

Draft Minutes
INCITS Fibre Channel (T11) Technical Committee regular meeting #115
7 February 2013 - 1 PM to 4 PM PST
Palm Springs, CA

1 Opening remarks and Introductions

1.1 Introductory Remarks

TC T11 chair Steve Wilson (Brocade) convened regular meeting #115 of the INCITS Fibre Channel (T11) Technical Committee on Thursday, 7 February 2013 at 1:12 PM PST. He introduced himself, and thanked our host, FCIA and Chris Lyon, for the meeting facilities and amenities.

He next introduced Claudio DeSanti (Cisco) as vice chair and Richard Johnson (Finisar) as acting secretary.

1.2 Self-introductions

The chair requested those present to introduce themselves, with identification of the organizations they represent.

1.3 Operating under INCITS procedures

1.3.1 Patent information

The chair indicated that among the rules and policies under which this Technical Committee 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.

1.3.2 Anti-trust guidelines

The chair indicated that among the rules and policies under which this Technical Committee operates are the INCITS Antitrust Guidelines as specified in <http://www.incits.org/inatrust.htm>. Any person present at 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.

1.3.3 Public access rules

The chair indicated that among the rules and policies under which this Technical Committee operates are the INCITS rules for operating in Public Access Mode, as specified in subclause 2.2 of INCITS Policies and Guidelines (http://www.incits.org/rd1/INCITS_RD1.pdf).

The chair encouraged those nonmembers who attend T11 meetings regularly or intend to attend T11 meetings regularly to join the organization. He further advised that nonmembers, by remaining in this meeting, acknowledge that they understand and agree to the policies of this meeting.

1.4 Attendance

The chair instructed those present how to register using the electronic attendance list for this meeting, found via the URL <http://www.t11.org/att>, and informed those present of the necessary password. He reminded those present that the electronic attendance list would become the only source of attendance for formal records of this meeting.

2 Approval of the Agenda

An electronic version of the agenda was posted as T11/13-003v1. The chair presented the agenda with final updates and made a call for any changes and new agenda items. No changes or new items were requested.

Sandy Wilson (Fujitsu) moved and Lou Ricci (EMC) seconded that T11/13-003v1 as presented at this meeting be approved as the agenda for this meeting. The motion passed by acclamation.

3 Attendance and Membership

3.1 Gaining and Losing Voting Membership

Information on how membership is gained, maintained, and lost in any INCITS Technical Committee or Task Group may be found in subclause 4.2 of INCITS Organization and Procedures (http://www.incits.org/rd2/INCITS_RD2.pdf). An overview of these requirements was introduced by the chair and was available to all attendees among the electronically distributed meeting documents.

The vice-chair presented the current list of members and representatives, and invited corrections. The membership effective for this meeting, as adjusted for changes introduced at this meeting, is shown in annex A.1. Attendance for this meeting is shown in annex A.2.

3.2 Changes in representation since last meeting

The following changes in member representation have been made since the last meeting:

- ENDL has resigned membership in T11
- Emulex:
 - > Gautam Shiroor replaces Bill Martin as Principal for Emulex
 - > David Baldwin is added as Alternate for Emulex
 - > Hossein Hashemi remains as Alternate for Emulex

3.3 New voting memberships

No organizations have met the prerequisites for voting membership and requested voting membership at this meeting:

3.4 Voting memberships in jeopardy for attendance

No organization was in jeopardy of losing its voting membership as the result of not attending the required number of meetings.

3.5 Voting memberships in jeopardy for non-payment of dues

No organization was in jeopardy of losing its voting membership as the result of not having paid required fees in a timely manner.

3.6 Voting memberships in jeopardy for letter ballot performance

The following organizations have lost voting membership for not voting in any of the last three T11 ballots

- Luxtera
- Panduit

3.7 Membership for this meeting

Technical Committee T11 had 31 voting members at the T11 regular meeting 06 December 2012. With

- 0 new voting member organizations (see 3.3); and
- 2 voting member organizations losing voting membership for not voting in any of the last three T11 ballots (see 3.6);
- 1 voting member organization has resigned its membership in T11 (see 3.2)

the voting membership of T11 is now 28 effective at this meeting.

Reflecting the above changes, the voting membership of T11 for this meeting is recorded in annex A.1.2.

Reflecting the above changes, the advisory (i.e., nonvoting) membership of T11 for this meeting is recorded in annex A.1.3.

3.8 Call for members of the press and journalists

The vice chair requested members of the press and journalists to introduce themselves.

No person attending the meeting made such an introduction.

3.9 Call for Quorum

The total membership for this meeting is 28. One third of the total membership for this meeting is 10. The number of member organizations that responded to the call for quorum was 22. This exceeds or equals one third of the total membership for this meeting and also exceeds or equals 4. A quorum is therefore present for this meeting.

