

ICS 35.100.30

CCS L 78



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

**GB/T 16974-2009**

Replacing GB/T 16974-1997

---

**Information technology -- Data communications -- X.25 Packet  
Layer Protocol for Data Terminal Equipment**

信息技术 数据通信 数据终端设备用X.25包层协议

**(English Translation)**

**Issued on: September 30, 2009**

**Implemented on: December 1, 2009**

---

**Issued by: General Administration of Quality Supervision, Inspection and  
Quarantine of the People's Republic of China**

## Table of Contents

Preface

### Foreword

This standard is equivalent to ISO/IEC 8208.:2000 "Information technology data communication data terminal equipment X. 25 cladding agreement "(English version).

This standard replaces GB/T 16974-1997 "Information technology data communication data terminal equipment X. 25 cladding agreement ".

This standard compared with GB/T 16974-1997, the main changes are as follows.

a) Increased the module extension number of the module 32768, which includes.

- new module 32768 operation of the package format;
- When using modulo 32768 operation, a protocol identifier field is used;
- a new super-extended packet sequence number facility;
- modified non-standard default window size facilities;
- modify the flow control parameters negotiation facility.

b) Expanded A bit = 1 (TOA/NPI addressing) Performance.

- Added support for A bit = 1 addressing address type and numbering scheme;
- Expanded use of A bit = 1 addressing in call setup and purge packets;
- Added TOA/NPI address reservation facility;
- Expanded performance in alternative addressing related facilities;

Added diagnostic code # 46.

c) Modifications associated with the online facility registration facility.

- indicate X. 251996 version of the online registration facility was deleted;
- Increased the ability of the online facility registration facility to modulate the non-standard default window size for modulo 32768 operations.

Appendix A and B of this standard are normative and Appendix C, Appendix D is an informative appendix.

This standard is proposed and centralized by the National Information Standardization

Technical Committee.

The drafting unit of this standard. China Electronic Technology Standardization Institute.

## 1 Scope

This standard specifies that the data terminal equipment (DTE) operation is in accordance with ITU-TX. 25 of the cladding procedures, formats and facilities. include Virtual call and permanent virtual circuit two modes of operation.

The standard protocol can be used for open system interconnection (OSI) and non-OSI. When used in OSI context, package Layer protocol package in the OSI reference model of the network layer, that is, GB/T 9387.1-1998.

When accessed by means of a dedicated path or circuit switched connection to ITU-TX. 25 of the public or private packet switching network when this standard package the DTE operation on the cladding. This standard also includes two DTEs conforming to this standard, via dedicated paths, circuit switched connections, or local area networks (LAN) direct communication (without packet switching network intervention) necessary additional packet procedures.

This standard also includes the use of ITU-TX. 25 is connected to the packet-switched public data network and can also provide X for the DTE. 25 interface Use the network (see Appendix A).

In order to assess the consistency of a particular implementation, there is a need for those capabilities and options that are fulfilled. This statement is called "agreement to achieve one." (PICS), as defined in ISO/IEC 9646-7.:1997, is defined in ISO/IEC 9646-7.:1997.

Record B provides a PICS form.

The first edition of the corresponding international standard was based on 1984CCITT X. 25 of the Redbooks are based on the text, also included with the early 1980 CCITT X. 25 of the Yellow Book is compatible with the necessary terms. The second edition is based on 1988CCITT X. 25 of the Blue Book text is based, the third edition is based on X. 25 of the 1993 version is based on the four edition is X. 25 of the 1996 edition. Which includes the 1988, 1984 and 1980 X. 25 version compatible with the necessary terms. Differences between the different versions of this standard are summarized in Appendix C.

It should be noted that when used in DTE, this standard is compatible with ITU-TX. 25 is not the same. This standard contains ITU-TX. 25 on the DTE specification. In addition, this standard also includes DTE to DTE to work between DTE and DTE Additional specification. This broader scope of application must be recognized in the application of this standard.

## 2 Normative reference documents

The terms of the following documents are hereby incorporated by reference into this standard. Whichever is the date of the reference file, which is followed by all (Excluding corrigenda) or revisions do not apply to this standard, however, encourage the parties to reach an agreement under this standard Whether you can use the latest version of these files. For undated references, the latest edition applies to this standard.

### 2.1 Equivalent to international standards

GB/T 9387.1-1998 Information technology - Open systems interconnection - Basic reference model - Part 1. Basic model (idt ISO/IEC 7498-1.:1994) Information technology - Open systems interconnection - Network service definition (ISO/IEC 8348.:2002, IDT) GB/T 15126-2008 GB/T 16966-1997 Information technology Packet-based devices connected to the Integrated Services Digital Network (ISDN) provide OSI connectivity Network service (idt ISO/IEC 9574.:1992) Information technology - Open systems interconnection - Data link service definition (idt ISO/IEC 8886.:1996) GB/T 17547-1998 GB/T 17963-2000 Information technology Open systems Interconnection Network layer security protocol (idt ISO/IEC 11577.:1995) ISO/IEC TR9577.:1999 Information technology - Network - level protocol identification ISO/IEC 10588.:1993 Information technology and X. 21/X. 21bis combine to provide OSI connection to the network service X. 25 the use of the cladding protocol GB/T 16974-2009/ISO/IEC 8208.:2000