



Date: July 8, 1997

To: T10 Technical Committee

From: John Lohmeyer

Subject: **Comments on 97-198r0, Status/Message Simplification**

The subject proposal actually contains two separate proposals, one to create a new SAVE DATA POINTER AND DISCONNECT message and one to add a new status code that would permit eliminating the COMMAND COMPLETE message. I support the first proposal and would like to offer an alternative to the second proposal.

I propose that GOOD status be the *implied* status if no STATUS phase occurs during a command. There would still be a COMMAND COMPLETE message, but the STATUS phase could be eliminated for all commands that would otherwise return GOOD status.

The performance benefit, in terms of bus time eliminated, should be identical to that proposed in 97-198r0. The benefit of this alternative proposal is that it keeps the transport protocol layer and the command layer separate. The state machine running the transport protocol does not have to examine the status byte to decide whether to disconnect. Also, system software does not have to interpret a new status code that does not affect its operation (GOOD status and GOOD & DISCONNECT status are synonymous to the command layer).

A further advantage of this alternative proposal is that it has less impact on the various standards documents. No changes are required in SCSI state diagram nor does a new status code need to be documented.

How the *implied* GOOD status gets into the actual status byte is entirely dependent on the initiator implementation and does not need to be defined by the standard. Possible implementations include having the driver software preset the status byte to GOOD or having the host adapter store a GOOD status when a command is started or when a command completes with no STATUS phase.