3.10 Call for Guests

The vice chair requested those associated with organizations that are not members of T11 to introduce themselves.

Representatives of nonmember organizations are tabulated in A.2.2. They were advised that by remaining in this meeting, they submit themselves and their organizations to INCITS policy for intellectual property, antitrust, and guest access to the work of this committee.

4 Document Distribution

The vice chair described the process for T11 document distribution via the T11 Web Site. He reminded those present how to access meeting documents via the red check mark on the T11 Web Site Center page (<http://www.t11.org/t11/docreg.nsf/center>), and that documents are also available at <ftp://ftp.t11.org/latest>.

5 Approval of Minutes - Meeting #114

The prior regular meeting of the INCITS Fibre Channel (T11) Technical Committee was #114 on 06 December 2012. The draft Minutes of that meeting were posted as document T11/12-407v0.

T11 minutes are reviewed as posted on the T11 web site. Corrections may be requested either before the subsequent meeting by email to the T11 secretary (richard.johnson@finisar.com) or at the subsequent meeting in person.

- The list of organizations in jeopardy for non attendance did not include Brocade.
- The discussion on the Anchorage meeting for August 2014 had an incomplete sentence.

Louis Ricci (EMC) moved and Roger Hathorn (IBM) seconded to accept T11/13-089v0 (T11/12-407v0 as modified) as the Minutes of T11 meeting #114 on 06 December 2012. The motion passed by acclamation.

See action item 13-035.

6 Review of Old Action Items

- 12-029 T11 Secretary to post approved Minutes of T11 meeting #113 as agreed at T11 meeting #114. Completed by document T11/12-407v1
- 12-030 T11 Chair to perform a Letter Ballot for approval of forwarding Revision 1.2 of FC-BB-6 (T11/12-007v3), Project 2159-D, to INCITS for first public review. Completed.
- 12-031 T11 Chair to perform a Letter Ballot for approval of forwarding Revision 0.80 of SM-HBA-2 (T11/12-452v1), Project 1841-D, to INCITS for first public review. Completed
- 12-032 T11 chair to create appropriate liaison reports from T11 to other organizations. Completed by document T11/12-518v0.
- 12-033 T11 Vice-Chair to update the plenary week calendar with new meeting venues. Completed
- 12-034 Roger Cummings to look at hosting the T11 reflector on the T11 web site. Completed

7 Review of T11 Project and Proposal Status

7.1 Projects Proposals

There were no Project Proposals for approval

7.2 Project status review

The T11 Project status sheet was displayed (see annex C.1). The current version can be viewed at any time at www.t11.org, by selecting either member or guest access, then using the button "Projects".

The chair reminded all TG chairs to assure the project status sheet is maintained to reflect changes in status of their projects.

8 Results of non-ISO Letter Ballots

8.1 FC-BB-6 Letter Ballot

FC-BB-6 Letter Ballot Results Closed on 1/28/13, Passed, Y20-N05-A03-DNV03 (5 yes ballots included comments).

8.2 SM-HBA-2 Letter Ballot

SM-HBA-2 Letter Ballot Results Closed on 1/27/13, Passed, Y19-N00-A08-DNV04 (1 yes ballots included comments).

9 Old Business

No old business was reopened.

10 Task Group T11.2 - Physical Interfaces

10.1 Report to T11 Plenary (T11/13-092v0)

Task Group chair Tom Palkert (Luxtera) presented the information posted as T11/13-092v0 on activity at T11.2.

10.2 Actions

There were no actions from TG T11.2.

10.3 Other items

No other items were presented for TG T11.2.

11 Task Group T11.3 - Interconnection Schemes

11.1 Report to T11 Plenary (T11/13-093v0)

Task Group chair Craig Carlson (QLogic) presented the information posted as T11/13-093v0 on activity at T11.3.

11.2 Actions

There were no actions from TG T11.3.

11.3 Other items

No other items were presented for TG T11.3.

12 Joint T11.2/T11.3 Items

12.1 Report to T11 Plenary including FC-EE (T11/13-083v0)

The information from this report was presented as part of the T11.2 report.

12.2 Actions

There were no actions from the Joint T11.2/T11.3 working group.

12.3 Other items

No other items were presented for the Joint TG T11.2/T11.3.

13 T11 project activities

13.1 Work Group SM-HBA-2 (T11/13-043v0)

In the absence of Dave Peterson (Brocade), Steve Wilson (Brocade) presented status on the progress of the SM-HBA-2 work group on storage management application program interfaces, as posted in T11/13-043v0.

13.2 Forward SM-HBA-2 rev 0.82 to INCITS for first public review (T11/12-452v1)

There were no opposing votes cast in the letter ballot on forwarding SM-HBA-2 to INCITS for first public review.

