

# **Project Proposal For A New INCITS Standard**

## **Fibre Channel Framing and Signaling - 2**

**(FC-FS-2)**

T11/03-092v0

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

#### **1.1 Title**

Fibre Channel – Framing and Signaling-2 (FC-FS-2)

#### **1.2 Date**

06 February 2003

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

INCITS TC T11, with a current membership of 69.

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

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

Type D (Development done within INCITS T11)

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

Standard

#### **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 (Existing or New)**

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.

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

March 2005

## **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**

The basis of FC-FS-2 will be the FC-FS document with the Link Services removed into a separate standard. FC-FS-2 will be a complete document and not a delta from FC-FS. FC-FS-2 will:

- a) Use FC-FS as a basis,
- b) be highly compatible with FC-FS,
- c) obsolete an outdated functions and features,
- d) clarify ambiguities,
- e) add improvements to existing features and services as needed for enhancements to the Fibre Channel, family of standards,
- f) add improvements to reduce interoperability problems,
- g) add new features as dictated by experience with existing implementations, and
- h) add new capabilities, which will improve performance of existing and future FC products.

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

As Fibre channel evolves with changes to speed, new upper level protocols, and new functions, FC-FS-2 is needed to describe any changes needed to Fibre Channel Framing and Signaling. FC-FS-2 will be a highly compatible extension to FC-FS. FC-FS-2 will be an entire standard and not a delta from FC-FS. Extended Link Services will be removed from FC-FS-2 and become a separate standard.

The project may also involve the deletion or obsoleting of outdated functions and features of FC-FS, support of new functions defined by the FC family of documents, the inclusion of improvements and clarifications to the definitions of existing services as dictated by experience with existing implementations, and other capabilities which will improve the performance of existing FC products and fit those products for new applications.

### **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 and protects backward compatibility wherever possible. 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-FS-2 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 not aware of any patent assertions that may be made.

### **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**

- X3.230-1994, Fibre Channel Physical and Signalling Interface (FC-PH).
- X3.297-1997, Fibre Channel Physical and Signalling Interface - 2 (FC-PH-2).
- X3.303-1998, Fibre Channel Physical and Signaling Interface -3 (FC-PH-3)
- INCITS 332:1999, Fibre Channel 2nd Generation Arbitrated Loop (FC-AL-2).
- INCITS 348:2000, Fibre Channel Generic Services (FC-GS-3).
- INCITS 355:2001 FC Switch Fabric and Switch Control Requirements (FC-SW-2)

### **4.2 Related Standards Activity**

- Project 1331-D, Fibre Channel Framing and Signal Interface (FC-FS)
- Project 1306-D, Fibre Channel Physical Interface (FC-PI)
- Project 1413-D, Fibre Channel 10 Gigabit (FC-10GFC)
- Project 1466-D, Fibre Channel - Backbone (FC-BB-2)
- Project 1505-D, Fibre Channel - Generic Service 4(FC-GS-4)
- Project 1508-D, Fibre Channel - Switch Fabric - 3 (FC-SW-3)

The development of the FC-FS-2 definitions will build on the work in any related standards and will be guided, as appropriate, by standards outside the suite of Fibre Channel standards.

### **4.3 Recommendations for Coordinating Liaison**

None

#### **4.4 Recommendations for Close Liaison**

None