

**Project Proposal For A New INCITS Standard
Fabric Application Interface Standard - 2**

(FAIS-2)

T11/06-360v1

1 Source of the Proposed Project

1.1 Title

Fabric Application Interface Standard - 2 (FAIS-2).

1.2 Date

14 June 2006.

1.3 Proposer(s)

INCITS TC T11, with a current membership of 52.

2 Process Description for 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. This technology is applicable to any storage network environment.

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 and Storage Networking 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)

June 2007.

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 functions to the Application Programming Interface (API) framework defined by the FAIS standard for use within a storage networking environment.

Included within this scope are functions such as:

- a) Enhanced separation of control and data paths in a networked storage environment;
- b) Additional methods for routing exceptions from the data path to the control path;
- c) Additional methods for handling exceptions and asynchronous events in the control path;
- d) Enhanced methods for discovering and configuring the data path capabilities;
- e) Any other item as deemed necessary during the development.

3.2 Existing Practice and the Need for a Standard

Development of the first generation Fabric Application Interface Standard (FAIS) began in 2003. FAIS defined a comprehensive model and an Application Programming Interface (API) framework to enable the implementation of storage applications in a storage network. The FAIS interface allowed improved portability and architectural flexibility in the implementation of storage applications, permitting a flexible distribution of functionality among different components of a storage network.

The migration from proprietary architectures to the FAIS model showed the need for additional and enhanced standard capabilities, especially regarding the handling of asynchronous events and the discovery and configuration of data path capabilities. The FAIS-2 standard will develop these enhanced capabilities and will become the foundation for further exploiting the implementation of storage applications in a storage network.

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.

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.

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 and Technical Reports

ANSI INCITS 402-2005, *SCSI Architecture Model - 3 (SAM-3)*

ANSI INCITS 416-2006, *Fibre Channel Protocol - 3 (FCP-3)*

RFC 3720, *Internet Small Computer Systems Interface (iSCSI)*, April 2004

4.2 Standards Under Development

ANSI INCITS Project 1640-D, *Fabric Application Interface Standard (FAIS)*

ANSI INCITS Project 1683-D, *SCSI Architecture Model - 4 (SAM-4)*

ANSI INCITS Project 1828-D, *Fibre Channel Protocol - 4 (FCP-4)*

4.3 Recommendations for Close Liaison

None.

5 Units of Measurement used in the Standard

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