Steve Wilson (Brocade) moved and Fred Knight (NetApp) seconded the following motion:

To accept T11/13-023v1 as the resolution of the letter ballot comments on SM-HBA-2 and to forward Revision 0.82 of SM-HBA-2 (T11/13-029v1), INCITS BSR 508, to INCITS for further processing including public review.

INCITS RD-2 requires approval of this question in accord with the 2/3 rule. The motion met the 2/3 rule with a show of hands vote, with 20 Favoring, 0 Opposing, 0 Abstaining, 2 Not Voting.

See action item 13-036.

14 Review of International Activity

14.1 ISO Status Report (T11/13-006v1)

In the absence of Dave Peterson (Brocade), Steve Wilson (Brocade) presented the information posted as T11/13-006v1 on project status at ISO (see annex C.2).

14.2 ISO Motions (US roll call votes)

14.2.1 NWIP for Storage Management

Steve Wilson (Brocade) moved and Landon Noll (Cisco) seconded the following motion:

INCITS TC T11 votes that the answers to the seven questions for the USNB position in SC 25 N 2082 be as follows:

Q1: Yes; Q2: Yes; Q3: Yes, David Peterson; Q4: Yes, David Peterson; Q5: Yes, already sent; Q6: Yes; Q7: Accelerated timeframe.

Furthermore, T11 votes to approve the CD ballots for the USNB position in

- SC25 N2068 - Part 1: Overview
- SC25 N2069 - Part 2: Common Architecture
- SC25 N2070 - Part 3: Common Profiles
- SC25 N2071 - Part 4: Block Devices
- SC25 N2072 - Part 5: File Systems
- SC25 N2073 - Part 6: Fabric
- SC25 N2074 - Part 7: Host Elements
- SC25 N2075 - Part 8: Media Libraries

noting that the US submitted the contributions for these JTC 1/SC 25 projects.

INCITS RD-2 requires approval of this question in accord with the 2/3 rule, as determined by roll call limited to U.S. domiciled members. The motion met the 2/3 rule, with 22 Favoring, 0 Opposing, 0 Abstaining, and 6 Not Voting.

The roll call record may be found in Annex B.1.

See action item 13-037.

14.2.2 Motion to withdraw FC-FS

Steve Wilson (Brocade) moved and John Lohmeyer (LSI) seconded the following motion:

INCITS TC T11 recommends to Withdraw the following International Standard:

ISO/IEC 14165-251:2008 Information technology - Fibre Channel - Part 251: Framing and Signaling (FC-FS).

Reason for withdrawal: FC-FS is superceded by FC-FS2.

INCITS RD-2 requires approval of this question in accord with the 2/3 rule, as determined by roll call limited to U.S. domiciled members. The motion met the 2/3 rule, with 22 Favoring, 0 Opposing, 0 Abstaining, and 6 Not Voting.

The roll call record may be found in Annex B.2.

See action item 13-038.

15 T11 New Business and New Technical Items

15.1 National maintenance (T11/12-508v0)

15.1.1 Stabilization vote

Steve Wilson (Brocade) moved and Lou Ricci (EMC) seconded to recommend to INCITS that the standards as listed in T11/13-015v0 be recommended for Stabilization.

INCITS RD-2 requires approval of this question in accord with the 2/3 rule, as determined by roll call. The motion met the 2/3 rule, with 22 Favoring, 0 Opposing, 0 Abstaining, 6 Not Voting. The roll call record may be found in Annex B.3.

The reason for Stabilization is that the standards address mature technology or practices, and as a result are not likely to require revision. In addition, the standards are not safety or health related.

See action item 13-039.

15.1.2 Reaffirmation vote

Steve Wilson (Brocade) moved and Landon Noll (Cisco) seconded to recommend to INCITS that the standards as listed in T11/13-015v0 be recommended for Reaffirmation.

INCITS RD-2 requires approval of this question in accord with the 2/3 rule, as determined by roll call. The motion met the 2/3 rule, with 22 Favoring, 0 Opposing, 0 Abstaining, 6 Not Voting. The roll call record may be found in Annex B.4.

See action item 13-039.

16 Call for Patents

16.1 Patent information registry

Steve Wilson indicated that the current record of responses to prior calls for patents can be found in the T11 web site at <http://www.t11.org/t11/docreg.nsf/patentdoc?OpenView>.

16.2 Call for patents

16.2.1 Patent Information Overview

Steve Wilson reminded the meeting that among the rules and policies under which T11 operates are the INCITS intellectual property policies. An overview of patent information relevant to T11 may be found in T11/10-008v0.

16.2.2 INCITS/ISO patent disclosure form

A template form for a patent declaration that is satisfactory to both INCITS and ISO can be found in http://www.incits.org/patdec_form.doc.

