Project Proposal
For a New
INCITS Standard

Automation/Drive Interface – Commands – 2

(ADC-2)

September 14, 2004

1   Source of the Proposed Project

1.1   Title: Automation/Drive Interface – Commands – 2 (ADC-2)

1.2   Date Submitted: September 14, 2004

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:
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 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, 2006.

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:
Media changer (automation) devices use a private communication link for monitoring and controlling the removable medium data transfer devices (drives) installed in them. The proposed Automation/Drive Interface – Commands – 2 (ADC-2) standard is based on the Automation/Drive Interface – Commands (ADC) draft standard and specifies commands issued by automation devices to the drives. This command set may be implemented on multiple interfaces such as the proposed Automation/Drive Interface – Transport Protocol – 2 (ADT-2) standard.

The following items should be considered for inclusion in ADC-2:
1)   Alignment with SAM-3, SPC-3, and SSC-3.
2)   Passthrough bridging.
3)   Progress indication for operations being performed by a data transfer device.

4) Automation firmware update from a medium in a data transfer device.
5) Support for SAS and iSCSI.
6) Interaction of the VHF Data WRTP bit and WORM media.
7) Other capabilities that may fit within the general application scope of this project.

3.2   Existing Practice and the Need for a Standard:

Presently, each drive vendor has a proprietary protocol for control by media changers. This requires media changer vendors to implement and debug a new protocol when a new drive is integrated, resulting in product introduction delays.

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 provide for growth in the medium changer and stream device product industry. This ensures that current investments in these products will have 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 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
T10/1157-D	SCSI Architecture Model – 2 (SAM-2)
T10/1236-D	SCSI Primary Commands – 2 (SPC-2)
T10/997-D	SCSI-3 Stream Commands (SSC)
T10/1434-D	SCSI Stream Commands – 2 (SSC-2)
T10/1383-D	SCSI Medium Changer Commands – 2 (SMC-2)

4.2   Related Standards Activity:

ID Number	Title
T10/1561-D	SCSI Architectural Model – 3 (SAM-3)
T10/1416-D	SCSI Primary Commands – 3 (SPC-3)
T10/1611-D	SCSI Stream Commands – 3 (SSC-3)
T10/1558-D	Automation/Drive Interface – Commands (ADC)
T10/1557-D	Automation/Drive Interface – Transport Protocol (ADT)

4.3   Corresponding ISO projects:

ID Number	Title
ISO/IEC 14776	Multipart SCSI Standard

4.4   Recommendations for Coordinating Liaison:

None.

4.5   Recommendations for Close Liaison:

None