15 Subenclosure String Out diagnostic page (2nd to the last paragraph)

This << To prevent the misinterpretation of the String Out data, >> should
be deleted as it contains a justification for the required action.
Standards should not justify requirements.

---
IBM comment number 110
Page=68 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.16 Subenclosure String In diagnostic page (2nd to last paragraph)

This << the SUBENCLOSURE STRING IN DATA LENGTH field shall contain 0000h >>
should be << the SUBENCLOSURE STRING IN DATA LENGTH field shall be set to
0000h >>

---
IBM comment number 111
Page=69 Subtype=StrikeOut Subj=Cross-Out Author=George Penokie
Comment=
6.1.18 Download Microcode Control diagnostic page (1st paragraph)

This << optionally >> should be deleted as everything is optional unless
otherwise stated.

---
IBM comment number 112
Page=69 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.18 Download Microcode Control diagnostic page (3rd pragraph before
table 47)

This << the incomplete microcode image shall not be used. >> should be <<
then, the incomplete microcode image shall not be used. >>

---
IBM comment number 113
Page=70 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.18 Download Microcode Control diagnostic page (2nd paragraph after
table 47)
This << If the SUBENCLOSURE IDENTIFIER value does not match a SUBENCLOSURE
IDENTIFIER value found in the Configuration diagnostic page (see 6.1.2),
the enclosure services process shall abort the download microcode operation

and set the SUBENCLOSURE DOWNLOAD MICROCODE STATUS field to 80h in the
Download Microcode Status diagnostic page. >> should be <<  If the
SUBENCLOSURE IDENTIFIER value does not match a SUBENCLOSURE IDENTIFIER
value found in the Configuration diagnostic page (see 6.1.2) then, the
enclosure services process shall abort the download microcode operation and
set the SUBENCLOSURE DOWNLOAD MICROCODE STATUS field to 80h in the Download
Microcode Status diagnostic page. >>

---
IBM comment number 114
Page=70 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.18 Download Microcode Control diagnostic page (3rd paragraph after
table 47)
This << If the PAGE length of the page, the enclosure services process
shall abort the >> should be << If the PAGE length of the page then, the
enclosure services process shall abort the >>

---
IBM comment number 115
Page=70 Subtype=StrikeOut Subj=Cross-Out Author=George Penokie
Comment=
6.1.18 Download Microcode Control diagnostic page (4th paragraph after
table 47)

This << To prevent the misinterpretation of the microcode data, >> should
be deleted as it contains a justification for the required action.
Standards should not justify requirements.

---
IBM comment number 116
Page=71 Subtype=Text Subj=Note Author=George Penokie
Comment=
6.1.18 Download Microcode Control diagnostic page (table 48)

Download modes Eh and Fh should be added to this table.

---
IBM comment number 117
Page=71 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.18 Download Microcode Control diagnostic page (1st paragraph after
table 48)

This << begun, if the DOWNLOAD MICROCODE MODE field value changes while
specifying the same buffer ID, the enclosure services process shall >>
should be << begun, if the DOWNLOAD MICROCODE MODE field value changes
while specifying the same buffer ID, then the enclosure services process
shall >>

---
IBM comment number 118
Page=72 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.18 Download Microcode Control diagnostic page (2nd paragraph after

table 48)

This << shall assign additional buffer ID codes contiguously, beginning
with 1. If it receives an >> should be << shall assign additional buffer ID
codes contiguously, beginning with one. If it receives an >>

---
IBM comment number 119
Page=72 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.18 Download Microcode Control diagnostic page (4th paragraph after
table 48)

This << The BUFFER OFFSET field shall be set to a multiple of 4. The
enclosure services >> should be << The BUFFER OFFSET field shall be set to
a multiple of four. The enclosure services >>

---
IBM comment number 120
Page=73 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.19 Download Microcode Status diagnostic page (1st paragraph before
table 50)

This << shall be for the primary subenclosure; download microcode status
descriptors for the remaining subenclosures may follow in any order. >>
should be << shall be for the primary subenclosure. Download microcode
status descriptors for the remaining subenclosures may follow in any order.
>>

---
IBM comment number 121
Page=75 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.19 Download Microcode Status diagnostic page (last paragraph)

This << it shall set the SUBENCLOSURE DOWNLOAD MICROCODE EXPECTED BUFFER
OFFSET field to FFFFFFFFh. >> should be << it shall set the SUBENCLOSURE
DOWNLOAD MICROCODE EXPECTED BUFFER OFFSET field to FFFF_FFFFh. >>

---
IBM comment number 122
Page=75 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.20 Subenclosure Nickname Control diagnostic page (2nd paragraph)

The term << page code >> should be in small caps as it is a field name.

---
IBM comment number 123
Page=75 Subtype=StrikeOut Subj=Cross-Out Author=George Penokie
Comment=
6.1.20 Subenclosure Nickname Control diagnostic page (4th paragraph after
table 52)

This << To prevent the misinterpretation of the microcode data, >> should
be deleted as it contains a justification for the required action.
Standards should not justify requirements.

