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To: T10 Committee (SCSI)
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Subject: Sense Codes for delivery subsystem errors that have to be reported with SCSI status

## 1.  Introduction

The operating environment of the iSCSI protocol creates certain new error possibilities.  Of particular note in this connection are the following three reasons -
- its architecture allowing multiple TCP connection "sessions" simulating "logical fat pipes",
- -its reliance on the de-facto Internet transport protocol, TCP, whose checksum robustness is considered potentially suspect,
- enabling new storage network configurations with TCP and/or iSCSI "proxies" between a SCSI initiator and SCSI target, whose robustness again may be questionable.

Every effort is being made by the iSCSI working group to use currently defined ASC/ASCQ values wherever they precisely identify the nature of the transport problem in generic terms.  It is also realized that some of the error possibilities are indeed new, and some currently defined ASC/ASCQ values are too closely identified with SPI to be usable in iSCSI.  This document proposes four new ASC/ASCQ values to be referenced in the iSCSI specification. However they could be used for other delivery subsystems that face error that can be clearly associated with the delivery subsystem.

## 2.  Proposed codes

The following table summarizes the new SCSI ASC/ASCQ codes to be approved for referencing in iSCSI.

| ASC | ASCQ | Device types | Description |
|-----|------|--------------|-------------|
| 0C | 0C | DTLPWRSOMCAEBK | Write error - Unexpected unsolicited data |
| 0C | 0D | DTLPWRSOMCAEBK | Write error - Not enough unsolicited data |

Under general condition "Write error" (0C/00):

Under general condition "Unrecovered Read error" (11/00):

| ASC | ASCQ | Device types | Description |
|-----|------|--------------|-------------|
| 11 | 13 | DTLPWRSOMCAEBK | Read error - Failed retransmission request |

Under general condition "SCSI Parity error" (47/00):

| ASC | ASCQ | Device types | Description |
|-----|------|--------------|-------------|
| 47 | 05 | DTLPWRSOMCAEBK | Protocol service CRC error |

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