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

GB/T 11589-2011

Replacing GB/T 11589-1999

**International user classes of service in, and categories of
access to, public data networks and integrated services digital
networks (ISDNs)**

公用数据网和综合业务数字网(ISDN)的国际用户业务类别和接入种类
(English Translation)

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Foreword

This standard is based on the rules of GB/T 1.1-2009.

This standard replaces the international user service category of GB/T 11589-1999 "public data network and integrated services digital network (ISDN) Into the species ".

This standard and GB/T 11589-1999 compared to the main changes are as follows.

In Table 10 of Chapter 5, "Access Frame Relay Data Transmission Service", the "B-ISDN Access FRDTS" content.

--- In accordance with the provisions of GB/T 1.1-2009 "table should not contain the requirements", without affecting the meaning of the original table on the basis of changes for the footnote of the table.

This standard uses translation methods to use ITU-TX.1..2000 "international users of the Common Data Network and Integrated Services Digital Network (ISDN) Business category and access type "(English version).

And the normative reference in this standard international documents are consistent with the relationship between China's documents are as follows.

--- GB/T 3382.1 Documentation of the three types of machines in the telephone network in the interoperability of technical conditions Part 1. for the transmission of documents three Standardization of facsimile terminals (GB/T 3382.1-2003, ITU-TT.4..1996, IDT);

--- GB/T 3382.2 document fax three types of machines in the telephone network interoperability technical conditions Part 2. in the public telephone exchange network (GB/T 3382.2-2003, ITU-TT.30..1996, IDT);

--- GB/T 11590 international data transmission services and optional user facilities for public data networks and ISDN networks (GB/T 11590-2011, ITU-TX.2..2000, IDT);

GB/T 11591 Assembly and Assembly (PAD) facilities in the public data network (GB/T 11591-2011, ITU-TX.3..2000, IDT);

--- GB/T 11592 Common data The data terminal equipment (DTE) and the data circuit terminating device used for the start/stop transmission service (DCE) (GB/T 11592-2011, ITU-TX.20. 1988, IDT);

--- GB/T 11593 Common data Synchronous work between the data terminal equipment (DTE) and the data circuit terminating device (DCE) (GB/T 11593-2001, idtITU-TX.21..1992);

--- GB/T 11595 Dedicated circuit connected to the public data network packet data terminal equipment (DTE) and the end of the data circuit Interface (DCE) interface (GB/T 11595-1999, idtITU-TX.25..1996);

--- GB/T 11596 start-stop data terminal into the national public data network packet assembly and disassembly (PAD) facilities DCE/DTE (GB/T 11596-1999, idtITU-TX.28..1997);

--- GB/T 11599 Data terminal equipment (DTE) interface with synchronous V-series modem interface on common data network (GB/T 11599-2009, ITU-TX.21bis. 1988, IDT);

--- GB/T 11600 Data terminal equipment (DTE) interface with asynchronous duplex V series modem interface on public data network Usage (GB/T 11600-2009, ITU-TX.20bis. 1988, IDT);

--- GB/T 17801-1999 via public switched telephone network or integrated service digital network or circuit switched public data network access group Exchange interface between a packetized data terminal equipment (DTE) and a data circuit terminating device (DCE) of a public data network (GB/T 17801-1999, ITU-TX.32..1996, IDT);

--- YD/T 891 Data terminal equipment for public data network providing frame relay data transmission service through dedicated circuit (DTD) and the data circuit terminating device (DCE) (YD/T 891-1997, ITU-TX.36..1996, IDT).

This standard is proposed by the Ministry of Industry and Information Technology of the People's Republic of China.

This standard is under the jurisdiction of China Communications Standardization Association.

The drafting of this standard. Ministry of Industry and Information Technology
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1 Overview

The establishment of a public network for data transmission in many countries and an integrated services digital network established for integrated services requires the development of user services Categories and access categories. This standard requires the following.

- a) provide a sufficient number of data signal rates to meet the needs of users;
- b) optimize the cost of data terminal equipment (DTE), transmission and exchange in order to provide comprehensive economic services to users;
- c) acknowledge the special operation of some user data terminal equipment;
- d) allowing the user to transmit information consisting of an arbitrary bit sequence higher than a certain number and any number of bits;
- e) Recognition of the interaction between user requirements, technical constraints and tariff structures may affect DTE access to public data transmission the method of doing things.

The user service category is a category of data transmission service. In this kind of service, DTE operation mode, data signal rate, call control the signal rate and code structure (starting and ending) should be standardized.

The access type identifies the method used by the DTE to access a particular data transmission service.

There are four common data transmission services, namely.

- a) leased circuit data transmission services;
- b) circuit switched data transmission service (CSDTS);
- c) packet switched data transmission service (PSDTS);
- d) Frame Relay Data Transfer Service (FRDTS).

This standard only defines the basic user equipment for these data transfer services. Other optional user devices are in ITU-TX.2 definition.

The data terminal equipment (DTE) can access the data transmission service by any of the following connections.

- a) direct access. when the DTE is not connected through the intermediate switch network to provide business network;
- b) Port access. When the DTE is connected to the network providing the service via an intermediate switching network (see Figure 1).

Port access can be achieved by any of the following connections.

- a) Switched connections. when a signaling or control procedure is required to establish or release DTE and provide a network connection for the service;
- b) Permanent connection. When a signaling or control procedure is not required to establish or release DTE and provide a network connection for the service (See Figure 2).

The access type described in this standard takes into account direct access (see note) to the public data network and ISDN, as well as with other public Network interoperability of the port access; also included in accordance with ITU-TX.3, ITU-TX.5 or ITU-TX.8 through the group assembly and disassembly Equipment (PAD), facsimile packet assembly and disassembly equipment (FPAD) or multi-function packet assembly and disassembly equipment (MAP) function to packet switching data transmission industry the situation of the business.

Note: You can use the method of renting a circuit or a dedicated circuit to provide direct access.

For example, a packet terminal that conforms to the user service class 8 to 11 may access the common packet exchange through direct access (see note) or port access Data transmission service. Use the Circuit Switched Common Data Network (CSPDN), Public Switched Telephone Network (PSTN), ISDN or Frame Relay Number According to the PDN of the transmission service, port access can be established. In the case of all these accesses, the access packet-switched data transmission service will be available