

Project Proposal for a new INCITS Standard

Automation/Drive Interface Transport Protocol - 3 (ADT-3)

1 Source of Proposed Project

1.1 Title: Automation/Drive Interface Transport Protocol – 3 (ADT-3)

1.2 Date Submitted: 9 January 2008.

1.3 Proposing Group: INCITS TC T10. Seven T10 members are also INCITS members.

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: none.

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 INCITS 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): January 2010.

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

Automation/Drive Interface Transport Protocol – 3 is the next generation of Automation/Drive Interface Transport Protocol, following ADT and ADT-2.

The following items should be considered for inclusion in ADT-3:

- 1) SAM-4 and SPC-4 compliance, including the addition of log subpages;
- 2) Transport of ADT frames over TCP/IP protocols (iADT);
- 3) Addition of new task management requests;
- 4) Raising the Max ACK Offset during negotiation as the baud rate is lowered; and
- 5) Other capabilities that may fit within the scope of this project.

3.2 Existing Practice and the Need for a Standard

The proposed project involves a compatible evolution of the present ADT-2.

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

This proposed project is intended to provide a more consistent interface between automation devices and removable medium devices. This ensures that investments in such solutions have a stable managed migration path in the face of technological development.

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 INCITS, 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 INCITS, ANSI, and/or ISO/IEC.

4 Related Standards Activities

4.1 Existing Standards:

ID Number	Title
ISO/IEC 14776	Multipart SCSI standard
INCITS 416-2006	Fibre Channel Protocol – 3 (FCP-3)
INCITS 366-2003	SCSI Architecture Model - 2 (SAM-2)
INCITS 402-2005	SCSI Architecture Model - 3 (SAM-3)
INCITS 376-2003	Serial Attached SCSI (SAS)
INCITS 417-2006	Serial Attached SCSI - 1.1 (SAS-1.1)
INCITS 351-2001	SCSI Primary Commands - 2 (SPC-2)
INCITS 408-2005	SCSI Primary Commands - 3 (SPC-3)

4.2 Related Standards Activity

ID Number	Title
T10/1741-D	Automation/Drive Interface Commands – 2 (ADC-2)
T10/1742-D	Automation/Drive Interface Transport Protocol -2 (ADT-2)
T10/1828-D	Fibre Channel Protocol – 4 (FCP-4)
T10/1683-D	SCSI Architecture Model - 4 (SAM-4)
T10/1760-D	Serial Attached SCSI – 2 (SAS-2)
T10/1729-D	SCSI Primary Commands - 4 (SPC-4)

4.3 Recommendations for Close Liaison

None.

5 Units of Measurement used in the Standard

The International System of Units (SI) units will be used.