

**Project Proposal  
For a New  
X3 Technical Report**

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**Method for a SCSI-3 Generic Packetized Protocol  
(GPP)**

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March 31, 1994

**1 IDENTIFICATION OF PROPOSED PROJECT****1.1 TITLE:** Method for a SCSI-3 Generic Packetized Protocol**1.2 PROPOSER:** X3T10**1.3 DATE SUBMITTED:** May 19, 1994**1.4 PROJECT TYPE:** DT - Development of technical report within X3 TC.**2 JUSTIFICATION OF PROPOSED TECHNICAL REPORT****2.1 NEEDS:**

SCSI is a widely used interface on a variety of peripherals. Some applications require the support of these peripherals in remote locations. In some special circumstances, but not the general case, there is a need for a transport protocol that works with any appropriate physical interface.

**2.2 RECOMMENDED SCOPE OF TECHNICAL REPORT:**

The Generic Packetized Protocol is intended to provide a protocol that can take advantage of multiple physical interfaces in a length-independent manner (e.g. Internet Protocol (IP) environment). The Generic Packetized Protocol encapsulates the SCSI protocol, functions, commands, status, and data requiring minimal services from the physical interface.

Functions which will be considered for incorporation include:

- a) A packet definition to carry essential SCSI information that is independent of the physical interface.
- b) A protocol that operates efficiently and minimizes the impact of lengthy delivery times.
- c) Other capabilities which fit within the scope of the Generic Packetized Protocol that may be proposed during the development phase by the participants in the project.

This proposed technical report will conform to the requirements of the SCSI-3 Architecture Model proposed standard.

**2.3 EXISTING PRACTICE IN AREA OF PROPOSED TECHNICAL REPORT:**

Other efforts exist within X3T10 to broaden the application of SCSI to be transported over specific physical interfaces.

**2.4 EXPECTED STABILITY OF PROPOSED TECHNICAL REPORT WITH RESPECT TO CURRENT AND POTENTIAL TECHNOLOGICAL ADVANCE:**

The nature of the proposed project is to define Generic Packetized Protocol in a manner which provides an alternative definition available to host system manufacturers and peripheral suppliers recognizing that the definition is not the selected SCSI standard.

**3 DESCRIPTION OF PROPOSED PROJECT:**

**3.1 TYPE OF DOCUMENT:** Technical Report.

**3.2 DEFINITION OF CONCEPTS AND SPECIAL TERMS:** None.

**3.3 EXPECTED RELATIONSHIP WITH APPROVED X3 REFERENCE MODELS:**

The Generic Packetized Protocol is for the use of designers of closed systems.

**3.4 RECOMMENDED PROGRAM OF WORK:**

The following program of work is planned for the GPP technical report:

- (1) Solicit participation from members of the storage industry through X3 procedures. Invite comments by end-user organizations and invite proposals from organizations that may have a contribution to a viable GPP technical report.
- (2) Develop a viable GPP technical report.
- (3) Prepare a draft technical report based on proposals submitted and other information gathered during the initial investigation.
- (4) Consider the results of GPP testing as may be available to the committee through the voluntary efforts of the various participants in X3T10.
- (5) Submit the draft proposed technical report to X3 for further processing.

**3.5 RESOURCES - INDIVIDUALS AND ORGANIZATIONS COMPETENT IN SUBJECT MATTER:**

The current membership of X3T10 includes representatives from all parts of the computer industry from semiconductor chip manufacturers to large mainframe system manufacturers as well as Government agencies. The members of X3T10 have expressed their desire to participate and cooperate in the development of this proposed technical report.

There are sufficient resources to complete the development of this technical report without delaying work on technical committee standards.

**3.6 RECOMMENDED X3 DEVELOPMENT TECHNICAL COMMITTEE:**

It is recommended that the development work be done in X3T10.

**3.7 ANTICIPATED FREQUENCY AND DURATION OF MEETINGS:**

X3T10 meets one day bi-monthly. Specific task ad hoc groups are called as may be required for one to three days between regular meetings, but their results are not binding.

**3.8 TARGET DATE FOR DPANS TO X3 (MILESTONE 10):** June 1995**3.9 ESTIMATED USEFUL LIFE OF TECHNICAL REPORT:**

It is anticipated that this technical report will have a life of over 10 years.