17 Liaison Reports

17.1 T11 report (T11/12-518v0), INCITS Liaison, activities other than T11 project status (T11/13-053v0)

Steve Wilson (Brocade) presented the information posted as T11/12-518v0 on activity at T11 as reported to other organizations, and the information posted as T11/13-053v0 on activity at INCITS other than T11 project status.

17.2 TC T10 (T11/13-018v1)

T10 liaison John Lohmeyer (LSI Logic) presented the information posted as T11/13-018v1 on activity at INCITS Technical Committee T10.

17.3 FCIA (T11/13-090v0)

FCIA liaison Greg McSorley (Amphenol) presented the information posted as T11/13-090v0 on activity at FCIA.

17.4 IEEE 802.3 (T11/13-066v0)

Ali Ghiasi (Broadcom) presented the information posted as T11/13-066v0 on activity at IEEE 802.3.

17.5 IETF (none)

No report was presented on activity at IETF.

17.6 INCITS TC CS1 (none)

No report was presented on activity at INCITS Technical Committee CS1.

17.7 SNIA and DMTF (T11/13-094v0)

SNIA/DMTF liaison Craig Carlson (QLogic) presented the information posted as T11/13-094v0 on activity at SNIA and DMTF.

17.8 ISO/IEC JTC1 SC25 WG3 (none)

No report was presented on activity at ISO/IEC JTC1 SC25 WG3.

17.9 IBTA (none)

No report was presented on activity at IBTA.

17.10 Storage Performance Council (T11/13-069v0)

Sandy Wilson (Fujitsu) discussed the possibility of a formal liaison to report on activities in the Storage Performance Council. It was decided to keep the reporting relationship informal for now.

18 Administrative Matters

None

18.1 Officer Appointments

The officers of this Technical Committee and its Task Groups are:

T11 Chair	Steve Wilson (Brocade)
T11 International Representative	David Peterson (Brocade)
T11 Secretary (acting)	Richard Johnson (Finisar)
T11 Vice chair	Claudio DeSanti (Cisco)
T11.2 Chair	Tom Palkert (Luxtera)
T11.2 Secretary	Richard Johnson (Finisar)
T11.2 Vice-chair	Dean Wallace (QLogic)
T11.3 Chair	Craig Carlson (QLogic)
T11.3 Secretary	Landon Noll (Cisco)
T11.3 Vice-chair	Erik Smith (EMC)

18.2 T11 Information Technology

18.2.1 Web site status (T11/13-073v0)

Roger Cummings presented the information on web site status in T11/13-073v0.

19 Future Meeting Schedule

19.1 Authorization of adhoc meetings

The chair directed members to the T11 web site at <http://www.t11.org/t11/meet.nsf/intmeet> for the latest announcements of pending work group interim meetings and teleconferences. He advised that authorization of ad hoc work group meetings is delegated to the appropriate TG, if any.

- The T11.2/T11.3 joint study group acts directly under authorization of TC T11. It requested meeting time 5:30 PM to 7:30 PM Wednesday at the T11 plenary week hosted by FCIA and Chris Lyon in Albuquerque, NM, 8 - 12 April 2013.

The vice chair will account for these requests in the schedule for the T11 plenary week hosted by FCIA and Chris Lyon in Albuquerque, NM, 8 - 12 April 2013.

19.2 Guidelines for hosting T11 meetings

The chair advised that important information for those considering hosting a T11 meeting week may be found on the T11 web site at <http://www.t11.org/t11/meet.nsf/host>. This information includes guidelines for hosting a T11 meeting week and room night histories of past meeting weeks. This is required reading for those who are considering hosting because it summarizes the needs of the committee for meeting facilities and gives considerations that may reduce costs for the host.

Groups arranging to meet with T11 were strongly advised to confirm with the host any changes in their needs for meeting space well before the meeting. Failure to do so could easily cause serious inconvenience to the host and/or the group.

19.3 Request for hosts - 2012-2014

The chair announced the following schedule for 2012-2014 meetings. He noted all dates through 2013 are hosted, and requested volunteer hosts for the 2014 meeting dates.

Jun 3-7, 2013	Coeur d'Alene, ID	FCIA	Chris Lyon
Aug 5-9, 2013	Chicago, IL	FCIA	Chris Lyon
Oct 7-11, 2013	Duluth, MN	FCIA	Chris Lyon
Dec 2-6, 2013	Austin, TX	FCIA	Chris Lyon
Feb 3-7, 2014	New Orleans, LA	FCIA	Chris Lyon
Apr 7-11, 2014	(tbd)		
Jun 2-6, 2014	(tbd)		
Aug 4-8, 2014	Anchorage, AK	FCIA	Chris Lyon
Oct 6-10, 2014	Boise, ID	FCIA	Chris Lyon
Dec 1-5, 2014	(tbd)		

19.4 Approval of meeting venues

There were no new meeting venues to approve.