---
IBM comment number 124
Page=77 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.21 Subenclosure Nickname Status diagnostic page (1st paragraph before
table 54)

This << shall be for the primary subenclosure; subenclosure nickname
status descriptors for the remaining subenclosures may follow in any order
>> should be << shall be for the primary subenclosure. Subenclosure
nickname
status descriptors for the remaining subenclosures may follow in any order
>> should be. >> Note that there is also a missing period at the end of
this sentence.

---
IBM comment number 125
Page=77 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.21 Subenclosure Nickname Status diagnostic page (2nd row in table 55)

This << of whichever field in the Subenclosure Nickname Control diagnostic
page which is in error. >> should be << of the field in the Subenclosure
Nickname Control diagnostic page which is in error. >>

---
IBM comment number 126
Page=77 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.21 Subenclosure Nickname Status diagnostic page (3rd row in table 55)
This << Internal error; nickname is lost. >> should be << Nickname is lost
internal error. >>

---
IBM comment number 127
Page=77 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.1.21 Subenclosure Nickname Status diagnostic page (4th row in table 55)
This << Internal error; previous nickname preserved. >> should be <<
Previous nickname preserved internal error. >>

---
IBM comment number 128
Page=78 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.3.1 Mode parameters overview (5th paragraph)

This << the BLOCK DESCRIPTOR
LENGTH shall be zero. >> should be << the BLOCK DESCRIPTOR
LENGTH shall be set to zero. >>

---
IBM comment number 129
Page=79 Subtype=StrikeOut Subj=Cross-Out Author=George Penokie
Comment=
6.3.2 Enclosure Services Management mode page (1st paragraph)

This << optional >> should be deleted as everything is optional unless
otherwise stated.

---
IBM comment number 130
Page=79 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.3.2 Enclosure Services Management mode page (1st paragraph)

This << the device server shall not implement the timed completion
function. >> should be << the device server shall not implement the timed
completion function (see x.x.x). >>

---
IBM comment number 131
Page=79 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.3.2 Enclosure Services Management mode page (2nd paragraph)
This << shall report the event by returning the requested status page as
soon as possible >> should be << shall report the event by returning the
requested status page. >> The statement << as soon as possible >> is not
valid as it is not a quantifiable amount of time.

---
IBM comment number 132
Page=79 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.3.2 Enclosure Services Management mode page (4th paragraph after table
58)

This << device server shall enable the timed completion function. >> should
be << device server shall enable the timed completion function (see x.x.x).
>>

---
IBM comment number 133
Page=79 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.3.2 Enclosure Services Management mode page (5th paragraph after table
58)

This << the application client should consider any time periods that are
not controlled by the device server, including reconnection overheads,
congestion latency, and protocol timeouts. >> should be << the application
client should consider any time periods that are not controlled by the
device server (e.g., reconnection overheads, congestion latency, and
protocol timeouts). >>

---

IBM comment number 134
Page=79 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
6.3.2 Enclosure Services Management mode page (5th paragraph after table
58)

This << A value of zero specifies a vendor-specific maximum time, which may
>> should be << A value of zero specifies a vendor-specific maximum time.
>>

---
IBM comment number 135
Page=80 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.1 Element definitions overview (1st paragraph)

This << The field formats generally are different for different element >>
should be << The field formats are different for different element >>

---
IBM comment number 136
Page=81 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.1 Element definitions overview (1st paragraph before table 59)
This << Table 59 lists the elements and their ELEMENT TYPE codes, and
indicates which elements accept the DISABLE bit in their COMMON CONTROL
field (see 7.2.2) and may support the DISABLED bit in their COMMON STATUS
field (see 7.2.3), and which elements contain a value subject to comparison
with a threshold. >> is nearly implossible to parse as it has 4 ands. It
should be converted into an a,b,c list.

---
IBM comment number 137
Page=82 Subtype=StrikeOut Subj=Cross-Out Author=George Penokie
Comment=
7.2.1 Formats for status and control fields overview (2nd paragraph)

This << Unless otherwise specified, all status and control bits are
optional. >> should be deleted as everything is optional unless otherwise
stated.

---
IBM comment number 138
Page=82 Subtype=StrikeOut Subj=Cross-Out Author=George Penokie
Comment=
7.2.1 Formats for status and control fields overview (2nd paragraph)

This << optional. >> should be deleted as everything is optional unless
otherwise stated.

---
IBM comment number 139
Page=82 Subtype=StrikeOut Subj=Cross-Out Author=George Penokie
Comment=
7.2.1 Formats for status and control fields overview (2nd paragraph)

This << optional. >> should be deleted as everything is optional unless otherwise stated.

---
IBM comment number 140
Page=82 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.2.2 Format for all control fields (1st paragraph after table 60)

This << the RST SWAP bit) are defined below. >> should be << the RST SWAP bit) are defined in this subclause. >>

---
IBM comment number 141
Page=82 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.2.2 Format for all control fields (3rd paragraph after table 60)
The quotes around the term << "predicted failure state" >> should be removed in all instances of the term.

