T10/01-160r0

Project Proposal
For a New
NCITS Standard

SCSI RDMA Protocol - 2

(SRP-2)

3 May 2001

1. Source of the Proposed Project

1.1. Title: SCSI RDMA Protocol - 2 (SRP-2)

1.2. Date Submitted: 3 May 2001

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:
Remote Direct Memory Access (RDMA) is a feature of some transport protocols like Virtual Interface (VI) and InfiniBand™. This feature allows devices to directly access memory in other devices on a fabric. VI has been mapped to Fibre Channel and other fabrics.

InfiniBand is a trademark and service mark of the InfiniBand Trade Association.

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 NCITS 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):
December 2002.

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 RDMA Protocol – 2 is the next generation of SCSI RDMA protocol.

The following items should be considered for inclusion in SRP-2:

1) support for using multiple channels; and
2) other capabilities that may fit within the general application scope of this project.

3.2. Existing Practice and the Need for a Standard:

The proposed project involves a compatible evolution of the present SCSI RDMA protocol.

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

The nature of the proposed project is to ensure that SCSI RDMA Protocol has an upward, highly compatible growth path. This ensures that current investments in SCSI RDMA Protocol are provided with a stable managed migration path in the face of technological developments.

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 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, and/or ISO/IEC.

4. Related Standards Activities:

4.1. Existing Standards:

ID Number	Title
X3.270:1996	SCSI-3 Architecture Model (SAM)
X3.301-1997	SCSI-3 Primary Commands (SPC)

4.2. Related Standards Activity:

ID Number	Title
T10/1157-D	SCSI Architecture Model - 2 (SAM-2)
T10/1236-D	SCSI Primary Commands - 2 (SPC-2)
T10/1415-D	SCSI RDMA Protocol (SRP)

4.3. Corresponding ISO projects:

ID Number	Title
ISO/IEC 14776	Multipart SCSI standard
ISO/IEC 14776- 411	SCSI-3 Architecture Model (SAM)
ISO/IEC 14776- 311	SCSI-3 Primary Commands (SPC)

4.4. Recommendations for Coordinating Liaison:

None.

4.5. Recommendations for Close Liaison:

InfiniBand Trade Association (IBTA).