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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 12500-2008

Replacing GB/T 12500-1990

**Information technology -- Open systems interconnection --
Protocol for providing the connection-mode transport service**

信息技术 开放系统互连 提供连接方式运输服务的协议

(English Translation)

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Foreword

This standard is equivalent to using ISO/IEC 8073:1997 "Information technology - OSI provides connectivity transport services agreement" and its amendment ISO/IEC 8073:1997/Amd1.1998, this standard of international standards were necessary editorial changes.

Amendment ISO/IEC 8073:1997/Amd1.1998 standard text table 6,12.2.3.2,14.2,14.3,14.4, C. 6.2 C. 9.3, C. 9.4, C. 9.5 and C. Chapter 10 has been modified, the corresponding provisions on the right of use "|" mark.

GB/T 12500-1990 reference to ISO 8073. 1986 and the development of this standard is GB/T 12500-1990 of revision. I State has not established international standards 2nd Edition and 3rd Edition corresponding national standards.

This standard and GB/T 12500-1990 compared to the main changes are as follows.

- Change standard entitled "Information Technology OSI protocol that provides connectivity transport services";
- This standard does not divide the contents of articles, the previous version of the standard is divided into three;
- The standard text added connectionless mode network service technology content;
- Appendix A of this standard increases the content connectionless mode network service;
- This standard adds Appendix B Network Connection Management content of the agreement;
- This standard adds content Appendix CPICS proforma;
- Appendix D of this standard checksum algorithm using the original criteria in Appendix B;
- This standard adds content to run 4 Appendix E classes in connection mode and connectionless-mode network service state table.

Appendix A, Appendix B, Appendix C, Appendix D and Appendix E is a normative appendix.

This standard by the National Information Technology Standardization Technical Committee and centralized.

This standard was drafted. China Electronics Standardization Institute.

Introduction

This standard is intended to facilitate the interconnection of information processing systems and one of a group of standard-setting. This group includes standard interconnect to accomplish this Seeking services and protocols.

Layers and other relevant standards in accordance with the Open Systems Interconnection Basic Reference Model (GB/T 9387.1) is defined to determine the transport protocol standards s position. This standard and transport service standards (GB/T 12453) most closely and impose within its scope of application. It also uses and reference Test Web services standards (in front of the national reference standards GB/T 15126), in order to achieve the objectives of transport protocol. These standards the relationship between the Figure 1.

Fig.1 Transport Agreement between the adjacent service

This standard specifies the encoding and all kinds of public transport protocol procedures for a variety of different quality of network services.

This standard is intended to strive to make the transport protocol simple and universal enough to adapt to all possible network quality of service, but do not limit future expansion Charge.

This Agreement will be divided into several categories protocol is to minimize incompatibility and reduce costs to achieve.

According to the service quality of transport services and network services to provide two sessions interconnected entities required to select the protocol type (in order to improve service Quality of service for each type of agreement offers different feature sets).

This standard defines the mechanism used to optimize network charges and improve the quality of the following services.

- a) different throughput;
- b) a different error rate;
- c) data integrity requirements;
- d) reliability requirements.

This standard neither requires a specific implementation uses all of these mechanisms, nor the provisions obtained by the measurement methods and the quality of service in the service After downgrading the quality criteria to decide when to release the transport connection.

The main objective of this standard is to provide a set of communication rules, a number of provisions which set of communication rules when communicating peer entities executed Cheng expressed. These communication rules are designed to provide a solid foundation for the development of these various uses, namely.

- a) as a guide to designers and implementers;
- b) when testing and procurement for equipment use;
- c) As part of the agreement permit system access open systems environment;
- d) to deepen the understanding of OSI.

Due to expect of this standard will be the first user equipment designers and implementers, so that it contains in its realization marked notes or appendices Registration various procedures guidance.

It should be noted that, due to the large number of valid protocol sequences, so use the current technology to verify a concrete realization of energy in any environment Proper implementation of the standards required by the agreement is not possible. However, through testing, it is believed that a positive implementation in a typical environment Ensure the implementation of this agreement. However, when two concrete realization can not communicate, this is the standard used to determine which one or both parties have not executed correctly Line Protocol.

GB/T 12500-2008/ISO/IEC 8073:1997 There is a standard in this Conformance Statement about the implementation of this standard procedures for each device. In order to verify the consistency of a particular implementation, there are Necessary capabilities and options given OSI protocol implementations declared. Such a statement is called a Protocol Implementation Conformance Statement (PICS). Attached Appendix C provides the PICS proforma. Pay attention to the fact that the standard does not contain any proof of the consistency of the test.

This standard available variants and options for a variety of network quality of service in the provision of transport services for a wide range of applications is essential of. Thus, to achieve a specific minimum comply with the agreement will be unsuitable for use in all possible environments. Thus, to provide or require A provision of the intended use of the option or predetermined or to limit all references to this standard is important.

GB/T 12500-2008/ISO/IEC 8073:1997 Information technology - OSI Providing connectivity transport services agreement

1 Scope

This standard specifies.

a) run on five network service connection procedure.

1) Class 0. Simple;

2) Class 1. basic error recovery class;

3) Class 2. Multiplexing Class;

4) Class 3. error recovery and multiplexing class;

5) Class 4. error detection and recovery class.

This procedure is for the five transport from one entity to the peer transport entity transferring connection data and control information provided.

b) running on a connectionless mode network service for a class of procedures (Category 4);

c) negotiation method of transport protocol used by the entity class;

d) for transmitting data and control information of transport protocol data unit structure and coding.

Each protocol is defined from the following aspects.

i) the interaction between peer transport entities through the exchange of transport protocol data units;

ii) in the same system, transportation between the entity and the transport service user to interact through the exchange of transport service primitives conducted;

The interaction between transport entities and network service provider through the exchange of network service primitives of iii).

These procedures are in the body of this standard specified in Appendix A of the table in a state standard is complemented.

These procedures apply to support the OSI reference model transport layer between hope and in an open system environment are interconnected communication Instance.

Chapter 14 specifies conformance requirements for system implementation of these procedures, and provides the PICS proforma to meet these requirements related to its Guidance is consistent with ISO/IEC 9646-2 given. It does not contain this consistency can be used to verify the test.