T10/99-214r0

Project Proposal For a New NCITS Technical Report

SCSI Domain Validation

(SDV-4)

Technical Report

July 15, 1999

1. Source of the Proposed Project

- 1.1. Title: SCSI Domain Validation 4 (SDV-4)
- **1.2. Date Submitted:** July 15, 1999
- **1.3. Proposer:** T10, 8 members of T10 are also members of NCITS.

2. Process Description for the Proposed Project

2.1. Project Type:

D - Development

2.2. Type of Document:

Technical Report

2.3. Definitions of Concepts and Special Terms:

None

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

This technical report is expected to be used in closed systems.

2.5. Recommended NCITS Development Technical Committee:

T10

2.6. Anticipated Frequency and Duration of Meetings

Technical Committee T10 meets on a regularly scheduled basis (see 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):

November, 2000

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 SCSI Domain Validation - 4 (SDV-4), is an application of testing techinques to validate the communication capability of the SCSI physical layer. Some of the techiques require cooperation between host and target devices.

The following items should be considered for inclusion in SDV-4:

- 1) definition of domain validation levels;
- 2) interoperability parameters for techniques;
- 3) communication methods for expanders;
- 4) other capabilities that may fit within the general application scope of the this project.

3.2. Existing Practice and the Need for a Technical Rep:

The proposed project involves a compatible extension of the present SCSI physical and protocol layers to improve the integrity of the physical layer.

3.3. Implementation Impacts of the Proposed Technical Report:

3.3.1. Development Costs

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Resources are provided by the members of T10. The members host the required meetings for development, provide for the necessary lab experiments and silicon technology development, and provide the Technical Editor for the project.

3.3.2. Impact on Existing or Potential Markets

This techincal report is applicable to past, present, and future versions of the SCSI parallel interface. This report is advisory in nature; does not constrain current implementations; and is not a requirement for building SCSI interconnects.

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 adjucnt of their normal development costs.

3.3.4. Return on Investment

ROI information is considered propriatary data by the member organizations but is judged 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 NCITS, 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 NCITS, ANSI, or ISO/IEC.

4. Related Standards Activities:

4.1. Existing Standards:

BSR Number	Title	Project
X3.270:1996	SCSI-3 Architecture Model (SAM)	0994-M
X3.301-1998	SCSI Parallel Interface - 2 (SPI-2)	1142-D

4.2. Related Standards Activity:

BSR Number	Title	Project
X3.301	SCSI Parallel Interface - 3 (SPI-3)	1302-D
	SCSI Primary Commands - 2 (SPC-2)	1236-D
	SCSI Architecture Model - 2 (SAM-2)	1157-D
	SCSI Parallel Interface - 4 (SPI-4)	1302-D

Corresponding ISO projects:

ISO/IEC Number	Title	Project
14776-411	SCSI-3 Architecture Model (SAM)	1.25.13.11.08
CD 14776-112	SCSI Parallel Interface - 2 (SPI-2)	1.25.13.11.21

4.3. Recommendations for Coordinating Liaison:

None.

4.4. Recommendations for Close Liaison:

None.