---
IBM comment number 142
Page=82 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.2.2 Format for all control fields (last paragraph)
This << The element-type-specific control information is defined separately for each element type in 7.3. >> should be << The element type specific control information is defined separately for each element type in 7.3. >>

---
IBM comment number 143
Page=83 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.2.3 Format for all status fields (1st paragraph after table 61)

This << CODE fields) are defined below. >> should be << CODE fields) are defined in this subcluase. >>

---
IBM comment number 144
Page=83 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.2.3 Format for all status fields (2nd paragraph after table 61)
The quotes around the term << "predicted failure state" >> should be removed in all instances of the term.

---
IBM comment number 145
Page=83 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.2.3 Format for all status fields (las row in table 62)
This << No status available because the initiator port from which the RECEIVE DIAGNOSTIC RESULT command was received does not have access to this element >> should be << No status available as a result of the initiator

port from which the RECEIVE DIAGNOSTIC RESULT command was received not
having access to this element >>

---
IBM comment number 146
Page=83 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.2.3 Format for all status fields (3rd paragraph after table 61)
This << A DISABLED bit set to one indicates that the element has been
disabled because the DISABLE bit was set to one >> should be << A DISABLED
bit set to one indicates that the element has been disabled as a result of
the DISABLE bit being set to one >>

---
IBM comment number 147
Page=84 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.2.3 Format for all status fields (last a,b,c list)
This << c) if there are one or more ELEMENT STATUS fields and, in each of
them, the ELEMENT STATUS CODE field is not set to 0h (i.e., Unsupported),
0h (i.e., Unsupported) or any value representing the overall status. >>
cannot be parsed. I have no idea when the then is supposed to be nor do I
have any idea why << 0h (i.e., Unsupported) >> is listed twice in a row.
This needs to be fixed.

---
IBM comment number 148
Page=84 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.2.3 Format for all status fields (last paragraph)
This << defined separately for each element type in 7.3. >> should be <<
defined separately for each element type (see 7.3). >>

---
IBM comment number 149
Page=86 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.3.2 Device element (2nd paragraph after table 66)

This << parallel SCSI target port of the SCSI target device if one exists,
and is vendor >> should be << parallel SCSI target port of the SCSI target
device, if any, and is vendor >>

---
IBM comment number 150
Page=86 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.3.2 Device element (7th paragraph after table 66)

This << element by a visual indication because the RQST IDENT bit was set
to one in the control-type diagnostic page. >> should be <<  element by a
visual indication as a result of the RQST IDENT bit being set to one in the
control-type diagnostic page. >>

---

IBM comment number 151
Page=88 Subtype=Text Subj=Note Author=George Penokie
Comment=
7.3.3 Array Device element (several paragraphs after table 67)

All the terms that are quoted should have the quotes removed.

---
IBM comment number 152
Page=89 Subtype=Text Subj=Note Author=George Penokie
Comment=
7.3.3 Array Device element (several paragraphs after table 68)

All the terms that are quoted should have the quotes removed.

---
IBM comment number 153
Page=90 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.3.4 Power Supply element (3rd paragraph after table 69)

This << Setting the RQST FAIL bit to one and then setting it to zero shall
reset any latched failure indications. >> should be << Setting the RQST
FAIL bit to one and then setting it to zero shall reset all  failure
indications. >>

---
IBM comment number 154
Page=90 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.3.4 Power Supply element (2nd paragraph after table 70)
This << element by a visual indication because the RQST IDENT bit was set
to one in the control-type diagnostic page. >> should be <<  element by a
visual indication as a result of the RQST IDENT bit being set to one in the
control-type diagnostic page. >>

---
IBM comment number 155
Page=90 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.3.4 Power Supply element (2nd paragraph after table 70)

This << indicates that the enclosure services process is not currently
identifying the element by >> should be << indicates that the enclosure
services process is not identifying the element by >>

---
IBM comment number 156
Page=91 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.3.4 Power Supply element (7th paragraph after table 70)

This << A FAIL bit set to one indicates that the enclosure services process
is currently identifying the element with a >> should be << A FAIL bit set
to one indicates that the enclosure services process is identifying the

element with a >>

---
IBM comment number 157
Page=91 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.3.4 Power Supply element (1st a,b,c list after table 70)
This << the enclosure services process is not currently identifying the
element with a visual failure indication >> should be << the enclosure
services process is not identifying the element with a visual failure
indication >>

---
IBM comment number 158
Page=93 Subtype=StrikeOut Subj=Cross-Out Author=George Penokie
Comment=
7.3.6 Temperature Sensor element (2nd paragraph)

This <<  optional. >> should be deleted as everything is optional unless
otherwise stated.

