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MEMORANDUM

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TO: John Lohmeyer, Chairman X3T9.2
FROM: Bill Spence, Texas Instruments
SUBJECT: FURTHER CLARIFICATION OF SDTR MESSAGE PROTOCOL

After all the hard and effective work the committee has done improving the SDTR message protocol, it is embarrassing to come in with yet one more problem. But our continuing work with synchronous devices has illuminated three ambiguous or plain wrong sentences which have slumbered along since way before X3.131 and which now are causing trouble.

The first bad sentence is the second sentence of the first paragraph of 5.5.5--5-27 of Rev 3: "The SCSI devices may also exchange messages to establish synchronous data transfer when requested to do so." On its face, this sentence seems meaningless, since there is no way for any outside intelligence to "request" a SCSI device to send a message. We have inquired as to the history of this sentence and analyzed its context and believe the intended meaning can be derived with some confidence--and that this intended meaning is needed. The first sentence presents the rule for a SCSI device to originate an SDTR message exchange. We believe that the second sentence was supposed to set the rule for a SCSI device to respond to an SDTR message. Accordingly, we offer the following proposal.

PROPOSAL 1:

Replace the second sentence of the first paragraph of Scn 5.5.5 with the following: "Each SCSI device shall respond to an SDTR message exchange initiated at any time by another device, ~~with no intervening bus activity.~~" *(See Section 5.1.3.4)*
Alan Dexter

The other two bad sentences are the last two sentences in Scn 5.5.5. The first of these two is terribly ambiguous. It can be read to have two quite different meanings. Again, we have inquired into history and analyzed context and come up with what seems to be the probable intent. In X3.131 there was the so-called "Single Initiator" Option (Scn 5.1.3.4), which allowed for single initiators which did not permit dis/reconnection to set only the target SCSI ID during selection. It appears that the intent of the sentence in question was to bar a synchronous exchange where the selection process had had only one SCSI ID, which is the meaning which makes sense of the last sentence. There is no indication or reason to think that the intent was to fix the position of the SDTR message in the command process. For SCSI-2, the fix is easy. The Single Initiator Option does not exist in SCSI-2, so there is no need for the last two sentences. They, along with their ambiguities, may be consigned to the bit bucket. Accordingly, we offer the following proposal.

PROPOSAL 2:

Delete the last two sentences of Scn 5.5.5.