

Date: Sept 15,1994

To: X3T10 Committee (SCSI)

From: George Penokie (IBM)

Subject: Exception Handling Selection Mode Page

**1 Overview**

Many of today SCSI devices have asynchronous events that occur. These devices use several different methods for reporting asynchronous events. This proposal allows a method for application clients to select the method it expects the target to use when reporting asynchronous events.

**2 Target control page**

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**Table 1 - Target control page**

Bit Byte	7	6	5	4	3	2	1	0
0	PS	RESERVED	PAGE CODE (sixth)					
1	PAGE LENGTH (0AH)							
2	RESERVED							LOGERR
3	RESERVED				METHOD OF REPORTING INFORMATIONAL EXCEPTIONS			
4	RESERVED							
5	RESERVED							
6	RESERVED							
7	RESERVED							
8	RESERVED							
9	RESERVED							
10	RESERVED							
11	RESERVED							

The log errors bit (LOGERR) of zero indicates that the logging of exceptions within a target is vendor specific. A LOGERR bit of one indicates the target shall log exception conditions.

The METHOD OF REPORTING INFORMATIONAL EXCEPTIONS field (see table 2) indicates the methods that shall be used by the target to report informational exceptions.

Table 2 - Format of METHOD OF REPORTING INFORMATIONAL EXCEPTIONS

Code	Description
0h	<p><b>No indications of exception condition:</b> This method instructs the target to not report information exception conditions. To find out about information exception conditions the Application Client shall poll the target by issuing a REQUEST SENSE command.</p>
1h	<p><b>Asynchronous event reporting:</b> This method instructs the target to report informational exception conditions by using the rules for asynchronous event reporting as described in the SCSI-3 Architecture Model and the relevant Protocol Standard.</p>
2h	<p><b>Generate unit attention:</b> This method instructs the target to report informational exception conditions by issuing a unit attention condition on any command. In response to a REQUEST SENSE command the target shall return sense data. The sense key shall be set to UNIT ATTENTION and the additional sense code shall be indicate the cause of the informational exception condition.</p>
3h	<p>The command that has the CHECK CONDITION shall not be executed before the informational exception condition is reported.</p> <p><b>Periodic check condition:</b> This method instructs the target to report informational exception conditions by periodically returning a sense of CHECK CONDITION on any command. In response to a REQUEST SENSE command the target shall return sense data. The sense key shall be set to RECOVERED ERROR and the additional sense code shall be indicate the cause of the informational exception condition.</p> <p>The period for indication an exception condition is vendor specific.</p> <p>The command that has the CHECK CONDITION shall complete without error before any informational exception condition may be reported.</p>
4h-Bh	Reserved
Ch-Fh	Vendor specific