Date: Sept. 9, 1998
To: T10 Committee
From: Gerry Houlder, Seagate Technology
Subj: Considerations for mode pages common to several LUNs

Rev. 1: Per discussion at July meeting, the group decided that a multiple LUN mode page will not be allowed. Instead a mode page that affects all LUNs attached to a target will only be reported or changed through LUN 0. This proposal was entirely re-written to reflect that decision.

This proposal is an artifact of previous proposals that created Mode Page 19h. This mode page is described in documents 96-195r4 and 98-106r1. Discussion of these proposals brought out the fact that mode pages are associated with Logical Unit Numbers (LUNs), not targets. However the interface functions controlled by mode page 19h are actually associated with the target in this case. It is undesirable (and not feasible) to have different settings for different LUNs, so a practical implementation will use the same mode page for all attached LUNs.

For many reasons, it is impractical to have mode page 19h be reported and/or changed for each of the attached LUNs. Since any multiple LUN device is required to have a LUN 0, it is better to have one copy of mode page 19h that is reported and/or changed through LUN 0. A MODE SENSE or MODE SELECT command to other LUNs will not include mode page 19h. I propose adding words to mode page 19h description to document this behavior.

Addition to FCP-2:

The underlined text must be added.

Table xxx - Fibre channel control page

Bit Byte	7	6	5	4	3	2	1	0
0	PS	Resvd	Page code (19h)					
1	Page length (06h)							
2	Reserved							
3	Resvd	PLPB	DDIS	DLM	DSA	ALWLI	DTIPE	DTOLI
4	Reserved							
5	Reserved							
6	Reserved							
7	Reserved							

This page shall only be implemented on LUN 0 of a device. If the device contains multiple LUNs, only LUN 0 may include this page in MODE SENSE or MODE SELECT data. Settings on this page shall apply to LUN 0 and all other LUNs attached to this SCSI device.

[All other text is unchanged.]