

Project Proposal for a new INCITS Standard

Fibre Channel - Framing and Signaling - 5 (FC-FS-5)

T11/15-002v0

1 Source of Proposed Project

1.1 Title

Fibre Channel - Framing and Signaling - 5.

1.2 Date Submitted

February 5, 2015.

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

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

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)

February 2017

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 technical additions and clarifications to INCITS T11/Project 2238-D, Fibre Channel - Framing and Signaling - 4 (FC-FS-4).

Included within this scope are:

- a) Clarifications of existing ambiguities;
- b) Any items deemed necessary to support energy efficient Fibre Channel; and
- c) Any other item as deemed necessary during the development.

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-5 is needed to describe any changes needed to Fibre Channel Framing and Signaling. FC-FS-5 will be a highly compatible extension to FC-FS-4. FC-FS-5 will be an entire standard and not a delta from FC-FS-4.

The project (i.e., FC-FS-5) may also involve the deletion or obsoleting of outdated functions and features of FC-FS-4, support of new functions defined by the FC family of documents, the inclusion of improvements and clarifications to the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. 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-5 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
ANSI INCITS 332-1999,	<i>Fibre Channel - Arbitrated Loop (FC-AL-2)</i>
ANSI INCITS 332-1999/AM1-2003,	<i>Fibre Channel - Arbitrated Loop (FC-AL-2) - Amendment 1</i>
ANSI INCITS 332-1999/AM2-2006,	<i>Fibre Channel - Arbitrated Loop (FC-AL-2) - Amendment 2</i>
ANSI INCITS 364-2003,	<i>Fibre Channel - 10 Gigabit (10GFC)</i>
ANSI INCITS 345-2007,	<i>Fibre Channel - BaseT (FC-BaseT)</i>
INCITS 479-2011,	<i>Fibre Channel - Physical Interfaces - 5 (FC-PI-5)</i>
INCITS 509:2014,	<i>Fibre Channel - Backbone - 6 (FC-BB-6)</i>
INCITS 475:2011,	<i>Fibre Channel - Inter Fabric Routing (FC-IFR)</i>

4.2 Related Standards Activity

ID Number	Title
Project 2238-D,	<i>Fibre Channel - Framing and Signaling - 4 (FC-FS-4)</i>
Project 2220,	<i>Fibre Channel - Switch Fabric - 6 (FC-SW-6)</i>
Project 2118-D,	<i>Fibre Channel - Physical Interfaces - 6 (FC-PI-6)</i>
Project 533-201x,	<i>Fibre Channel - Physical Interfaces - 6P (FC-PI-6P)</i>
Project 2237-D,	<i>Fibre Channel - Link Services - 3 (FC-LS-3)</i>
Project 2236-D,	<i>Energy Efficient Fibre Channel (FC-EE)</i>

Project 540, *Fibre Channel - Non-Volatile Memory Express (FC-NVMe)*

4.3 Recommendations for Close Liaison

None

5 Units of Measurement used in this Standard

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