19.5 Next meeting information, hosted by FCIA and Chris Lyon in Albuquerque, NM, 8 -

12 April 2013

The chair reminded the membership that the next T11 plenary week is hosted by FCIA and Chris Lyon in Albuquerque, NM, 8 - 12 April 2013. He noted that detailed information about the hotel and the locale can be found on the T11 web pages at [http://www.t11.org/t11/meet.nsf/sch/\\$first](http://www.t11.org/t11/meet.nsf/sch/$first).

19.6 Letter to travel representatives on hotel rates (T11/10-009v0)

The chair reminded the membership that

- T11 plenary meetings are hosted by volunteer organizations;
- A plenary host receives no reimbursement from T11 or INCITS for any expenses of hosting;
- A plenary host may depend on agreements with the meeting hotel in order to reduce the expenses of the host and also possibly, though not necessarily, reduce the room rates for the members; and
- A hotel may charge punitive extra fees to a host if the meeting does not achieve an agreed number of room nights identified with group members.

Therefore, T11 expects those attending meetings during a plenary week to stay at the meeting hotel and identify themselves as members of the T11 group, even though less expensive lodging may be found in the area, or even at the same hotel. Document T11/10-009v0 has been posted, which contains a letter to those with budget responsibilities for member organizations justifying this obligation.

19.7 Plenary week meeting map for April 2013 T11 meetings

The vice chair presented the tentative meeting map of the next T11 meeting week. He advised members to refer to the T11 web site, [http://www.t11.org/t11/docreg.nsf/umap/\\$first](http://www.t11.org/t11/docreg.nsf/umap/$first), for the most recent meeting map of the next T11 regular meeting.

20 Final Attendance Notice/Check

The chair reviewed the electronically registered attendance list, advised that the list was about to close, and reminded those who had not registered that the list would then become the only source of attendance for formal records of this meeting.

Final registered attendance for T11 regular meeting #115 is shown in annex A.2. 29 people from 25 member organizations and 1 nonmember organizations were in attendance.

21 Review of Action Items

- 08-044 International Representative to prepare a T11 style guide that resolves issues including description of the list enumeration style and multiplication symbol.
In process.
Status as of 4 October 2012: ISO representatives reviewed the preliminary style guide prepared by the IR in Geneva, and progress is being made.
- 09-009 Secretary to determine where T11 standing rules are, or should be, documented.
In process.
Complete. Draft procedures will be in the T11Procs directory. Approved procedures will be in the T11Procs_Approved directory. Roger Cummings working on the process for posting and viewing these.
- 09-010 Secretary to update standing rules, when the standing rules location is determined, to require every T11 Plenary meeting location to be approved by a two-thirds vote (INCITS RD2/4.4.2.2) and that the proposer may request the result of the vote to be reconsidered by asking the T11 Chair to issue a letter ballot.
In process, see T11/09-635 for the history and T11/12-513v0 for the proposal for next meeting.
- 09-011 T11 vice chair to modify the instructions to prospective hosts to reflect that every T11 Plenary meeting location shall be approved by a two-thirds vote (INCITS RD2/4.4.2.2) and that the proposer may request the result of the vote to be reconsidered by asking the T11 Chair to issue a letter ballot.
In process pending completion of action 09-010.
- 09-045 T11 International Representative to review the admin/so/ subdirectory of the T11 ftp server and advise the webmaster if anything should move to the protected directory.
In process.
- 13-035 T11 Secretary to post approved Minutes of T11 meeting #114 as agreed at T11 meeting #115.
- 13-036 T11 Chair to forward Revision 0.82 of SM-HBA-2 (T11/13-023v1), INCITS BSR 508, to INCITS for further processing and public review. (see 13.2)
- 13-037 IR to notify INCITS that TC T11 recommends the NWIP (see T11/12-439v0) for Storage Management Technical Specification version 1.5 as a US contribution to JTC1/SC25 and to approve the NWIP to be issued by SC25, answering the first six questions specified in table 1 'Yes' and naming David Peterson as project editor, and question 7 in table 1 as "Accelerated Timeframe". (see 14.2.1)
- 13-038 IR to notify INCITS of the motion to withdraw FC-FS. Reason for withdrawal: FC-FS is superceded by FC-FS-2. (see 14.2.2)
- 13-039 T11 Chair to notify INCITS of T11'2 National Maintenance recommendations (see 15.1.1),(see 15.1.2)
- 13-040 T11 chair to create appropriate liaison reports from T11 to other organizations.

22 Adjournment

Greg McSorley (Amphenol) moved and Fred Knight (NetApp) seconded to adjourn at 2:40 PM PST. The motion passed by acclamation.