---
IBM comment number 159
Page=93 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.3.6 Temperature Sensor element (3rd paragraph)

This << are indicated because of the temperature values sensed >> should be
<< are indicated as a result of the temperature values being sensed >>

---
IBM comment number 160
Page=94 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.3.6 Temperature Sensor element (3rd paragraph after table 76)
This << The value of 0 is reserved. >> should be << The value of zero is
reserved. >>

---
IBM comment number 161
Page=99 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.3.11 Nonvolatile Cache element (3rd paragraph after table 86)

This << and the SIZE MULTIPLIER indicate the approximate size >> should be
<< and the SIZE MULTIPLIER field indicate the approximate size >>

---
IBM comment number 162
Page=100 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.3.12 Invalid Operation Reason element (1st paragraph)

This << It is only meaningful in the pages which define INVOP >> should be
<< It is only valid in the pages which define INVOP >>

---
IBM comment number 163
Page=100 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.3.12 Invalid Operation Reason element (table 89)
This << INVOP-TYPE SPECIFIC >> should be << invop-type specific descriptor
>>

---
IBM comment number 164
Page=100 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.3.12 Invalid Operation Reason element (2nd paragraph after table 89)
This <<  INVOP TYPE-SPECIFIC bytes. >> should be << should be << invop-type
specific descriptor >>

---
IBM comment number 165
Page=100 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.3.12 Invalid Operation Reason element (1st paragraph after table 90)
This << The format of the status field when INVOP TYPE is 00b is defined in
table 91. >> should be << The format of the status field when INVOP TYPE
field is set to 00b is defined in table 91. >>

---
IBM comment number 166
Page=100 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.3.12 Invalid Operation Reason element (table 91 title)
This << status-type diagnostic pages with INVOP TYPE of 00b >> should be <<
status-type diagnostic pages with INVOP TYPE field set to 00b >>

---
IBM comment number 167
Page=101 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.3.12 Invalid Operation Reason element (2nd paragraph after table 91)
This << This bit is only set to one when this element is returned by the >>
should be << The PAGE NOT SUPPORTED bit is only set to one when this
element is returned by the >>

---
IBM comment number 168
Page=101 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.3.12 Invalid Operation Reason element (3rd paragraph after table 91)
This << The format of the status field when INVOP TYPE is 01b is defined in
table 92. >> should be << The format of the status field when INVOP TYPE
field is set to 01b is defined in table 92. >>

---
IBM comment number 169
Page=101 Subtype=Highlight Subj=Highlight Author=George Penokie

Comment=
7.3.12 Invalid Operation Reason element (table 92 title)
This << status-type diagnostic pages with INVOP TYPE of 01b >> should be <<
status-type diagnostic pages with INVOP TYPE field set to 01b >>

---
IBM comment number 170
Page=101 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.3.12 Invalid Operation Reason element (table 93 title)
This << status-type diagnostic pages with INVOP TYPE of 11b >> should be <<
status-type diagnostic pages with INVOP TYPE field set to 11b >>

---
IBM comment number 171
Page=101 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.3.12 Invalid Operation Reason element (3rd paragraph after table 92)
This << The format of the status field when INVOP TYPE is 11b is defined in
table 93. >> should be << The format of the status field when INVOP TYPE
field is set to 11b is defined in table 93. >>

---
IBM comment number 172
Page=102 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.3.13 Uninterruptible Power Supply element (3rd paragraph after table 94)
This << compared against the threshold fields as defined in 6.1.8 >> should
be << compared against the thresholds as defined in 6.1.8 >>

---
IBM comment number 173
Page=102 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.3.13 Uninterruptible Power Supply element (3rd paragraph after table 94)
This << are used for comparisons against the battery status field. A >>
should be << are used for comparisons against the BATTERY STATUS field. A
>>

---
IBM comment number 174
Page=102 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.3.13 Uninterruptible Power Supply element (3rd paragraph after table 94)
This << A value between 1 and 255 in the threshold field specifies that the
corresponding number of >> should be << A threshold value between 1 and 255
specifies that the corresponding number of >>

---
IBM comment number 175
Page=102 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.3.13 Uninterruptible Power Supply element (3rd paragraph after table 94)
This << The HIGH WARNING THRESHOLD and the HIGH CRITICAL THRESHOLD fields
shall be ignored. >> should be << The HIGH WARNING THRESHOLD field and the

HIGH CRITICAL THRESHOLD field shall be ignored. >>

---
IBM comment number 176
Page=102 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.3.13 Uninterruptible Power Supply element (2nd paragraph after table 95)
This << An indication of 0 minutes indicates that the battery is discharged
>> should be << An indication of zero minutes indicates that the battery is
discharged >>

---
IBM comment number 177
Page=102 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.3.13 Uninterruptible Power Supply element (3rd paragraph after table 95)

This << zero indicates that the AC line voltage has risen into its
specified range. >> should be << zero indicates that the AC line voltage is
within its specified range. >>

---
IBM comment number 178
Page=102 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.3.13 Uninterruptible Power Supply element (4th paragraph after table 95)
This << zero indicates that the AC line voltage has fallen into its
specified range. >> should be << zero indicates that the AC line voltage is
within its specified range. >>

---
IBM comment number 179
Page=102 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.3.13 Uninterruptible Power Supply element (5th paragraph after table 95)

This << that the AC line voltage quality has returned to its specified
value. >> should be << that the AC line voltage quality is within its
specified value. >>

---
IBM comment number 180
Page=102 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.3.13 Uninterruptible Power Supply element (8th paragraph after table 95)

This << indicates that the uninterruptible power supply has failed and
cannot provide power. A UPS FAIL bit set to zero >> should be << indicates
that the uninterruptible power supply has failed and is not able to provide
power. A UPS FAIL bit set to zero >>

---
IBM comment number 181
Page=102 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=

