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FOREWORD

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International Standard ISO/IEC 14165-521 was prepared by subcommittee 25: Interconnection of information technology equipment, of ISO/IEC joint technical committee 1: Information technology.

The list of all currently available parts of the ISO/IEC 14165 series, under the general title *Information technology - Fibre channel,* can be found on the IEC web site.

This International Standard has been approved by vote of the member bodies and the voting results may be obtained from the address given on the second title page.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

INTRODUCTION

This International Standard defines an application programming interface (API) by which a storage application may perform the functions of one or more SCSI Targets or Initiators, and control high-performance command/data forwarding and manipulation facilities.

INFORMATION TECHNOLOGY – FIBRE CHANNEL –

Part 521: Fabric application interface standard (FAIS)

1 Scope

This part of ISO/IEC 14165 describes a set of functions and data structures in the C language abstracting the details of the FAIS_Platform from the implementation of a storage management application.

This standard defines an API only in the C language. Functionally equivalent APIs may be implemented in other languages but these are beyond the scope of this part of ISO/IEC 14165. All functions provided to operate with function specifications defined in this standard shall use C-style calling conventions. This constraint does not limit the internal implementation of components of a FAIS_Provider.

Unless specified otherwise in this standard, data structures and elements shall be stored in memory as determined by the local machine, operating system and C compiler.

This standard provides declarations for all data structures that it requires. Although these declarations may, in common practice, be combined into a C header file, this is not required by this standard.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document, including any amendments, applies.

The provisions of the referenced specifications other than ISO/IEC, IEC, ISO and ITU documents, as identified in this clause, are valid within the context of this International Standard. The reference to such a specification within this International Standard does not give it any further status within ISO or IEC. In particular, it does not give the referenced specification the status of an International Standard.

ISO/IEC 9899:1999, *Programming languages – C*

ISO/IEC 10646:2003, *Information technology - Universal Multiple-Octet Coded Character Set (UCS)*

ANSI INCITS 408-2005, *Information technology – Fibre Channel – Framing and Signaling-2 (FC-FS-2)*

ISO/IEC 14776-453, *Information technology – Small computer system interface (SCSI) – Part* 453: *SCSI Primary Commands-3 (SPC-3)* [ANSI INCITS 408-2005]

ISO/IEC 19501: *Information technology – Open distributed processing – Unified modeling language (UML), Version 1.4.2*

NOTE For more information on UML specifications, contact the Object Modeling Group at http://www.omg.org.

INCITS Project 1828-D: *Fibre Channel Protocol for SCSI, Fourth Version (FCP-4)*

RFC 791, *Internet Protocol*

RFC 2279, *UTF-8, a transformation format of ISO 10646*

RFC 2460, *Internet Protocol, Version 6 (IPv6)*

RFC 3720, *Internet Small Computer Systems Interface (iSCSI)*