### Proposal for a new work item on

**Title:** Information technology --- SCSI, Serial Attached SCSI (SAS)

#### PROPOSAL FOR A NEW WORK ITEM

Date of presentation of proposal: 2002-11-10	Proposer: SC25
Secretariat: Germany(DIN)	ISO/IEC JTC 1 / SC 25 N

A **proposal for a new work item** shall be submitted to the secretariat of the Subcommittee of ISO/IEC joint technical committee 1 concerned with a copy to the secretariat of ISO/IEC JTC1 and to the ISO Central Secretariat. **Presentation of the proposal** - to be completed by the proposer Guidelines for proposing and justifying a new work item are given in ISO Guide 26.

# **Title ISO/IEC: INFORMATION TECHNOLOGY -** SCSI, Serial Attached SCSI (SAS)

**Scope:** The Serial Attached SCSI is a new physical transport for SCSI intended to focus on new configurations that traditionally use the parallel SCSI transport. It will use serial point-to-point links. Expanders may be used to fan out to multiple devices. A goal of this project is to facilitate the development of systems that can include either Serial Attached SCSI devices or Serial ATA devices. Serial Attached SCSI will:

- 1) define the physical interconnect to support multiple transfer rates (e.g., 1.5 Gbit/sec, 3.0 Gbit/sec);
- 2) define the layers to support attaching Serial ATA devices to multi-mode Serial Attached SCSI / Serial ATA systems;
- 3) define key expander interoperability features (address assignment, contention resolution, etc.);
- 4) define a SAM-compliant protocol layer to support multiple SCSI initiators and multiple SCSI targets:
- 5) define other capabilities that may fit within the general application scope of this project.

#### Purpose and justification:

Current enterprise class storage devices typically use either the parallel SCSI interface (SPI-n) for configurations of up to 15 devices or Fibre Channel for much larger configurations. As the signaling rates increase, the electrical limitations of the parallel SCSI multi-drop bus are becoming more problematic. A low-cost serial point-to-point topology with inexpensive expander devices is necessary to support the market currently addressed by parallel SCSI.

Programme of work: If the proposed new work item is approved, which of the following document(s)is (are) expected to be developed?

\_X\_\_ a single International Standard more than one International Standard

Relevant documents to be considered: Small Computer System SCSI, Serial Attached SCSI (SAS), available now.

Cooperation and liaison: None.

eparatory work offered with target date(s): Small Computer System Interface (SCSI) Serial tached SCSI (SAS), available now.				
gnature:				
		thority be required?NoAre Does the proposed standard concern		
omments with respect to the proposed is proposed to assign this ne		recommendations thereon: /SC 25 as project 1.25.13.13.nn .		
ting on the proposal - Each P-n thin the time limits laid dow		O/IEC JTC 1/SC 25 has an obligation to vote		
te of circulation: Closing	osing date for voting: Signature			
NEW WORK ITEM PROPOSAL - PROJECT ACCEPTANCECRITER A				
Criterion	Validity	Explanation		
A Business Requirement				
A.1 Market Requirement	Essential _X Desirable Supportive	The SCSI interface is widely available on PC, server, and multimedia devices.		
A.2 Regulatory Context	Essential DesirableX_ Supportive Not Relevant			
B. Related Work				
B.1 Completion/Maintenance of current standards	Yes NoX_			
B.2 Commitment to other organization	Yes NoX_			

B.3 Other Source of standards	Yes NoX_	
C. Technical Status		
C.1 Mature Technology	Yes _X_ No	The technology for SCSI is mature.
C.2 Prospective Technology	Yes NoX_	The standard is needed now.
C.3 Models/Tools	Yes NoX_	
D. Conformity Assessment and Interoperability		
D.1 Conformity Assessment	Yes NoX_	
D.2 Interoperability	Yes _X No	If standard approved as this is the prime objective.
E. Other Justification		

#### Notes to Proforma

- **A. Business Relevance.** That which identifies market place relevance in terms of what problem is being solved and or need being addressed.
- A.1. Market Requirement. When submitting a NP, the proposer shall identify the nature of the Market Requirement, assessing the extent to which it is essential, desirable or merely supportive of some other project.
- A.2 Technical Regulation. If a Regulatory requirement is deemed to exist- e.g. for an area of public concern e.g. Information Security, Data protection, potentially leading to regulatory/public interest action based on the use of this voluntary international standard the proposer shall identify this here.
- **B. Related Work.** Aspects of the relationship of this NP to other areas of standardization work shall be identified in this section.

- B.1 Competition/Maintenance. If this NP is concerned with completing or maintaining existing standards, those concerned shall be identified here.
- B.2 External Commitment. Groups, bodies, or for a external to JTC1 to which a commitment has been made by JTC for cooperation and or collaboration on this NP shall be identified here.
- B.3 External Std/Specification. If other activities creating standards or specifications in this topic area are known to exist or be planned, and which might be available to JTC1 as PAS, they shall be identified here.
- **C. Technical Status.** The proposer shall indicate here an assessment of the extent to which the proposed standard is supported by current technology.
- C.1 Mature Technology. Indicate here the extent to which the technology is reasonably stable and ripe for standardization.
- C.2 Prospective Technology. If the NP is anticipatory in nature based on expected or forecasted need, this shall be indicated here.
- C.3 Models/Tools. If the NP relates to the creation of supportive reference models or tools, this shall be indicated here.
- D. Any other aspects of background information justifying this NP shall be indicated here.

## **D.** Conformity Assessment and Interoperability

- D.1 Indicate here if Conformity Assessment is relevant to your project. If so, indicate how it is addressed in your project plan.
- D.2 Indicate here if Interoperability is relevant to your project. If so, indicate how it is addressed in your project plan.