**4 IMPLEMENTATION IMPACTS****4.1 IMPACT ON EXISTING USER PRACTICES AND INVESTMENTS:**

The proposed Generic Packetized Protocol technical report will provide a specialized alternative definition which complements existing practices and investments. It is likely that any isolated negative impacts would occur in any case through other non-standard evolution or revolution.

**4.2 IMPACT ON SUPPLIER PRODUCTS AND SUPPORT:**

The proposed Generic Packetized Protocol technical report will provide a specialized alternative definition which complements existing practices and investments. It is likely that any isolated negative impacts would occur in any case through other non-standard evolution or revolution.

**4.3 TECHNIQUES AND COSTS FOR COMPLIANCE VERIFICATION:**

The committee will consider the results of Generic Packetized Protocol testing as may be available to the committee through the voluntary efforts of the various participants in X3T10. 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. As a technical report compliance verification is not applicable.

**4.4 LEGAL CONSIDERATIONS:**

There are no known legal considerations. A call for patents will be made under milestone 7.

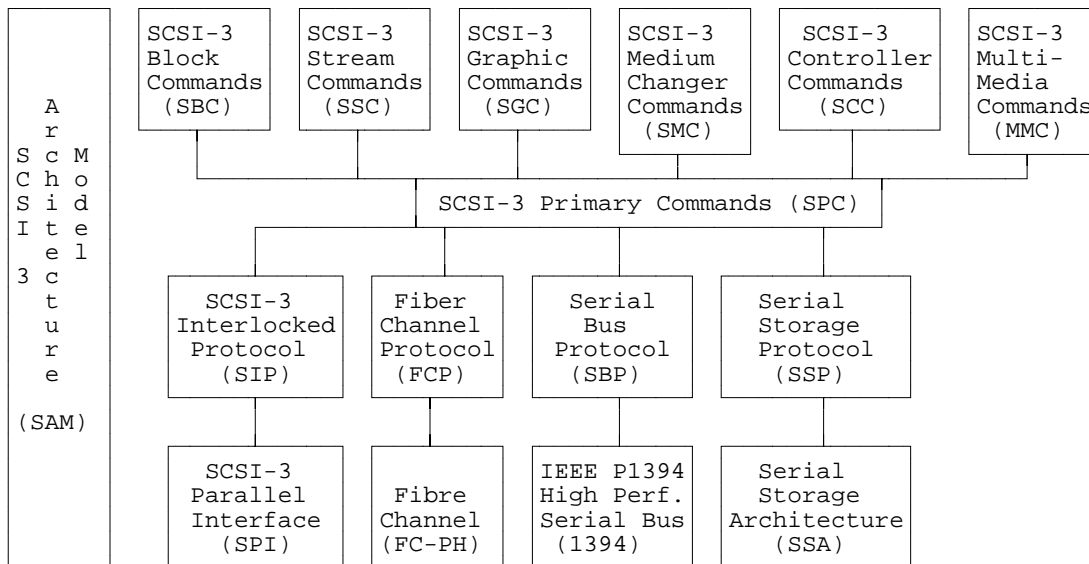
**5 CLOSELY RELATED STANDARDS ACTIVITIES**

This technical report is an alternative definition of extentions and enhancements of SCSI-2 (X3.131-1994) and is related to some of the members of the SCSI-3 family of standards (see 5.2, below).

**5.1 EXISTING STANDARDS: SCSI-2 (X3.131-1994)**

**5.2 X3 STANDARDS DEVELOPMENT PROJECTS:**

The related SCSI-3 family of standards are:



- 5.3 **X3 STUDY GROUPS:** None.
- 5.4 **OTHER RELATED DOMESTIC STANDARDS EFFORTS:** None.
- 5.5 **ISO/IEC JTC 1 STANDARDS DEVELOPMENT PROJECTS:** Not applicable.
- 5.6 **OTHER RELATED INTERNATIONAL STANDARDS DEVELOPMENT PROJECTS:** None.
- 5.7 **RECOMMENDATIONS FOR COORDINATING LIAISON:** None.
- 5.8 **RECOMMENDATIONS FOR CLOSE LIAISON:** None.