Project Proposal
For a New
INCITS Standard

SCSI Enclosure Services - 2

(SES-2)

14 March 2002
1. Source of the Proposed Project

1.1. Title: SCSI Enclosure Services - 2 (SES-2)

1.2. Date Submitted: 14 March 2002

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 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 2003.

2.8. Estimated Useful Life of Standard or Technical Report:
5 Years

3.1. Description:
The SCSI Enclosure Services – 2 is the next generation of SCSI Enclosure Services command set.

The following items should be considered for inclusion in SES-2:
1) incorporation of SES Amendment #1;
2) support for protocol-specific device elements for the enclosure status page;
3) add a way to report that an enclosure services device is busy;
4) define vendor-specific diagnostic pages for enclosure services devices accessed via other devices;
5) add visual identification control bits for each element type;
6) add a way to report why the invalid operation requested bit is set; and
7) 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 Enclosure Services command set to correct errors, support new SCSI protocols, and provide new capabilities.

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 Enclosure Services has an upward, highly compatible growth path. This ensures that current investments in SCSI Enclosure Services 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 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:

<table>
<thead>
<tr>
<th>ID Number</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>X3.270:1996</td>
<td>SCSI-3 Architecture Model (SAM)</td>
</tr>
<tr>
<td>X3.301-1997</td>
<td>SCSI-3 Primary Commands (SPC)</td>
</tr>
<tr>
<td>NCITS.305:1998</td>
<td>SCSI-3 Enclosure Services (SES)</td>
</tr>
<tr>
<td>NCITS 308.1998/AM1:2000</td>
<td>SCSI-3 Enclosure Services Amendment 1</td>
</tr>
</tbody>
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4.2. Related Standards Activity:

<table>
<thead>
<tr>
<th>ID Number</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>T10/1157-D</td>
<td>SCSI Architecture Model - 2 (SAM-2)</td>
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<tr>
<td>T10/1236-D</td>
<td>SCSI Primary Commands - 2 (SPC-2)</td>
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<tr>
<td>T10/1416-D</td>
<td>SCSI Primary Commands - 3 (SPC-3)</td>
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4.3. Corresponding ISO projects:

<table>
<thead>
<tr>
<th>ID Number</th>
<th>Title</th>
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<tbody>
<tr>
<td>ISO/IEC 14776</td>
<td>Multipart SCSI standard</td>
</tr>
<tr>
<td>ISO/IEC 14776-411</td>
<td>SCSI-3 Architecture Model (SAM)</td>
</tr>
<tr>
<td>ISO/IEC 14776-311</td>
<td>SCSI-3 Primary Commands (SPC)</td>
</tr>
<tr>
<td>ISO/IEC 14776-371</td>
<td>SCSI-3 Enclosure Services (SES)</td>
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4.5. Recommendations for Close Liaison:

None.