

X3T10/96-128 RØ



ISO/IEC JTC 1 N 3862

Date: 1996-01-15

Enclosure to JT/96-0028 - J

**ISO/IEC JTC 1
INFORMATION TECHNOLOGY
Secretariat: U.S.A. (ANSI)**

TITLE: Proposal for a New Work Item: SCSI Specifications for Optical Memory Card Reader/Writer

SOURCE: Secretariat, ISO/IEC JTC 1/SC 17

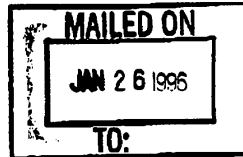
PROJECT: -

STATUS: New Work Item which, if approved, will be assigned to SC 17 for development.

REQUESTED ACTION: Please complete the enclosed letter ballot and return it to the JTC 1 Secretariat no later 30 April 1996.

Comments should be submitted to the Secretariat in electronic format (via email or diskette).

DISTRIBUTION: P and L Members
SC 17 Secretariat



C. Dyball, X3D10 Chair
A. Leah, X3B10 TR

Address Reply to:
Secretariat - ISO/IEC JTC1- American National Standards Institute, 11 West 42nd Street, NY, NY 10036
Telephone: 212 642 4832; Facsimile: 212 398 0023; e-mail: irsjche1@ansi.org



PROPOSAL FOR A NEW WORK ITEM	
Date of presentation of proposal 15 January 1996	Proposer ISO/IEC JTC1/SC 17
Secretariat APACS for BSI	ISO/IEC JTC 1 SC17

A proposal for a new work item shall be submitted to the secretariat of the ISO/IEC joint technical committee concerned with a copy 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 28. For ease of reference an extract is given overleaf.

Title (subject to be covered and type of standard, e.g. terminology, method of test, performance requirements, etc.) SCSI Specifications for Optical Memory Card Reader/Writer					
Scope (and field of application) A subset of commands of SCRT interface used for optical memory card reader/writer taking program interface into consideration.					
Purpose and justification - attach a separate page as annex, if necessary Make programming interface for optical memory card reader/writer units uniquely defined independently from reader/writer unit vendors.					
Programme of work If the proposed new work item is approved, which of the following document(s) is (are) expected to be developed? <input type="checkbox"/> a single Annex in an International Standard <input type="checkbox"/> more than one International Standard (expected number:) <input type="checkbox"/> a multi-part International Standard consisting of parts <input checked="" type="checkbox"/> an addendum or addenda to the following International Standard(s) ..ISO/IEC 9316. <input type="checkbox"/> a technical report, type					
Relevant documents to be considered ISO/IEC 11693, ISO/TRC 11694, ISO/IEC 9316.					
Co-operation and liaison SC 25/WG 4					
Preparatory work offered with target date(s) 31 July 1996	Signature				
Will the services of a maintenance agency or registration authority be required? If yes, have you identified a potential candidate? If yes, indicate name	<table border="1"> <tr> <td>yes</td> <td>no</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> </table>	yes	no	<input type="checkbox"/>	<input checked="" type="checkbox"/>
yes	no				
<input type="checkbox"/>	<input checked="" type="checkbox"/>				
Are there any known requirements for coding? If yes, please specify on a separate page	<table border="1"> <tr> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> </table>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
<input type="checkbox"/>	<input checked="" type="checkbox"/>				
Does the proposed standard concern known patented items? If yes, please provide full information in an annex	<table border="1"> <tr> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> </table>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
<input type="checkbox"/>	<input checked="" type="checkbox"/>				
Comments and recommendations of the JTC secretariat - attach a separate page as annex, if necessary					
Comments with respect to the proposal in general, and recommendations thereon It is proposed to assign this new item to SC 17/WG 8					

Voting on the proposal

Each P-member of the ISO/IEC joint technical committee has an obligation to vote within the time limits laid down (normally three months after the date of circulation)

Date of circulation	Closing date for voting	Signature of JTC secretary
1996-01-15	1996-04-30	Lisa A. Rajchel

PROPOSAL FOR NEW WORK ITEM**TITLE:**

Identification cards & related devices - SCSI specifications for optical memory card reader/writer

SCOPE:

This NWI will define the command specifications which are part of the user interface between the Optical Memory Card Reader/Writer (hereafter OMC R/W) and its controlling host computer. The command specifications are to be compliant with the SCSI standard.

PURPOSE AND JUSTIFICATION:

Standards for the Optical Memory Card itself are now established, and OMC R/Ws have already been marketed by several companies; however, OMC R/W user interface specifications have yet to be standardised. To date, OMC R/W user interface specifications are vendor specific and are incompatible at the command level. Consequently, an application program built for a particular OMC R/W has to be modified for other OMC models. Moreover, the lack of command compatibility is seen as a disadvantage by users, which is likely to prevent the widespread take-up of OMCs by the market. Users therefore, request that application programs must be capable of supporting multiple vendors' OMC R/Ws without modification.

In order to implement command compatibility, it is necessary to specify the user interface specifications between any OMC R/W and its controlling host computer. One way of doing this is to leave the specification to the manufacturers. They would then describe driver/library specifications to access their OMC R/W from any application programs. However, this approach has the following shortcomings:

- It would be necessary to prepare a driver/library for each vendor's OMC R/W.
- When the OMC R/W is replaced by a different model, its corresponding driver/library would have to be installed.
- It would be difficult to produce one common driver/library able to connect/control multiple vendors' OMC R/Ws. Even if such a driver/library were produced, newly developed OMC R/Ws may not be supported as they are likely to require new or unsupported commands.

The above problems can be overcome by standardising a SCSI command specification for OMC R/Ws. By creating such a standard, it is reasonable to expect that a standardised access library including BIOS, would become available for OMC R/Ws. Such a standard would thus be attractive to both vendors of drivers and users alike. This NWI will produce the SCSI command specifications for OMC R/Ws, to form the basis of the user interface specification. From this:

- It would be possible to create one driver/library to control all OMC R/W regardless of the vendor.
- Specific OMC R/Ws do not require the installation of their own driver/library.
- The driver/library can control a newly developed OMC R/W regardless of whether it was catered for or not at the time of developing the driver/library.

In order to standardise OMC R/W command specifications, it is desirable to choose the optimum command specifications from among the available interface specifications.

Choosing any new or unique specification would lack compatibility with existing conventional technology. This NWI aims to produce a command specification based on SCSI for the following reasons:

- All OMC R/W providers support SCSI.
- SCSI is the standard interface supported by the computer and peripherals industry.
- When the logical block accessing mode is employed (as described by SCSI) the user interface is independent of the OMC format and recording method used.

The SCSI standard is extremely flexible and provides for a wide range of user options, including vendor specific if required. Consequently, SCSI compliant specifications are not required to be identical and can vary from each other. For example, to read data from an OMC sector, either a vendor specific Read Data command or a standardised Read command could be used, both of which are compliant with the SCSI standard. Although SCSI is already standardised, an OMC R/W command compliant with SCSI has yet to be standardised in any uniform manner.

This NWI would specify the command specifications based on the SCSI standard which every OMC R/W should commonly support. However, vendors would not be prevented from implementing other commands outside of those specified by this NWI.

Additionally, data access via SCSI normally employs a fixed block size. Optical Memory Cards are capable of supporting various sector sizes. This NWI will specify a method to select the appropriate block size for the OMC R/W and OMC card being used.