7.3.13 Uninterruptible Power Supply element (2nd paragraph after table 95)
This << The value of the BATTERY STATUS field indicates the time the
battery could provide power in the event of an AC >> should be << The value
of the BATTERY STATUS field indicates the time the battery is able to
provide power in the event of an AC >>

---
IBM comment number 182
Page=102 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.3.13 Uninterruptible Power Supply element (9th paragraph after table 95)
This << A WARN (warning) bit set to one indicates that the output power
will be available for less than the number of minutes specified by the LOW
WARNING THRESHOLD field or less than the vendor-specific default time.>>
should be << A WARN (warning) bit set to one indicates that there is not
enough output power to operate the enclosure for the number of minutes
specified by the LOW WARNING THRESHOLD field or the vendor-specific default
time.>>

---
IBM comment number 183
Page=102 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.3.13 Uninterruptible Power Supply element (9th paragraph after table 95)

This << A WARN bit set to zero indicates that output power will be
available for at least the time specified by the LOW WARNING THRESHOLD
field >> should be << A WARN bit set to zero indicates that there is enough
output power to operate the enclosure for at least the number of minutes
specified by the LOW WARNING THRESHOLD field or the vendor-specific default
time.>>

---
IBM comment number 184
Page=103 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.3.14 Display element (1st paragraph)

This << if more than one Display elements share the same type descriptor
header in the Configuration diagnostic page (see 6.1.2), the order of the
Display elements shall >> should be << if more than one Display elements
share the same type descriptor header in the Configuration diagnostic page
(see 6.1.2), then the order of the Display elements shall >>

---
IBM comment number 185
Page=103 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.3.14 Display element (1st paragraph)

This << (e.g., to display "45" on two LEDs each represented by a Display
element, the first Display element displays Â 4' and the second Display
element displays Â 5') >> should be << (e.g., to display 45 on two LEDs each
represented by a Display element, the first Display element displays 4 and
the second Display element displays 5) >>

---
IBM comment number 186
Page=104 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.3.14 Display element (table 99 1st row)
This << The enclosure services process is controlling the display; Display
element control of the display is not supported. >> should be << The
enclosure services process is controlling the display and the display
element control of the display is not supported. >>

---
IBM comment number 187
Page=104 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.3.14 Display element (table 99 2nd row)
This << The enclosure services process is controlling the display; Display
element control of the display is supported. >> should be << The enclosure
services process is controlling the display and the display element control
of the display is supported. >>

---
IBM comment number 188
Page=104 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.3.14 Display element (last paragraph)
This << If the DISPLAY MODE STATUS field is set to 01b or 10b and a
Language element (see 7.3.18) is present, the >> should be << If the
DISPLAY MODE STATUS field is set to 01b or 10b and a Language element (see
7.3.18) is present, then the >>

---
IBM comment number 189
Page=104 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.3.14 Display element (last paragraph)
This << If the DISPLAY MODE STATUS field is set to 01b or 10b and a
Language element is not available, the first byte of the >> should be << If
the DISPLAY MODE STATUS field is set to 01b or 10b and a Language element
is not available, then the first byte of the >>

---
IBM comment number 190
Page=104 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.3.14 Display element (last paragraph)
This << If the DISPLAY MODE STATUS field is set to 00b or 11b, the DISPLAY
CHARACTER STATUS field >> should be << If the DISPLAY MODE STATUS field is
set to 00b or 11b, then the DISPLAY CHARACTER STATUS field >>

---
IBM comment number 191
Page=106 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.3.16 Enclosure element (table 104 1st row)

This << The enclosure shall begin a power cycle immediately after
completing the SEND DIAGNOSTIC command. >> should be << The enclosure shall
begin a power cycle after completing the SEND DIAGNOSTIC command. >>

---
IBM comment number 192
Page=106 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.3.16 Enclosure element (table 105 1st row)
The term << minimal >> is not a specific time interval. The amount of time
needs to be made more specific.

---
IBM comment number 193
Page=107 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.3.16 Enclosure element (table 107 last row)
This << The enclosure is scheduled to begin a power cycle immediately. >>
should be << The enclosure is scheduled to begin a power cycle after
completing the SEND DIAGNOSTIC command. >>

---
IBM comment number 194
Page=107 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.3.16 Enclosure element (table 108 1st row)
The term << minimal >> is not a specific time interval. The amount of time
needs to be made more specific.

---
IBM comment number 195
Page=109 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.3.18 Language element (item a in a,b,c list after table 111)

This << 0000h: the enclosure services process shall use the default >>
should be << 0000h, then the enclosure services process shall use the
default >>

---
IBM comment number 196
Page=109 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.3.18 Language element (item b in a,b,c list after table 111)
This << characters each with its MSB set to zero): the enclosure services
process shall use UCS-2 as defined >> should be << characters each with its
MSB set to zero), then the enclosure services process shall use UCS-2 as
defined >>

---
IBM comment number 197
Page=109 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.3.18 Language element (item c in a,b,c list after table 111)

This << a value other than 0000h or the two-letter code of a language that
is supported by the enclosure services process: the enclosure services
process shall >> should be << a value other than 0000h or the two-letter
code of a language that is supported by the enclosure services process,
then the enclosure services process shall >>