Annex A Membership and Attendance

A.1 Membership for this meeting

A.1.1 Emeritus Members

These people have been granted Emeritus membership in INCITS Fibre Channel (T11) Technical Committee, recognizing their many years of skilled leadership and high quality technical contribution:

Mr. James Coomes

Dr. William Ham

Mr. Robert Kembel

Mr. Joseph Mathis

Mr. Schelto vanDoorn

Mr. Gary Stephens

Mr. Horst Truededt

A.1.2 Voting Members

The following is the list of organizations that are voting members of record for regular meeting #115 of the INCITS Fibre Channel (T11) Technical Committee, including the recognized representatives of each member organization:

Organization	Representative Type	Representative
Agilent	Principal	Joachim Vobis
	Alternate	Stephen Didde
	Alternate	Steve Sekel
Amphenol	Principal	Gregory McSorley
	Alternate	Michael Wingard
	Alternate	Alex Persaud
Avago	Principal	Randy Clark
	Alternate	David Cunningham
	Alternate	Brian Misek

Organization	Representative Type	Representative
Broadcom	Principal	Ali Ghiasi
	Alternate	Pat Thaler
Brocade	Principal	Steven L. Wilson
	Alternate	David Peterson
	Alternate	Scott Kipp
	Alternate	John Crandall
Cisco	Principal	Claudio DeSanti
	Alternate	Landon Noll
	Alternate	Fabio Maino
	Alternate	Joe Pelissier
Corning	Principal	Doug Coleman
	Alternate	Steven E. Swanson
DCS	Principal	Kevin Ehringer
	Alternate	Jack Edwards
Dell	Principal	Hiren Desai
	Alternate	Gaurav Chawla
	Alternate	Brad Booth
EMC	Principal	Gary S. Robinson
	Alternate	David Black
	Alternate	Erik Smith
	Alternate	Louis Ricci
Emulex	Principal	Gautam Shiroor
	Alternate	David Baldwin
	Alternate	Hossein Hashemi
Finisar	Principal	Chris Yien
	Alternate	Richard Johnson

Organization	Representative Type	Representative
Fujitsu	Principal	Sandy Wilson
	Alternate	Eugene Owens
	Alternate	Kun Katsumata
	Alternate	Jim DeCaires
	Alternate	Osamu Kimura
	Alternate	Mark Malcolm
Hitachi DS	Principal	Eric Hibbard
	Alternate	Vincent Franceschini
	Alternate	Michael Hay
HP	Principal	Barry Maskas
	Alternate	Krishna Babu Puttagunta
	Alternate	Rupin Mohan
	Alternate	Nadaraha (Nava) Navaruparajah
	Alternate	Siamack Ayandeh
IBM	Principal	Scott Carlson
	Alternate	Roger Hathorn
	Alternate	Henry May
	Alternate	Patty Driever
INTEL	Principal	Prafulla Deuskar
	Alternate	Mark Wunderlich
JDS Uniphase	Principal	Dave Lewis
	Alternate	Jason Rusch
	Alternate	Scott Baxter
	Alternate	Paul Gentieu
Juniper	Principal	Joseph White
	Alternate	Simon Gordon
LSI	Principal	Adam Healey
	Alternate	John Lohmeyer
	Alternate	Harvey Newman
Molex	Principal	Jay Neer

Organization	Representative Type	Representative
NetApp	Principal	Frederick Knight
	Alternate	Denise Ridolfo
	Alternate	Heather Lanigan
Oclaro	Principal	Jon Anderson
Oracle	Principal	Roger Dickerson
	Alternate	Matt Gaffney
	Alternate	Michael Roy
QLogic	Principal	Craig W. Carlson
	Alternate	Skip Jones
	Alternate	Alan Spalding
	Alternate	Dean Wallace
	Alternate	Ed McGlaughlin
Systimax	Principal	Richard Baca
	Alternate	Paul Kolesar
	Alternate	Joe Livingston
TE	Principal	Kim Whitman
	Alternate	Andrew Nowak
	Alternate	Michael Fogg
VMware	Principal	Neil MacLean
	Alternate	Sandeep Uttamchandani
	Alternate	Lawrence Lamers

A.1.3 Advisory Members

The following is the list of organizations that are advisory (i.e., nonvoting) members of record for regular meeting #115 of the INCITS Fibre Channel (T11) Technical Committee, including the recognized representatives of each member organization:

