

T11.3 FC-LS-5 Ad Hoc Working Group Regular Meeting Minutes

9 October 2019 – 9:00 AM to 12:00 PT, 3:00 PM to 4:00 PT

Coeur d'Alene, ID, USA

The FC-LS-5 ad hoc work group of the Fibre Channel Protocol (T11.3) Task Group held a regular meeting at Coeur d'Alene, ID, USA on 9 October 2019, hosted by the FCIA. Attendance was 12 people from 9 organizations and is tabulated at the end of this document.

Minutes were taken by Jason Rusch (Viavi Solutions) (jason.rusch@viavisolutions.com). Please report any corrections by email to the T11.3 reflector at T11_3@mail.T11.org.

1 Opening Remarks and Introductions

Chairperson Patty Driever (IBM) opened the regular meeting on Wednesday, 9 October 2019 at 9:00 AM PT. She led a round of introductions and thanked our host organization, the FCIA.

1.1 Attendance and Membership

The chair explained that attendance is recorded electronically at <http://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. She 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 slides 1-3 of http://www.incits.org/patent_slides.pdf. She 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 she 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/standards-information/legal-info>.

2.0 Approval of Agenda

An agenda for the FC-LS-5 ad hoc work group regular meeting 9 October 2019 was posted as T11-2019-00302-v000.

Howard Johnson (Broadcom Inc) moved and Mike Blair (Cisco) seconded to accept T11-2019-00302-v000 as the agenda for this regular meeting. Approved by acclamation.

3.0 Review of Past Business

3.1 Review of Minutes

Minutes for the FC-LS-5 ad hoc work group regular meeting 14 August 2019 have been posted as T11-2019-00255-v000.

Minutes for the FC-LS-5 ad hoc work group conference call 17 September 2019 have been posted as T11-2019-00290-v000.

Howard Johnson (Broadcom Inc) moved and Mike Blair (Cisco) seconded to accept T11-2019-00255-v000 as the official minutes for the regular meeting on 14 August 2019, and T11-2019-00290-v000 as the official minutes for the interim conference call on 17 September 2019. Approved by acclamation.

3.2 Review of Old Action Items

Action items carried forward from prior meetings:

None.

New action items from the previous meeting:

- | | | |
|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| 1908-01 | FC-LS-4 Chair to request that T11.3 accept T11-2019-00078-v006 and T11-2019-0079-v006 as the RFC Ballot Comment Resolution for FC-LS-4 and forward FC-LS-4 version 4.05 (T11-2019-00213-v001) to T11 for further processing. | [COMPLETE] |
| 1908-02 | FC-LS-5 Chair to schedule interim conference call (60 minutes) on 17 September 2019, 2:00 ET. | [COMPLETE] |

4 Old Business

4.1 Fabric Notification – Is There Anybody Out There?

[T11-2019-00017-v005, T11-2019-00214-v002] Johnson (Broadcom Inc)

Howard led a discussion covering the text proposal in detail. It was an active discussion, with the working group suggesting many edits, including a new category for the Register Diagnostics ELS that can be referred to.

During discussion of the FPIN ELS, it was decided to label this as an ELS and not an ELS Request, indicating that a response is not expected/required.

Time did not permit to finish the text proposal review. Howard will update the text based on the working group feedback and present an update at a future meeting.

4.2 Wrapped or Unwrapped?

[T11-2019-00098-v002] Driever (IBM)

Patty led a discussion updating her proposal to use a new descriptor for the Counter Reset Token to clarify if a continually increasing counter has been reset or wrapped since the last read. The group reviewed the text changes for the new descriptor and token value.

Patty Driever (IBM) moved and Howard Johnson (Broadcom Inc) seconded to incorporate T11-2019-00098-v002 as modified into the FC-LS-5 draft standard. Motion passed by acclamation.

The FC-LS-5 meeting recessed at 12:00 PM PT.

4.3 Adding Determinism to Congestion Notification

[T11-2019-00242-v000] Blair (Cisco)

The FC-LS-5 meeting resumed at 3:00 PM PT.

Mike continued the discussion regarding passive FPIN listeners during SAN congestion, and whether it could be determined which traffic flow was the source of the congestion. A new TLV was discussed for identifying the congestion source, and Mike will review this and determine if it can be tied to an FPIN descriptor, and whether there can be a relationship to multiple descriptors within a single TLV.

Time did not permit to completely review the proposal. Mike will continue the discussion at a future meeting.

5 New Business

None.

6 Unscheduled Business

None.

7 Project Schedule

Milestone	Expected Date
Last technical input	October 2020
RFC Ballot	TBD
T11 Letter Ballot	TBD
Forward to INCITS	TBD

8 Review of Action Items

Action items carried forward from prior meetings:

None.

New action items from this meeting:

1910-01 FC-LS-5 Editor to incorporate T11-2019-00098-v002 as modified into the FC-LS-5 draft standard.

9 Future Meeting Schedule

9.1 Interim Conference Call

None.

9.2 Next Plenary Week

Request 5 hours for FC-LS-5 at the T11 plenary week in New Orleans, LA, December 2 - 6, 2019.

10 Adjournment

Howard Johnson (Broadcom Inc) moved and Alan Rajapa (Dell) seconded to adjourn. Approved by acclamation.

The regular meeting was adjourned at 4:00 PM PT on 9 October 2019.

11 Attendance

Organization	Representative	Member Company
Broadcom Inc	David Baldwin	Member
Broadcom Inc	Howard Johnson	Member
Broadcom Inc	David Peterson	Member
Cisco Systems Inc	Mike Blair	Member
Cisco Systems Inc	J Metz	Member
Dell Inc	Alan Rajapa	Member
Fujitsu America Inc	Mark Malcolm	Member
Hewlett Packard Enterprise	Krishna Babu Puttagunta	Member
IBM Corporation	Patty Driever	Group Chair
Marvell Semiconductor Inc	Craig Carlson	Proj Editor
NetApp Inc	Frederick Knight	Member
Viavi Solutions Inc	Jason Rusch	Member