Project Proposal
for a New
NCITS Standard

Information Systems - Small Computer System Interface (SCSI)
on Scheduled Transport (ST)
(SST)

1. Source of the Proposed Project

1.1 Title
Small Computer Systems Interface (SCSI) on Scheduled Transport (ST) (SST)

1.3 Date Submitted
September 16, 1999.

1.2 Proposer
NCITS T10, which has 48 members. Eight members of T10 are also members of NCITS.

2. Process Description for the Proposed Project

2.1 Project Type (Development or Revision)
D - Development done within NCITS TC.

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 is intended for use in closed systems.

2.5 Recommended NCITS Development Technical Committee (Existing or New)
It is recommended that this project be assigned to TC T10, in order that the project be coordinated with work on other SCSI standards.

2.6 Anticipated Frequency and Duration of Meetings
This project will make use of the regularly-scheduled bimonthly T10 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)
November 2000.

2.8 Estimated Useful Life of Standard or Technical Report
It is anticipated that this Technical Report 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 mapping for SCSI Architecture and commands onto the facilities provided by Scheduled Transfer (ST).

The Small Computer System Interface is an NCITS T10 standard with wide industry support and usage. SCSI is used for controlling disk and tape peripherals.

The ST protocol is currently being developed in T11.1, responsible for the HIPPI suite of standards. The Scheduled Transfer (ST) project defines a local transport mechanism for use on several media including the High-Performance Parallel Interface (HIPPI), HIPPI-6400, Fibre Channel, and Ethernet. ST allows maximum network performance. It achieves this by scheduling transfers and sending data only when end devices can accept it.

3.2 Existing Practice and the Need for a Standard
Although the ST specification enables multi-platform and multi-media interoperability, applications that use ST can be implemented in a variety of ways. Without conventions for mapping SCSI on ST, it is likely that different implementations of SCSI on ST would be created. Different SCSI on ST mappings would be unlikely to interoperate or be portable. Thus, a strong need exists for a standard SCSI on ST mapping.

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 T10 and T11.1 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 T10 and T11.1. 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 mapping 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 NCITS, ANSI and ISO/IEC policies and procedures. T10 is unaware 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 NCITS, ANSI

4. Related Standards Activities

   4.1 Existing Standards

      (1) ANSI X3.131-1994: Information Systems - Small Computer System
          Interface - 2 (SCSI-2)

      (2) ANSI X3.270-1996: Information Systems - SCSI-3 Architecture Model
          (SAM)

   4.2 Related Standards Activity:

      (1) NCITS T11.1, Project 1245-D: Scheduled Transfer (ST)

      (2) NCITS T10, Project 1236-D: SCSI Primary Commands (SPC-2)

      (3) NCITS T10, Project 1157-D: SCSI Architecture Model - 2 (SAM-2)

      (4) NCITS T10, Project 1144-D: SCSI Fibre Channel Protocol - 2 (FCP-2)

   4.3 Recommendations for Coordinating Liaison
       None

   4.4 Recommendations for Close Liaison
       NCITS T11, NCITS T11.1 (Project 1245-D: Scheduled Transfer)