Organization	Representative Type	Representative
Crossroads Systems	Principal	Bill Moody
DSI A*STAR	Principal	Khin Mi Mi Aung
FCI	Principal	Miguel Conde
	Alternate	David Sideck
Futurewei	Principal	Serge Manning
	Alternate	Xiaoyu Ge
	Alternate	Xiaoyan He
	Alternate	Jincheng Li
Liberty Intl	Principal	Phil Zuniga
Luxtera	Principal	Tom Palkert
Mellanox	Principal	Diego Crupnicoff
	Alternate	Trevor Caulder
	Alternate	Dror Goldenberg
Microsoft	Principal	Steve Olsson
	Alternate	Calvin Chen
	Alternate	James Borden
	Alternate	Paul Luber
Panduit	Principal	Robert Elliot
	Alternate	Jose Castro
	Alternate	Steve Skiest
	Alternate	Robert Reid
Pegatron	Principal	Michael Hsu
Solution Technology	Principal	David Deming
	Alternate	David Deming Jr
Teradyne	Principal	Eracar Yonet

Organization	Representative Type	Representative
Texas Instruments	Principal	Rajeev Jain
	Alternate	Stephen Hubbins
Unisys	Principal	Jeffrey Dremann
	Alternate	Diep Nguyen
	Alternate	Jose Macias
	Alternate	Phil Shelton
Virtual Instruments	Principal	Skip Bacon

A.2 Attendance at this meeting

A.2.1 Member organizations

The following is the list of member organizations and their representatives recorded in the online attendance registry as attending regular meeting #115 of the INCITS Fibre Channel (T11) Technical Committee:

Organization	Representative(s)
AGILENT TECHNOLOGIES, INC.	Steve Sekel
AMPHENOL INTERCONNECT	Gregory McSorley
AVAGO	David Cunningham
BROADCOM	Ali Ghiasi
BROCADE	Steven L. Wilson
CISCO SYSTEMS, INC	Claudio DeSanti
CISCO SYSTEMS, INC.	Landon Noll
DCS	Jack Edwards
DELL	Hiren Desai
EMC	Erik Smith
EMC	Louis Ricci
EMULEX	Gautam Shiroor
EMULEX	David Baldwin
FINISAR CORPORATION	Richard Johnson
FUJITSU	Sandy Wilson
FUTUREWEI	Hao Chen

Organization	Representative(s)
HEWLETT PACKARD CO.	Nava Navaruparajah
IBM	Roger Hathorn
JDS UNIPHASE	Dave Lewis
JDS UNIPHASE	Jason Rusch
JUNIPER	Joseph White
LSI CORP.	John Lohmeyer
LUXTERA	Tom Palkert
MOLEX	Jay Neer
NETAPP	Frederick Knight
ORACLE	Roger Dickerson
PANDUIT	Jose Castro
QLOGIC CORP.	Craig W. Carlson
TE CONNECTIVITY	Michael Fogg

A.2.2 Nonmember organizations

The following is the list of nonmember organizations and their representatives recorded in the online attendance registry as attending regular meeting #115 of the INCITS Fibre Channel (T11) Technical Committee:

Organization	Representative(s)
SELF	Roger Cummings

Annex B Roll Call Vote Tallies

B.1 Roll call vote for NWIP for Storage Management (see 14.2.1)

Organization	Representative Type	Voting Representative	Position Declared
Agilent	Alternate	Steve Sekel	Y
Amphenol	Principal	Gregory McSorley	Y
Avago	Alternate	David Cunningham	Y
Broadcom	Principal	Ali Ghiasi	Y
Brocade	Principal	Steven L. Wilson	Y
Cisco	Alternate	Landon Noll	Y
Corning	Principal	Doug Coleman	NV
DCS	Alternate	Jack Edwards	Y
Dell	Principal	Hiren Desai	Y
EMC	Alternate	Louis Ricci	Y
Emulex	Principal	Gautam Shiroor	Y
Finisar	Alternate	Richard Johnson	Y
Fujitsu	Principal	Sandy Wilson	Y
Hitachi DS	Principal	Eric Hibbard	NV
HP	Alternate	Nadaraha Navaruparajah	Y
IBM	Alternate	Roger Hathorn	Y
INTEL	Principal	Prafulla Deuskar	NV
JDS Uniphase	Principal	Dave Lewis	Y
Juniper	Principal	Joseph White	Y
LSI	Alternate	John Lohmeyer	Y
Molex	Principal	Jay Neer	Y
NetApp	Principal	Frederick Knight	Y
Oclaro	Principal	Jon Anderson	NV

Oracle	Principal	Roger Dickerson	Y
QLogic	Principal	Craig W. Carlson	Y
Systemax	Principal	Richard Baca	NV
TE	Alternate	Michael Fogg	Y
VMware	Principal	Neil MacLean	NV

B.2 Roll call vote for motion to withdraw FC-FS (see 14.2.2)

The roll call vote was identical to that listed in Annex B.1.

B.3 Roll call vote for stabilization (see 15.1.1)

The roll call vote was identical to that listed in Annex B.1

B.4 Roll call vote for reaffirmation (see 15.1.2)

The roll call vote was identical to that listed in Annex B.1

Annex C Supporting Documents

C.1 T11 project status

The following table indicates the status of all active T11 projects. It reflects the official status as reported on the T11 web site as of the T11 regular meeting 7 February 2013.

