Project Proposal for a new INCITS Standard

SCSI Fibre Channel Protocol - 3 (FCP-3)

1. Source of Proposed Project

1.1 Title: SCSI Fibre Channel Protocol - 3.

1.2 Date Submitted: May 2, 2002.

1.3 Proposing Group: T10.

2. Process Description for the Proposed Project

2.1 Project Type: D - Development.

2.2 Type of Document: Standard.

2.3 Definitions of Concepts and Special Terms: none.

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

None, it is expected that this standard will be used in closed systems.

2.5 Recommended INCITS Development Technical Committee: T10.

2.6 Anticipated Frequency and Duration of Meetings

Technical Committee T10 meets on a regularly scheduled basis (see http://www.t10.org for the current meeting schedule). Specific task ad hoc groups are called as required between the regular meetings but their results are not binding.

- 2.7 Target Date for Initial Public Review (Milestone 4): January 2004.
- 2.8 Estimated Useful Life of Standard or Technical Report: 5 Years.

3. Business Case for Developing the Proposed Standard or Technical Report

3.1 Description

The FCP-3 standard will define a mapping layer for the execution of SCSI operations as defined by the SCSI Architecture Model - 3 (SAM-3). This mapping layer will function on the Fibre Channel infrastructure as defined in FC-PI, FC-FS, and related Fibre Channel standards.

The following items should be considered for inclusion in FCP-3:

- 1) Normative text for bi-directional SCSI command support;
- 2) updated clearing effects;
- 3) normative text for class 2 error detection and recovery; and
- 4) any additional items deemed appropriate by the committee.

3.2 Existing Practice and the Need for a Standard

The SCSI Fibre Channel Protocol - 2 (FCP-2) standard is in the process of approval at INCITS and there is a continuing need to evolve and enhance the protocol. The proposed FCP-3 standard will update and revise FCP-2 to add additional functionality.

3.3 Implementation Impacts of the Proposed Standard

3.3.1 Development Costs

Members of T10 will provide the necessary resources. The T10 members will host the required meetings for development, provide for the necessary lab experiments, and provide the Technical Editor for the project.

3.3.2 Impact on Existing or Potential Markets

This proposed project is intended to preserve as much of the existing Fibre Channel software and hardware investment as practical.

3.3.3 Costs and Methods for Conformity Assessment

The committee will consider the results of testing as may be available to the committee through the voluntary efforts of the various participants in T10. 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

ROI information is considered proprietary data by the member organizations, but members have stated that the ROI is expected to be large.

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.

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 property of INCITS, ANSI, and/or ISO/IEC.

4. Related Standards Activities

4.1 Existing Standards:

ID Number Title

NCITS.351:2001 SCSI Primary Commands - 2 (SPC-2)

4.2 Related Standards Activity

ID Number	Title
T10/1157-D	SCSI Architecture Model - 2 (SAM-2)
T10/1416-D	SCSI Primary Commands - 3 (SPC-3)
T10/1144-D	Fibre Channel Protocol for SCSI - 2 (FCP-2)
T11/1331-D	Fibre Channel Framing and Signaling Interface (FC-FS)
T11/1306-D	Fibre Channel - Physical Interface (FC-PI)

4.3 Corresponding ISO projects

ID Number	Title
ISO/IEC 14776	Multipart SCSI standard
ISO/IEC 14776-412	SCSI Architecture Model - 2 (SAM-2)
ISO/IEC 14776-312	SCSI Primary Commands - 2 (SPC-2)

4.4 Recommendations for Close Liaison

Technical Committee T11.