To: **T10 Committee**
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Subj: **SBC-2 Read Long clarification**
Date: **June 16, 2004**

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This proposal requests a wording change in Read Long command to allow for implementations that may transform the user data before adding ECC bytes. To maintain expected operation of ECC algorithm (e.g., inverting 40 bits in the data stream should cause the ECC algorithm to sense a 40 bit error and not a longer or shorter length error) the data returned by the Read Long command must be the transformed user data plus ECC bytes. A presentation showing reasons for and advantages of this implementation can be seen in document 04-185.

The proposed additional wording is underlined in the following text, from SBC-2 rev. 14:

5.17 READ LONG (10) command

The READ LONG (10) command (see table 46) requests that the device server transfer data from a single logical block to the application client. The data passed during the READ LONG (10) command is vendor-specific, but shall include the user data, any protection information, and any additional information (e.g., ECC bytes) recorded on the medium. The data passed shall represent the point in the device's data path that is operated on by ECC, and therefore may be a uniquely transformed version of the user data returned by a READ command. The most recent data written, or to be written, in the addressed logical block shall be returned. The values in the Read-Write Error Recovery mode page (see 6.3.4) do not apply to this command. The device server may perform retries while processing this command.