---
IBM comment number 198
Page=110 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.3.20 Voltage Sensor element (3rd paragraph)

This << conditions are indicated because of the voltage values sensed. >>
should be <<  conditions are indicated as a result of the voltage values
being sensed. >>

---
IBM comment number 199
Page=110 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.3.20 Voltage Sensor element (3rd paragraph)
This << When the DISABLE bit is set to zero, the voltage sensor's output is
accepted normally by the enclosure services process. >> should be << When
the DISABLE bit is set to zero, the voltage sensor's output is accepted by
the enclosure services process. >>

---
IBM comment number 200
Page=111 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.3.20 Voltage Sensor element (3rd paragraph after table 116)
This << voltage indicated by the VOLTAGE field has fallen below the actual
high warning threshold. >> should be << voltage indicated by the VOLTAGE
field is below the high warning threshold. >>

---
IBM comment number 201
Page=111 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.3.20 Voltage Sensor element (4th paragraph after table 116)
This << that the voltage indicated by the VOLTAGE field has risen above the
actual low warning threshold >> should be << that the voltage indicated by
the VOLTAGE field is above the low warning threshold >>

---
IBM comment number 202
Page=111 Subtype=Text Subj=Note Author=George Penokie
Comment=
7.3.20 Voltage Sensor element (3rd - 6th paragraphs after table 116)
Delete the term << actual >> in all cases in these paragraphs. It has no
apparent value.

---
IBM comment number 203

Page=111 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.3.20 Voltage Sensor element (5th paragraph after table 116)
This << voltage indicated by the VOLTAGE field has fallen below the actual
high critical threshold. >> should be << voltage indicated by the VOLTAGE
field is below the high critical threshold. >>

---
IBM comment number 204
Page=111 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.3.20 Voltage Sensor element (6th paragraph after table 116)
This << voltage indicated by the VOLTAGE field has risen above the actual
low critical threshold. >> should be << voltage indicated by the VOLTAGE
field is above the low critical threshold. >>

---
IBM comment number 205
Page=111 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.3.20 Voltage Sensor element (last paragraph after table 116)
This << The largest positive voltage that can be expressed is 327,67 volts
and the largest negative voltage that can be expressed is -327,67 volts. >>
should be << The largest positive voltage that is able to be expressed is
327,67 volts and the largest negative voltage that is able to be expressed
is -327,67 volts. >>

---
IBM comment number 206
Page=112 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.3.21 Current Sensor element (3rd paragraph)

This << unrecoverable conditions are indicated because of the current
values sensed. >> should be << unrecoverable conditions are indicated as a
result of the current values being sensed. >>

---
IBM comment number 207
Page=112 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.3.21 Current Sensor element (3rd paragraph)

This << bit is set to zero, the current sensor's output is accepted
normally by the enclosure services process. >> should be << bit is set to
zero, the current sensor's output is accepted by the enclosure services
process. >>

---
IBM comment number 208
Page=112 Subtype=Text Subj=Note Author=George Penokie
Comment=
7.3.21 Current Sensor element (3rd - 4th paragraphs after table 118)
Delete the term << actual >> in all cases in these paragraphs. It has no
apparent value.

---
IBM comment number 209
Page=112 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.3.21 Current Sensor element (3rd paragraph after table 118)
This << current indicated by the CURRENT field has fallen below the actual
high warning threshold. >> should be << current indicated by the CURRENT
field is below the high warning threshold. >>

---
IBM comment number 210
Page=112 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.3.21 Current Sensor element (4th paragraph after table 118)
This << current indicated by the CURRENT field has fallen below the actual
high critical threshold. >> should be << current indicated by the CURRENT
field is below the high critical threshold. >>

---
IBM comment number 211
Page=112 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.3.21 Current Sensor element (last paragraph)
This << The largest positive current that can be expressed is 327,67 amps
and the largest negative current that can be expressed is -327,67 amps. >>
should be << The largest positive current that is able to be expressed is
327,67 amps and the largest negative current that is able to be expressed
is -327,67 amps. >>

---
IBM comment number 212
Page=112 Subtype=Highlight Subj=Highlight Author=George Penokie
Comment=
7.3.22 SCSI Target Port element (2nd paragarph)

This << If a SCSI target/initiator port is represented by a SCSI Target
Port element or a SCSI Initiator Port element, it shall be>> should be <<
If an enclosure contains SCSI ports that contain both a target port and an
initiator port, then the enclosure may represent the SCSI port as a SCSI
Target Port element or a SCSI Initiator Port element, however the SCSI port
shall be >>


***************************************************************

Comments attached to Abs ballot from Dennis Moore of
KnowledgeTek, Inc.:

Not materially affected by this standard.

***************************************************************

Comments attached to No ballot from Roger Cummings of
Symantec:

SES-2 Comments Rev 2


SYMANTEC 01
PDF pg 21, pg 3, 2.4 Other references

Delete reference to Unicode - not used elsewhere in the document.

Proposed Resolution:

Remove reference


SYMANTEC 02
PDF pg 22, pg 4, 3.1.2 ASCII string

Make the exclusion of NUL character a requirement.

