

Final Minutes – T10/T11.3 Joint Working Group Meeting Oct 4, 2000 – Nashua, NH 1 PM - 9 PM

An ad hoc meeting of the joint working group of NCITS Technical Committee T10 and NCITS Technical Committee T11 Task Group T11.3 was held at Nashua New Hampshire on October 4, 2000, in conjunction with the plenary meeting of the ANSI/NCITS T11 Technical Committee. Attendance at this meeting is tabulated at the end of this document.

1. Opening

Dave Peterson opened the meeting at 1:37 PM. He expressed the appreciation of the group to our host company, Hitachi Cable and led a round of introductions.

2. Approval of this agenda: [T11/00-593v0](#)

The agenda was approved as written.

3. Approval of minutes

The minutes of the joint working group on 8/9/2000 ([T10-00-316r0](#)) and of the SCSI-CAP working group on September 11, 2000, including FCP-2, ([T10-00-307r0](#)) were both approved as written

4. 4. Review of old action items: Bob Nixon

- 4.1 Bob Snively to bring the Joint T10/T11.3 working group a new revision of the FCP-2 specification with corrections requested during the September 11 SCSI CAP meeting.
(OPENED 9/11/00) CLOSED, reopen as "complete rev 5 by end of October".
- 4.2 Dave Peterson to revise MPIO Discovery Procedures ([T11/00-232v0](#)) to eliminate dependency on MultiP bit and present for inclusion as an informative annex to FCP-2
(OPENED 9/11/00) CARRYOVER

5. Discussion items:

5.1 Bi-directional Data Transfers in FCP-2 [T10/00-377r0](#) Carl Zeitler

The capability is already added to SCSI.

The proper IUs (almost) already exist, but not the proper protocol.

The exceptions are the need for two requested byte counts in the command and two residual byte counts in the response.

Editorial issues were delegated to the editor.

(Note the reserved field indicated in byte 11 of the FCP header is no longer reserved. Since this proposal does not rely on it, this is only an editorial issue)

Technical issues were:

- Reverse the sense of the bit in PRLI that indicates bidi capability so zero is "not bidi". This makes it backward compatible. (AGREED).
- If bidi is offered, use a different fixed length structure instead of a variable length IU (even on commands that do not invoke bidi) (RETRACTED).

- In the FCP_RSP, the residual data must be separately specified for Read and Write. (AGREED)
- It was noted that unless REC and SRR are modified, sequence level recovery must not be used. This was expected soon to be a moot point.

ACTION: Rob Elliot to prepare a rev 2 of 00-377 to incorporate changes requested here and deliver to the editor.

5.2 Installation of corrections in FCP-2 T10/00-300rX Bob Snively

- Note that the wording concerning process associators has been removed.
- We need to review whether SRR violates FS by resetting the sequence count to zero, and if so, can it get an exemption.

6. FCP-2:

6.1 Review of FCP-2, Rev 4b T10/00-XXXrX Bob Snively

Defer to next meeting.

7. SSC-2:

7.1 Status Dave Peterson

There is a time slot reserved for SSC-2 Monday morning of November T10 week.

8. Unscheduled business:

Bob Nixon observed that combining sequence level error recovery with "Modify Data Pointer" can produce a potentially large number of gaps in the delivered data, which could be holey hell to track. He recommended forbidding the combination. He lost the ensuing holey war, but gained the following list of allowable responses if PRLI sets Retry and the disconnect-reconnect mode page sets EMDP:

- renegotiate;
- error it;
- in case of data error, fall back to exchange level recovery;
- in case of data error and a hole, fall back to exchange level recovery;
- track all the holes.

9. Next meeting requirements:

At the November T10 meeting, FCP-2 is scheduled for Monday afternoon; however, SSC-2 may end early, in which case FCP-2 will begin early

At the December T11 meeting, 8 hours will be requested.

10. Review new action items: Dave Peterson

- 10.1 Dave Peterson to revise MPIO Discovery Procedures ([T11/00-232v0](#)) to eliminate dependency on MultiP bit and present for inclusion as an informative annex to FCP-2.

(OPENED 9/11/00) CARRYOVER

- 10.2 Bob Snively to bring a complete revision 05 of FCP-2 to the Joint T10/T11.3 working group by end of October.

(OPENED 10/04/00)

- 10.3 Rob Elliot to prepare a rev 2 of [00-377r0](#) to incorporate changes requested here and deliver to the editor.
(OPENED 10/04/00)

11. Adjournment: Group

The meeting adjourned at 3:17 PM

FC-FCP-2 Meeting Attendance -10/04/00

Company Represented	Last Name	First Name	Email
Adaptec	Moore	Dennis	dmoore@ix.netcom.com
Agilent	Wakeley	Matt	matt_wakeley@agilent.com
Brocade	Snively	Bob	rsnively@brocade.com
Ciprico	Stein	Larry	lstein@ciprico.com
Cisco Systems	Peterson	Dave	dap@network.com
CMD	Turenne	Adrienne	
Compaq	Hamel	Mark	mark.w.hamel@compaq.com
Compaq	Pomfret	Steve	steve.pomfret@compaq.com
Compaq	Zeitler	Carl	carl.zeitler@compaq.com
Connectivity Solutions	Kembell	Bob	kembel@compuserve.com
Crossroads	Wanamaker	Neil	ntw@crossroads.com
Emulex	Nixon	Bob	bob.nixon@emulex.com
Exabyte	Breher	Joe	joebre@exabyte.com
FSI	Weber	Ralph	roweber@acm.org
Fujitsu	Fitzpatrick	Mike	mfitzpatrick@fcpa.fujitsu.com
LSI Logic	Lohmeyer	John	lohmeier@t10.org
LSI Logic	Tiemeyer	Matt	matt.tiemeyer@lsil.com
Nishan	Monia	Charles	cmonia@nishansystems.com
Seagate	Coomes	Jim	jim_coomes@seagate.com
Seagate	Milligan	Gene	
Seagate	Suhler	Paul	Paul_A-Suhler@seagate.com
Solution Technology	Crawford	Robert	Robert@lanlab.net
Sun	Moe	Ken	kenneth_moe@sun.com
Tivoli Systems	Penokie	George	gop@us.ibm.com
True Focus	Truestedt	Horst	
Unisys	Gentry	Wayne	Wayne.gentry@unisys.com