Standard	Status	Action	Target or Reaffirm Date	Editor	Ad Hoc Chair
Projects in Development Stage					
FC-EE	At T11	To T11	Oct-12		Wallace
FC-FS-4	In dev.	To T11.3	Jun-13	Martin	Peterson
FC-GS-7	in Dev.	T11 LB to fwd	Feb-13	Carlson	Ricci
FC-LS-3	In dev.	To T11.3	Jun-13	Carlson	Martin
FC-MSQS-2	In dev.	To T11.2 LB	Feb-13	Johnson	Wallace
FC-PI-6	In dev.	T11.2 LB	Feb-13	Hashemi	Wallace
FC-SB-5	T11.3 LB	To T11	Dec-12	Carlson	Hathorn
FC-SW-6	At T11.3	To T11.3	Jun-12	Wilson	Carlson
SM-HBA-2	In dev.	To T11	Dec-12	Lanigan	Peterson
Projects in Approval Stage					
FC-BB-6	At T11	To INCITS	Apr-13	Peterson	DeSanti

C.2 T11 project status at ISO

The following tables indicates the status of all active T11 projects at ISO. It reflects the official status as reported at the T11 regular meeting #115, 7 February 2013 in document T11/13-006v1.

C.2.1 Active T11 SC25 WG4 Projects

JTC1/SC25 Project	Document	ISO/IEC # (T11 allocated)	Step	Status
1.25.13.13.49	FC-AE-ASM	14165-313	40.60	Should be published soon.
1.25.13.13.50	FC-AE-RDMA	14165-314	40.60	Should be published soon.
1.25.13.13.45	FC-BaseT	14165-151	30.99	Sent response to ISO/IEC comments.
1.25.13.13.30	FC-BB-3	14165-243	40.99	Should be published soon.
1.25.13.13.46	FC-DA	14165-341	40.20	CD submitted 4/6/2010.
1.25.13.13.X	FC-SW-5	14165-135	10.99	Need ISO version.
1.25.13.13.X	FC-GS-6	14165-416	10.99	Need ISO version.
1.25.13.13.X	FC-BB-5	14165-245	10.99	Need ISO version. FC-BB-5 Am1 is now complete.

C.2.2 Active SNIA SC25 WG4 Projects

JTC1/SC25 Project Num	Document	ISO/IEC #	Step	Status
ISO/IEC NP (TBD)	SMI-S v1.5	24775		NWIP and CDs (8 Parts) currently out for ballot, closing March 18.

C.2.3 Active Miscellaneous WG4 Projects

JTC1/SC25 Project Num	Document	ISO/IEC # (T11 allocated)	Step	Status

C.2.4 Published WG4 Projects

JTC1/SC25 Project Num	Document	ISO/IEC #	Step	Status
1.25.13.22	Server Management Command Line Protocol (SM-CLP)	13187	60.60	Published
1.25.13.19.01	Storage Management	24775	60.60	Published
1.25.13.13.47	FC-MI-2	14165-372	60.60	Published
1.25.13.21	iSCSI Management API (IMA)	11989	60.60	Published
1.25.13.13.25	FC-SW-3	14165-133	60.60	Published
1.25.13.13.18	FC-AV	14165-321	60.60	Published.
1.25.13.13.19	FC-AE-1553	14165-312	60.60	Published.
1.25.13.13.29	FAIS	14165-521	60.60	Published.
1.25.13.13.15	FC-GS-4	14165-414	60.60	Published
1.25.13.13.22	FC-FS	14165-251	60.60	Published
1.25.13.13.26	FC-VI	14165-331	60.60	Published
1.25.13.13.27	10GFC	14165-116	60.60	Published
1.15.13.13.28	MJSQ	14165-117	60.60	Published
1.25.13.10.18	RL	24740	60.60	Published
1.25.13.19	SMS (was SMI-S)	24775	60.60	Published
1.25.13.20	SNIA MMA	11002	60.60	Published
1.25.13.13.27-1	10GFC-Amendment 1	14165-116-1	60.60	Published
1.25.13.13.06-1	FC-AL-2-1	14165-122	60.60	Published.
1.25.13.13.06-2	FC-AL-2-2	14165-122	60.60	Published

C.2.5 ISO step codes

The following explains the ISO step codes (ISC), which are two numbers separated by a dot. The first number is described in the table. The second part is percent complete.

Stage	NWIP	Convert to ISO	FCD	Edit/DoC	FDIS	Edit/DoC	Publish
Ballot Time	2 months		4 months		2 months		
first number of ISC	10	20	40		50	60	60.60