

Project Proposal to Develop Information Technology – AT Attachment with Packet Interface – 7 (ATA/ATAPI-7)

1 Source of the Project Proposal

1.1 Title

AT Attachment with Packet Interface – 7 (ATA/ATAPI-7)

1.2 Date Submitted

8/24/2001

1.3 Proposer

T13.

2 Process Description for the Proposed Project

2.1 Project Type

Development.

2.2 Type of Document

Standard.

2.3 Definition of Concepts and Special Terms

The terms are industry standard.

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

The standard addresses closed systems and has no relationship to NCITS Reference Models.

2.5 Recommended NCITS Development Technical Committee

T13.

2.6 Anticipated Frequency and Duration of Meetings

T13 presently meets up to six times per year and authorizes ad hoc meetings as warranted for the needs of the projects. It is anticipated that these meetings are adequate to address this standard among the other agenda items for these meetings.

2.7 Target Date for Initial Public Review (Milestone 4)

December 2002.

2.8 Estimated Useful Life of Standard

10 years or more.

3 Business Case for Developing the Proposed Standard

3.1 Description

Development of an enhanced AT Attachment Interface between host systems and storage devices providing a common attachment interface for systems manufacturers, systems integrators, software suppliers, and suppliers of intelligent storage devices.

Anticipated enhancements include clarification of termination issues, extended sector sizes, extended cable lengths, command integrity checking, implementation guidelines for 48-bit addressing, and other enhancements that industry may propose for the family of ATA/ATAPI products that are amenable to the standard architecture. It is also intended that the standard will be published in two volumes to provide better ease of use.

3.2 Existing Practice and the Need for a Standard

The proposed project involves evolutionary expansion of the present ATA/ATAPI-6 standard. The ATA/ATAPI-5 interface is widely utilized in high volume computer based systems and the ATA/ATAPI-6 is emerging rapidly. There is continuing need to enhance the ATA/ATAPI interface definition while maintaining a high degree of compatibility with previous versions of the standard. The nature of the proposed project is to ensure that ATA/ATAPI has an upward, highly compatible growth path. This will ensure that current investments in ATA/ATAPI are provided with more stability in the face of technological developments.

3.3 Implementation Impacts of the Standard

3.3.1 Development Costs

All costs are borne by the organizations of the participants and have for the most part been an adjunct of their normal development costs. Specific costs are considered by the participants to be proprietary.

3.3.2 Impact on Existing or Potential Markets

The contemplated enhancements for ATA/ATAPI-7 are considered essential for the continued growth of the low end segment of the storage market and to the expansion into the consumer storage segment.

3.3.3 Costs and Methods for Conformity Assessment

The committee will consider the results of ATA/ATAPI-7 testing as may be available to the committee through the voluntary efforts of the participants in T13. With this method all costs are borne by the organizations of the various participants and have for the most part been an adjunct of their normal development costs. Specific costs are considered by the participants to be proprietary.

3.3.4 Return on Investment

The return on investment is considered to be high. Specific ROI for each organization is considered by the participants to be proprietary.

3.4 Legal Considerations

3.4.1 Patent Assertions

Some definitions in ATA/ATAPI-4, -5 and -6 were declared to be covered by patents for which the patent holder provided statements of willingness to license under terms complying with the ANSI patent policy. Those definitions are expected to be included in ATA/ATAPI-7. Beyond that T13 will make regular calls for patents in the meetings addressing the standard.

3.4.2 Dissemination of the Standard

Drafts of this standard will be disseminated electronically. Dissemination of the final standard will be restricted as the document becomes the property of NCITS or ANSI. T13 is not aware of any IPR assertions that will hinder this distribution.

4 Related Standards Activities

4.1 Existing Standards

X3.298:1997 AT Attachment – 3 (ATA-3), NCITS 317-1998 AT Attachment with Packet Extensions (ATA/ATAPI-4), NCITS 340-2000 AT Attachment with Packet Interface (ATA/ATAPI-5), and NCITS 333-2000 Multimedia Commands – 2 (MMC-2).

4.2 Related Standards Activity

T13/1410D AT Attachment with Packet Interface – 6 (ATA/ATAPI-6) and T10/1363D Multimedia Commands – 3 (MMC-3).

4.3 Recommendations for Coordinating Liaison

None.

4.4 Recommendations for Close Liaison

NCITS T10.