

Minutes

T11.3 FC-FS-6 ad hoc work group regular meeting 14 August 2018 – 09:00AM – 12:00PM EDT

Louisville, KY, USA

The FC-FS-6 ad hoc work group of the Fibre Channel Protocol (T11.3) Task Group held a regular meeting at Louisville, Kentucky on 14 August 2018, hosted by Amphenol. Attendance was 14 people from 8 organizations and is tabulated at the end of this document.

Minutes were taken by Patty Driever (IBM) (pgd@us.ibm.com). Please report any corrections by email to the T11.3 reflector at T11_3@mail.T11.org.

1 Opening remarks & Introductions

Chairperson Dave Peterson (Broadcom) opened the regular meeting Tuesday, 14 August 2018 at 09:11 AM EDT. He thanked our host organization, Amphenol, and led a round of introductions.

1.1 Attendance and Membership

The chair explained that attendance is recorded electronically at www.incits.org, and explained the procedure. Attendance at this meeting does not count toward attendance at the plenaries of T11 and its task groups (i.e., being here will not get you out or keep you out of membership jeopardy). The chair stated that all persons present are considered members of this meeting and may vote on questions, limited to one vote per company present. He advised that although T11 does not limit participation in the activities of its work groups to representatives of T11 member organizations, it requires nonmembers to identify themselves as such. Nonmembers that expect they may participate in the activities of T11 regularly were encouraged to become members.

1.2 Patents

The chair indicated that among the rules and policies under which this working group operates are the ANSI intellectual property policies as specified in pages 1-3 of http://www.incits.org/pat_slides.pdf. He displayed these pages without comment or explanation, and directed that questions about the policy should be referred to the questioner's legal counsel or the ANSI General Counsel.

1.3 Antitrust

The chair indicated that among the rules and policies under which this working group operates are the INCITS Antitrust Guidelines. Any member of the meeting is responsible for objecting if he believes discussion in the meeting violates those guidelines. As examples, there should never be discussion of the following topics at any INCITS or INCITS subgroup meeting:

- Any company's prices or pricing policies;
- Specific R&D, sales and marketing plans;
- Any company's confidential product, product development or production strategies;
- Whether certain suppliers or customers will be served;
- Prices paid to input sources; or
- Complaints about individual firms or other actions that might tend to hinder a competitor in any market.

If such discussion is not immediately terminated, it is the chairperson's responsibility to terminate the meeting. The INCITS Antitrust Guidelines are available at <http://www.incits.org/inatrust.htm>.

2 Approval of Agenda

An agenda for the FC-FS-6 ad hoc work group regular meeting 14 August 2018 has been posted as T11-2018-00215-v000.

Howard Johnson (Broadcom) moved and Roger Hathorn (IBM) seconded to accept T11-2018-00215-v000 as the agenda for this regular meeting. Approved unanimously.

3 Review of Past Business

3.1 Review of Minutes

Minutes for the FC-FS-6 ad hoc work group regular meeting 05 June 2018 have been posted as T11/2018-00176-v000.

Howard Johnson (Broadcom) moved and Roger Hathorn (IBM) seconded to accept T11/2018-00176-v000 as the minutes of the FC-FS-6 ad hoc work group meeting on 05 June 2018. Approved unanimously.

3.2 Review of Old Action Items

Action Items Carried Forward from Prior Meetings:

None

New Action Items Identified Last Meeting:

- 1806-01 Chair to generate future FC-FS-6 meeting notices and requests for presentations **(COMPLETE)**
- 1806-02 Dave Peterson to clean up text regarding ABTS. **(CARRY – covered in 6.1)**

4 Old Business

4.1 FC-NVMe-2 Sequence Level Error Recovery – (2018-00047-v005) - Baldwin (Broadcom)

Dave Baldwin reviewed some changes made to the previously reviewed version of the doc. Some of the changes were related to allowing a target to send a FLUSH command. The use case for this is the target sending a FLUSH to check on the status of a CONF command. Other changes related to wording regarding the fact that holding sequence initiative is not required to send FLUSH, FLUSH_RSP and RED commands.

After many suggested wording changes, Dave Baldwin (Broadcom) made a motion to include 2018-00047-v005 as modified into FC-FS-6. Motion seconded by Barry Maskas (HPE). Motion passed unanimously.

Action Item: Editor to incorporate 2018-00047-v006 into FC-FS-6.

5.0 Scheduled Business

5.1 RDMA over Fibre Channel Project Proposal – (2018-00213-v000) - Peterson (Broadcom)

Dave Peterson presented a project proposal for a new project we agreed to name FC-RDMA. With some other minor modifications in place, Dave made a motion that we accept 2018-00213-v000 as modified as a new project proposal and forward to T11.3 for further processing. Seconded by Patty Driever (IBM). Motion passed unanimously.

6 Unscheduled Business

6.1 Open and Active Exchange/Sequence Text – Peterson (Broadcom)

Dave Peterson led a discussion regarding the use of ‘open’ and ‘active’ relative to sequences and exchanges. Dave indicated that after a review he finds no distinction between the two terms, and would like to use a single consistent term. However it was pointed out that a sequence is active until the last frame is transmitted, yet it may remain open (at least in Class 2 until the ACK is received). There was also wording about a sequence remaining open until one of a number of events occur, even though it may no longer be active.

Dave decided after this discussion to focus his future review on the use of these terms only relative to exchanges.

7 Project Schedule

Milestone	Expected Date
Last technical input	TBD
T11 Letter Ballot	TBD
Forward to INCITS	TBD

8 Review of Action Items

Action Items Carried Forward:

1806-02 Dave Peterson to clean up text regarding ABTS

New Action Items:

- 1808-01** Editor to incorporate 2018-00047-v006 into FC-FS-6.
- 1808-02** Chair to request T11.3 accept 2018-00213-v001 as a new project proposal and forward to T11 for further processing.

9 Meeting Schedule

9.1 Next Plenary Week

Request 3 hours for FC-FS-6 at the T11 plenary week in New Orleans, Louisiana 01 October – 05 October 2018.

10 Adjournment

Jason Rusch (Viavi) moved and Roger Hathorn (IBM) seconded to adjourn. Approved unanimously.

The regular meeting was adjourned at 11:58 AM EDT on 14 August 2018.

11 Attendance

Organization	Representative	T11.3 Member Company
BROADCOM LIMITED	David Baldwin	Y
BROADCOM LIMITED	David Peterson	Y
BROADCOM LIMITED	Howard Johnson	Y
BROADCOM LIMITED	Steven L. Wilson	Y
CISCO SYSTEMS INC	Mike Blair	Y
CISCO SYSTEMS INC	J Metz	Y
FUJITSU AMERICA INC	Mark Malcolm	Y
HEWLETT PACKARD ENTERPRISE	Barry Maskas	Y
IBM	Patty Driever	Y
IBM	Roger Hathorn	Y
NETAPP INC	Frederick Knight	Y
QLOGIC CORPORATION	Raul Oteyza	Y
QLOGIC CORPORATION	Craig W. Carlson	Y
VIAVI SOLUTIONS	Jason Rusch	Y