

# **Project Proposal for a new INCITS Standard**

## **Fibre Channel - Methodologies for Interconnects - 3 March 2010**

**T11/10-111v0**

### **1 Source of Proposed Project**

#### **1.1 Title**

Fibre Channel - Methodologies for Interconnects - 3.

#### **1.2 Date Submitted**

April 1, 2010.

#### **1.3 Proposer(s)**

INCITS Technical Committee T11.

### **2 Process Description for the Proposed Project**

#### **2.1 Project Type (Development or Revision)**

Type D (Development done within INCITS TC T11).

#### **2.2 Type of Document**

Technical Report.

#### **2.3 Definition of Concepts and Special Terms**

None.

#### **2.4 Expected Relationship with Approved Reference Models, Frameworks, Architectures, etc.**

All Fibre Channel standards are intended for use in closed systems.

#### **2.5 Recommended INCITS Development Technical Committee**

It is recommended that this project be assigned to TC T11, in order that the project be coordinated with work on other Fibre Channel standards.

## **2.6 Anticipated Frequency and Duration of Meetings**

This project will make use of the regularly-scheduled bimonthly T11 plenary meetings. Informal Working Groups will be organized on an ad-hoc basis to discuss specific subjects where appropriate.

## **2.7 Target Date for Initial Public Review (Milestone 4)**

April 2011

## **2.8 Estimated Useful Life of Standard or Technical Report**

It is anticipated that this standard will have a useful life of over 10 years.

# **3 Business Case for Developing the Proposed Standard or Technical Report**

## **3.1 Description**

This project proposal recommends the development of a set of additional and enhanced definitions for the interconnection of Fibre Channel devices.

Included within this scope are services such as:

- a) Clarification of existing ambiguities;
- b) Extension of requirements for virtualization, feature obsolescence, Fibre Channel over Ethernet (FCoE); and
- c) Other services or features identified during the development of this standard.

## **3.2 Existing Practice and the Need for a Standard**

The FC-MI-3 project will continue extending interoperability requirements for Fibre Channel interconnects. Examples are updated port models to support virtualization, FCoE environments, and new speeds and operational characteristics associated with Fibre Channel.

## **3.3 Implementation Impacts of the Proposed Standard**

### **3.3.1 Development Costs**

This standard will be developed through the voluntary and cooperative efforts of T11 Task Committee members. No significant development costs are anticipated.

### **3.3.2 Impact on Existing or Potential Markets**

The proposed standard will provide an upward growth path that complements and enhances existing supplier products and support schemes. The proposed standard will result in expanded applications for existing and conceived products in both the channel and network markets. It is likely that isolated adverse effects would occur in any case through non-standard evolution or revolution.

### **3.3.3 Costs and Methods for Conformity Assessment**

The committee will consider the results of testing provided to the committee through the voluntary efforts of the participants in T11. With this method all costs are borne by the organizations of the various participants and have for the most part been mainly an adjunct of their normal development costs.

### 3.3.4 Return on Investment

The return on investment for this development is expected to be high, due to the commonality of effort directed to a singular method of providing the services covered by the proposed standard. Additionally, the investment made in products developed under FC-MI-3 will be preserved by providing services within the existing infrastructure.

## 3.4 Legal Considerations

### 3.4.1 Patent Assertions

Calls will be made to identify assertions of patent rights in accordance with the relevant INCITS, ANSI and ISO/IEC policies and procedures. T11 is aware of patent assertions that have been made and letters indicating compliance with INCITS policies have been received.

### 3.4.2 Dissemination of the Standard or Technical Report

Drafts of this document will be disseminated electronically. Dissemination of the final standard will be restricted as the document becomes the property of INCITS, ANSI, or ISO/IEC.

## 4 Related Standards Activities

### 4.1 Existing Standards

ID Number	Title
(1) INCITS 424-2007	Fibre Channel - Framing and Signaling - 2 (FC-FS-2)
(2) INCITS 332:1999,	Fibre Channel Arbitrated Loop (FC-AL-2).
(3) INCITS 416:2006,	Fibre Channel Protocol for SCSI - 3 (FCP-3).
(4) INCITS 427:2007,	Fibre Channel Generic Services - 5 (FC-GS-5).
(5) INCITS 418:200x,	Fibre Channel Switch Fabric - 4 (FC-SW-4).
(6) INCITS 374:2003,	Fibre Channel Single-Byte Command Sets Mapping Protocol - 3 (FC-SB-3).
(7) INCITS 419-2008,	Fibre Channel - Backbone (FC-BB-4).
(8) INCITS TR:36:2004,	Fibre Channel - Device Attach (FC-DA)
(9) INCITS TR:39:2005,	Fibre Channel Methodologies for Interconnects - 2 (FC-MI-2).
(10) INCITS 433-2006,	Fibre Channel Link Services (FC-LS)
(11) INCITS 426-2007,	Fibre Channel Security Protocols (FC-SP).
(12) INCITS 428:2007,	Storage Management Host Bus Adapter Application Programming Interface (SM-HBA)

### 4.2 Related Standards Activity

ID Number	Title
(1) Project 1833D	Fibre Channel - Generic Services-6 (FC-GS-6)

- (2) Project 1822D, Fibre Channel Switch Fabric - 5 (FC-SW-5).
- (3) Project 1861D, Fibre Channel Framing and Signaling - 3 (FC-FS-3).
- (4) Project 2103D, Fibre Channel Link Services - 2 (FC-LS-2).
- (5) Project 1745D, Fibre Channel - Inter-Fabric Routing (FC-IFR)
- (6) Project 1841D, Host Bus Adapter Application Programming Interface - 2 (SM-HBA-2)
- (7) Project 1871D, Fibre Channel - Backbone (FC-BB-5).
- (8) Project 2122D, Fibre Channel Single-Byte Command Sets Mapping Protocol - 4 (FC-SB-4).

#### **4.3 Recommendations for Close Liaison**

SNIA - Fibre Channel Technical Work Group

#### **5 Units of Measurement used in this Standard**

Système Internationale d'Unités (International System of Units).