

T11.3 FC-LS-5 Ad Hoc Working Group Regular Meeting Minutes 8 December 2020 – 11:10 AM to 1:30 PM CDT Virtual Meeting

The FC-LS-5 ad hoc work group of the Fibre Channel Protocol (T11.3) Task Group held a virtual meeting on 8 December 2020, with Zoom meetings hosted by Marvell. Attendance was 11 people from 7 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 virtual meeting on Tuesday, 8 December 2020 at 11:10 AM CDT. She led a round of introductions and thanked our virtual host organization, Marvell.

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 8 December 2020 was posted as T11-2020-00279-v000.

Howard Johnson (Broadcom Inc) moved and Mike Blair (Cisco) seconded to accept T11-2020-0279-v000 as modified 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 6 October 2020 have been posted as T11-2020-00228-v000.

Howard Johnson (Broadcom Inc) moved and Mike Blair (Cisco) seconded to accept T11-2020-00228-v000 as the official minutes for the regular meeting on 6 October 2020. Approved by acclamation.

3.2 Review of Old Action Items

Action items carried forward from prior meetings:

2006-01	Editor to incorporate T11-2020-00085-v000.	[Carry]
2008-01	Editor to incorporate T11-2020-00013-v004.	[Carry]
2008-02	Editor to incorporate T11-2020-00109-v003.	[Carry]

New action items from the previous meeting:

None.

4 Old Business

4.1 FC LAG Data Plane

[T11-2020-00271-v000]

Bharadwaj (Cisco)

Harsha reviewed the existing N_Port and F_Port Architecture, and explained how FC LAG would fit in, and gave a recap of the advantages that FC LAG would provide. There was an active discussion on I/O Load Balancing on the target side. The group provided feedback that the amount of work necessary to implement FC-LAG outweighed the potential benefits. Harsha will take the feedback from this meeting offline and see if a further presentation is necessary and whether discussions on this topic should continue.

4.2 Fabric Controller and FLOGI

[T11-2020-00126-v005, T11-2020-00266-v000]

Peterson (Broadcom Inc)

Dave continued the review of current Extended Link Services with respect to request and response payload size. It was noted that it would be a considerable effort to add text for every ELS that could be initiated by the Fabric Controller. Changes were recommended in Table 9 with the addition of footnote c for any ELS that can be sent from a Well Known Address. The group was asked to review Table 9 and provide feedback at the next meeting for incorporation.

5 New Business

5.1 Fabric Notifications

[T11-2020-00259-v000]

Johnson (Broadcom Inc)

Howard reviewed the proposed text for addition of an informative Annex covering Fabric Notification information and examples. The group participated in the review and provided feedback that will be presented at the next meeting cycle for incorporation into FC-LS-5.

5.2 Target Credit Stall: A Proposal

[T11-2020-0004-v007]

Johnson (Broadcom Inc)

Howard provided an overview of the timeout value descriptor change for the EDC ELS exchange with updated field names based on the previous feedback.

6 Unscheduled Business

None.

7 Project Schedule

Milestone	Expected Date
Last technical input	October 2020
RFC Ballot	April 2021
T11 Letter Ballot	TBD
Forward to INCITS	TBD

8 Review of Action Items

Action items carried forward from prior meetings:

2006-01 Editor to incorporate T11-2020-00085-v000.
2008-01 Editor to incorporate T11-2020-00013-v004.
2008-02 Editor to incorporate T11-2020-00109-v003.

New action items from this meeting:

None.

9 Future Meeting Schedule

9.1 Interim Conference Call

None.

9.2 Next Plenary Week

Request 3 hours for FC-LS-5 at the Virtual T11 plenary week February 1-5, 2021.

10 Adjournment

Howard Johnson (Broadcom Inc) moved and Mike Blair (Cisco) seconded to adjourn. Approved by acclamation.

The regular meeting was adjourned at 1:30 PM CDT on 8 December 2020.

11 Attendance

Organization	Representative	Member Company
Broadcom Inc	Howard Johnson	Member
Broadcom Inc	David Peterson	Member
Broadcom Inc	Anil Veerabhadrapa	Member
Cisco Systems Inc	Harsha Bharadwaj	Member
Cisco Systems Inc	Mike Blair	Member
Hewlett Packard Enterprise	Barry Maskas	Member
IBM Corporation	Patty Driever	Group Chair
IBM Corporation	Roger Hathorn	Member
Marvell Semiconductor Inc	Craig Carlson	Proj Editor
NetApp Inc	Frederick Knight	Member
Viavi Solutions Inc	Jason Rusch	Secretary