February 22, 1988

From: Dave McIntyre, Disc Memory Division, Hewlett-Packard

To: the X3T9.2 Committee

Subject: Unimplemented Page Request Response

This proposal is prompted by a review of the proposed SCSI-II Revision document. The current wording has a target responding with Check Condition and Illegal Request for any request for a paged information command (such as Inquiry or Mode Sense), if a specified page is not implemented by that target.

The paging concept (as developed at a CCS working group meeting in Aspen several years ago, remember - right after the two hour discussion on donuts) was meant to allow simpler evolution of devices as the standard progresses.

Please consider the following scenario. A target implements the "proper" number of pages for the current revision of the standard. Later, an initiator requesting either a newly defined "enhancement" page, a vendor unique page, or an unsupported page from this target would receive an Illegal Request. The status of an Illegal Request is quite different from a simple response that specifies that the target supports zero bytes of the requested page. Illegal Request to a qualified functional host system is typically deemed an exception condition and a source of possible incompatibility.

The page concept allows a much more "graceful" response to this scenario. When faced with a unsupported page request, the target should return a data phase with the page code reflecting the unsupported page code and the page length simply set to zero. This allows the driver to process the unsupported page response in the same manner as other unsupported fields in a page request, thus easing development effort for initiators and increasing possible forward compatibility for the target.

I suggest that if this proposal is accepted, the author and the editors will insert appropriate language into the standard to effect this change. Thank you for your attention.

Dave McIntyre