Proposed Resolution:

"ASCII strings shall not contain the NUL character (i.e., 00h)."


SYMANTEC 03
PDF pg 22, pg 4, 3.1.6 Device Server

This definition is out of order, and should reference SAM-4.

Proposed Resolution:

Add "See SAM-4"


SYMANTEC 04
PDF pg 22, pg 4, 3.1.14 field

Definition should reference SPC-4

Proposed Resolution:

Add "See SPC-4"


SYMANTEC 05
PDF pg 23, pg 5, 3.1.30 subenclosure

Definition is recursive

Proposed Resolution:

subenclosure: An entity containing, and defining the scope of, one of more

enclosure service processes (see 3.1.13). Each enclosure accessed shall have a single primary subenclosure, and may have other subenclosures. See 4.7.


SYMANTEC 06
PDF pg 23, pg 5, 3.1.31 text string

Definition for graphic characters is required or it needs to be deleted, and the exclusion of NUL character needs to be a requirement

Proposed Resolution:

3.1.31 text string: A string of characters using the character encoding and language specified by the
Language element (see 7.3.18). Text strings shall not contain the NULL character (i.e., 00h or 0000h).


SYMANTEC 07
PDF pg 24, pg 6, 3.2 Symbols and abbreviations

Add DC - used in Table 70

Proposed Resolution:

DC direct current


SYMANTEC 08
PDF pg 27, pg 9, 4.1.3 Attached enclosure services process 1st para 4th line

Spell out ESI here as it's the first usage, it's currently spelled out in Note 5

Proposed Resolution:

Enclosure Services Interface (ESI)


SYMANTEC 09
PDF pg 27, pg 9, 4.1.3 Attached enclosure services process 1rd para 2nd line

Reference back to the previous subclause for the standalone process

Proposed Resolution:

standalone enclosure services process (see 4.1.2)


SYMANTEC 10
PDF pg 28, pg 10, First line

"If the device server is not able to communicate with an enclosure services process, the device server
shall return CHECK CONDITION status as described in 4.8." is incorrect. 4.8

50

contains a "Not ready" sense key that might be returned even when a process
is "temporarily busy"

Proposed Resolution:

Identify the specific ASC value(s) to be returned.


SYMANTEC 11
PDF pg 28, pg 10, Figure 3

The diagnostic page code range is incorrect.

Proposed Resolution:

Device server (forwards diagnostic page 00h - 2Fh accesses)


SYMANTEC 12
PDF pg 29, pg 11, 4.5 Invalid Field errors

"destined to" is not normal usage

Proposed Resolution:

"destined for"


SYMANTEC 13
PDF pg 29, pg 11, 4.5 Invalid Field errors

The second paragraph is incorrect. If the device server allows a RECEIVE
DIAGNOSTIC RESULTS command with PVC set to zero for its non-SES
functionality, I think it needs to set ILLEGAL REQUEST if it receives a
command with PVC set to zero for an SES page code

Proposed Resolution:

For an attached enclosure services process, for other than the PVC bit the
device server does not have the capability of analyzing the validity of the
CDB and the parameters destined to the attached enclosure services process.


SYMANTEC 14
PDF pg 29, pg 11, 4.5 Invalid Field errors

The last paragraph is not specific enough - it should refer only to
unsupported SES page codes. If the process receives other non-SES page codes
it should return "ILLEGAL REQUEST", right?

Proposed Resolution:

An attached enclosure services process shall process a RECEIVE DIAGNOSTIC
RESULTS command
requesting an unsupported SES-2 page code by returning no data. It shall

process a SEND DIAGNOSTIC command
requesting an unsupported SES-2 page code by setting the INVOP bit to one in
the next Enclosure Status diagnostic
page returned to any application


SYMANTEC 15
PDF pg 30, pg 12, 4.6.4 CHECK CONDITION status

"invalid operations" needs to be clarified here. Is an unsupported SES page
an invalid operation? Presumably not, because 4.5 says to return no data, not
a check condition.

Proposed Resolution:

Please clarify


SYMANTEC 16
PDF pg 30, pg 12, 4.6.4 CHECK CONDITION status

The phrase "rules defined for informational exception conditions defined in
SPC-4" doesn't parse. As far as I can see, the term "rule" is never used in
SPC-4 in relation to informational exception conditions.

Proposed Resolution:

Please clarify


SYMANTEC 17
PDF pg 30, pg 12, 4.7 Subenclosures

The first sentence "When a single enclosure is present, the primary
subenclosure is the enclosure." is extremely confusing with respect to the
terminology in the Configuration diagnostic page, and flatly contradicts the
last sentence in the third para that states "Subenclosures are those zero or
more enclosures that contribute to the contents of the diagnostic pages but
do not transmit them to the application client"

Proposed Resolution:

Change the first sentence "When visibility is restricted to the level of an
entire enclosure, that enclosure shall be viewed as consisting of a single
subenclosure with scope of the entire enclosure." Change the last sentence in
the 3rd para to read "Non-primary Subenclosures are those zero or more
enclosures that contribute to the contents of the diagnostic pages but do not
transmit them to the application client."


