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 13, 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 T110, 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)
     June 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
       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 even with
       high loading. 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 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 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
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, or ISO/IEC.

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)

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

4.4 Recommendations for Close Liaison
None