

**Minutes**  
**T11.3 FC-LS-4 ad hoc work group regular meeting**  
**06 June 2018 – 9:45AM to 11:35AM MDT**  
**Santa Fe, NM, USA**

The FC-LS-4 ad hoc work group of the Fibre Channel Protocol (T11.3) Task Group held a regular meeting at Santa Fe, New Mexico, USA on 06 June 2018, hosted by Qlogic/Cavium. Attendance was 12 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](mailto:jason.rusch@viavisolutions.com)). Please report any corrections by email to the T11.3 reflector at [T11\\_3@mail.T11.org](mailto:T11_3@mail.T11.org).

## **1 Opening Remarks and Introductions**

Chairperson Patty Driever (IBM) opened the regular meeting on Wednesday, 06 June 2018 at 09:45 AM MDT. She led a round of introductions and thanked our host organization, Qlogic/Cavium.

### **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](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-4 ad hoc work group regular meeting 06 June 2018 was posted as T11-2018-00170-v000.

**Howard Johnson (Broadcom) moved and Roger Hathorn (IBM) seconded to accept T11-2018-00170-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-4 ad hoc work group regular meeting 04 April 2018 have been posted as T11-2018-00128-v000.

**Howard Johnson (Broadcom) moved and Mike Blair (Cisco) seconded to accept T11-2018-00128-v000 as the official minutes for the regular meeting on 04 April 2018. Approved by acclamation.**

### **3.2 Review of Old Action Items**

**Action items carried forward from prior meetings:**

**1710-02** Editor to incorporate 2017-00095-v004 into FC-LS-4. **(CARRY)**

**1802-01** Dave Peterson to investigate the correct location (standard) to document that priority shall be reflected for all frames of all sequences of exchange. **[COMPLETE]**

**New action items from last meeting:**

None.

## **4 Old Business**

### **4.1 How Bad Is It? - (2018-00025-v002), Text - (2018-00096-v001)**

**Johnson (Broadcom)**

Howard presented the text changes suggested in the previous meeting cycle to support the Exchange Diagnostic Capabilities (EDC) ELS. The group requested that the wording for the LS\_ACC to the Exchange Diagnostic Capabilities be improved. Howard agreed to make the suggested change.

**Howard Johnson (Broadcom) moved and Roger Hathorn (IBM) seconded to approve T11-2018-00096-v0001 as modified for inclusion in FC-LS-4. Approved by acclamation.**

Howard also led a discussion regarding editorial suggestions to use a consistent format for the description to LS\_RJT in all Extended Link Services. The editor suggested that a new proposal be presented for discussion and inclusion into FC-LS-4.

### **4.2 Port Congestion Descriptor - (2018-00036-v003)**

**Blair (Cisco)**

Mike presented an updated version of the Port Congestion Descriptor with suggestions from the previous meeting cycle. The group discussed changing the name of the descriptor to Port Performance to better describe its function. In addition, it was suggested that the names of the fields in the descriptor are too long and should be shortened.

Much of the discussion surrounded the Frame Transmit Discards and Receive Link Reset to Recover fields. There was concern whether Frame Transmit Discards should be considered a Vendor Specific Counter as it only applies to specific interfaces. It was decided to keep it as is and improve the text description of the field.

Mike agreed to remove the Receive Link Reset to Recover from Buffer to Buffer Credit 0 Condition counter. The group discussion concluded that this field is not applicable, as the receiver cannot determine why the transmitter issued a Link Reset.

Mike will take the feedback from this discussion and provide proposed text for inclusion into FC-LS-4 at the next meeting.

### **4.3 Fabric\_Name in FLOGI LS\_ACC - (2018-00121-v001)**

**Peterson (Broadcom)**

Dave presented an update to the presentation to correct the use of the Fabric\_Name in the FLOGI LS\_ACC. The group discussed changing the text to indicate that either the Fabric\_Name at the time of login or locally-attached Switch\_Name are returned, and the Host should query the Management Server to determine with was provided. The text changes discussed also affect other areas of FC-LS-4. Dave will review those areas and suggest the appropriate changes and provide completed text for inclusion into FC-LS-4 at the next meeting cycle.

## **5 New Business**

None.

## **6 Unscheduled Business**

None.

## **7 Project Schedule**

<b>Milestone</b>	<b>Expected Date</b>
Last technical input	August 2018
T11 Letter Ballot	December 2018
Forward to INCITS	June 2019

## **8 Review of Action Items**

### **Action items carried from prior meetings:**

**1710-02** Editor to incorporate 2017-00095-v004 into FC-LS-4.

### **New action items:**

**1806-01** Howard Johnson to post T11-2018-00096-v001 as modified.

**1806-02** Editor to incorporate T11-2018-00096-v0002 into FC-LS-4.

## 9 Meeting Schedule

### 9.1 Next Plenary Week

Request 2 hours for FC-LS-4 at the T11 plenary week in Louisville, KY, 13 - 17 August 2018.

## 10 Adjournment

*Dave Peterson (Broadcom) moved and Mike Blair (Cisco) seconded to adjourn. Approved by acclamation.*

The regular meeting was adjourned at 11:35 AM MDT on 06 June 2018.

## 11 Attendance

Organization	Representative	Member Company
Broadcom Limited	David Baldwin	Member
Broadcom Limited	Howard Johnson	Member
Broadcom Limited	David Peterson	Member
Broadcom Limited	Steven Wilson	Member
Cisco Systems Inc	Harsha Bharadwaj	Member
Cisco Systems Inc	Mike Blair	Member
Dell Inc	Alan Rajapa	Member
GlobalFoundries US2 LLC	Adrian Butter	Member
IBM Corporation	Patty Driever	Group Chair
IBM Corporation	Roger Hathorn	Member
QLogic Corporation	Craig Carlson	Member
Viavi Solutions Inc	Jason Rusch	Secretary