SYMANTEC 18
PDF pg 31, pg 13, Figure 4

The enclosure descriptor of the configuration diagnostic page supports
multiple enclosure service processes per subenclosure, and this should be

reflected in the figure.

Proposed Resolution:

Enclosure service process(es)


SYMANTEC 19
PDF pg 31, pg 13, Figure 4

The figure is the only place that indicates that the subenclosure identifier
of the primary subenclosure should be 00h.

Proposed Resolution:

Prepend the following sentence to the second paragraph after the figure: "The
subenclosure identifier of the primary subenclosure shall be 00h."


SYMANTEC 20
PDF pg 32, pg 14, Table 3

The term "enclosure services function" is only used in this table, and is
undefined.

Proposed Resolution:

Add a definition - it's a function that is activated by changing the state of
a bit in a control type diagnostic page?


SYMANTEC 21
PDF pg 34, pg 16,  Table 4 Footnote c

Question: The PF bit should be the PCV bit, and this should be expressed as a
requirement in normative text. Also does it say anywhere that the SES pages
SHALL be accessed by the SEND SEND DIAGNOSTIC command and a RECEIVE
DIAGNOSTIC RESULTS commands?

Proposed Resolution:

Correct the bit name. Change the second sentence after the table to read "The
diagnostic pages associated with an enclosure service process that shall be
accessed by a SEND DIAGNOSTIC command and a RECEIVE DIAGNOSTIC RESULTS
command with the PCV bit set to one are defined in 6.1."


SYMANTEC 22
PDF pg 37, pg 19, 6.1.2.1 Configuration diagnostic page overview

Use of the term device in "if the device supports enclosure services and does
not use the Short Enclosure Status diagnostic page" is extremely problematic.
Section 4.7 states "an enclosure may contain one or more devices".  When
combined with the requirements in 6.1.11, its not clear if the Short
Enclosure Status page can ever be reported.

Proposed Resolution:

Please clarify - I have no good suggestions.


SYMANTEC 23
PDF pg 38, pg 20, Table 7

Remove the "diagnostic page header" line as it seems to appear in no other
Tables.

Proposed Resolution:

Please delete


SYMANTEC 24
PDF pg 39, pg 21, 6.1.2.1 Configuration diagnostic page overview

The description of "NUMBER OF SUBENCLOSURES" field, while correct, is
decidedly counterintuitive.

Proposed Resolution:

Can the field be renamed "NUMBER OF NON-PRIMARY SUBENCLOSURES"?


SYMANTEC 25
PDF pg 39, pg 21, 6.1.2.1 Configuration diagnostic page overview

For the present definitions of the RELATIVE ENCLOSURE SERVICE PROCESS
IDENTIFIER and NUMBER OF ENCLOSURE SERVICE PROCESSES fields to make sense,
the relationship between "the enclosure" and "this subenclosure" has to be
defined. Intuition would say that there's a containment relationship with an
enclosure containing 1 or more subenclosures, but that's not stated anywhere,
and it's a bit orthogonal to Table 7 which defines one enclosure descriptor
per subenclosure. Are the relative process identifer or the number measured
across a scope of the entire enclosure or just the subenclosure covered by
this enclosurre descriptor? The terms are so mashed that its impossible to
say.

Proposed Resolution:

The easiest solution might be to remove "enclosure" from Figures 2 and 3 and
to make everything in Table 7 and 6.1.2.2 reference subenclosures.


SYMANTEC 26
PDF pg 39, pg 21, 6.1.2.1 Configuration diagnostic page overview

The paragraph defining the SUBENCLOSURE IDENTIFIER duplicates and contradicts
other text, and needs to reference the GENERATION CODE field.

Proposed Resolution:

"The SUBENCLOSURE IDENTIFIER is a value ass signed by the Primary
Subenclosure (see 4.7), and when the value in the GENERATION CODE field
changes these value may be reassigned.


SYMANTEC 27
PDF pg 41, pg 23, 6.1.2.3 Type Descriptor Header List

The paragraph defining the SUBENCLOSURE IDENTIFIER duplicates and contradicts
other text.

Proposed Resolution:

"The SUBENCLOSURE IDENTIFIER is a value assigned by the Primary Subenclosure
(see 4.7), and identifies the subenclosure for the enclosure containing the
element described by this type descriptor."


SYMANTEC 28
PDF pg 53, pg 35, 6.1.11 Short Enclosure Status diagnostic page

The first sentence in the second paragraph "Enclosures reporting the Short
Enclosure Status diagnostic page shall not be primary subenclosures" is a
major change from SES, a brand new requirement, and we believe breaks a lot
of equipment in the field. It also leads to a contradiction with various
definitions in the Configuration diagnostic page

Proposed Resolution:

"Where a primary subenclosure supports multiple other subenclosures,
enclosure services processes within the primary Subenclosure shall not use
the Short Enclosure Status diagnostic page."


SYMANTEC 29
PDF pg 54, pg 35,  6.1.11 Short Enclosure Status diagnostic page

The alpha list contradicts the text in 4.3, where on item b is allowed.

Proposed Resolution:

Make this text and 4.3 agree.


******************** End of Ballot Report ********************