To: **T10 Membership**
From: **Lawrence J. Lamers**
Subject: **Synchronous Transfer Timeout Function**
Date: **Wednesday, January 27, 1999**

This proposal adds a Synchronous Transfer Timeout (STT) field to the Control Mode page. The STT timeout field is a sixteen-bit value in one millisecond increments. A value of 0000h indicates that the function is disabled. A value of FFFFh indicates an unlimited period. (See also the busy timeout period definition in SPC-2).

Note: The specific location in the Control Mode page is left to the discretion of Ralph.

The synchronous transfer timeout timeout is intended to clear the bus in the event of a bus hang. The existing rules related to synchronous transfer timeout behavior apply.

The events that control the counter are:

1. If there is a REQ transition when there are no outstanding REQs waiting for an ACK then load and start the timer.
2. If there is a REQ transition when there are any outstanding REQs waiting for an ACK then there is no effect on the timer.
3. If there is an ACK transition when there are outstanding REQs waiting for an ACK then load and start the timer.
4. If after an ACK transition there are no outstanding REQs waiting for an ACK then stop the timer.

If the timer expires then generate an error by going to a BUS FREE phase. The behavior rules specifed for an unexpected bus free apply.