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NETWORK CONNECTION SPECIFICATION FOR CONNECTION OF CUSTOMER PREMISES EQUIPMENT (CPE) TO THE X.25 PACKET SWITCHED PUBLIC DATA NETWORKS IN HONG KONG

TELECOMMUNICATIONS AUTHORITY
HONG KONG

FOREWORD

1. This specification is issued pursuant to Section 32D of the Telecommunications Ordinance (Cap. 106). This specification sets out the technical requirements for connection of customer premises equipment (CPE) to the packet switched public data networks in Hong Kong using International Telecommunication Union – Telecommunication (ITU-T) Recommendation X.25 protocols.

2. Public X.25 services may be provided by any Fixed Telecommunications Network Services (FTNS) operators in Hong Kong. X.25 CPE should comply with this specification for connection to the networks of the FTNS operators. Supplementary information on network characteristics and services of the FTNS networks may be obtained direct from the operators. Contact information of the FTNS operators can be found in the information note OFTA I 412.

3. At present, the Office of the Telecommunications Authority (OFTA) operates a **H**ong **K**ong **T**elecommunications Equipment **E**valuation and **C**ertification ("HKTEC") scheme. Details of the scheme can be found in the information note OFTA I 421. Under the scheme, suppliers or manufacturers may apply to OFTA for certification of their customer premises equipment against this specification. The application procedures for certification of customer premises equipment can be found in the information note OFTA I 412. A prescribed label may be affixed to the equipment which has been certified by the Telecommunications Authority (TA). Details of the labelling arrangement can be found in the Standardisation Guide HKTA 3211.

4. The TA may amend any part of this specification as and when he deems necessary.

5. In case of doubt about the interpretation of this specification, the methods of carrying out the test and the validity of statements made by the manufacturers of the equipment, the decision of the TA shall be final.

6. The TA accepts no responsibility for the satisfactory performance of the CPE connected to the public telecommunications networks. The CPE is not normally evaluated against performance, reliability or quality-of-service parameters.

7. The HKTA specifications and information notes issued by the TA can be obtained through one of the following methods:-

- Downloading direct through the OFTA's Internet Home Page. The Home Page address is http://www.ofta.gov.hk;

- Making a request for hard copies to:-

Senior Telecommunications Engineer
Standards Section
Office of the Telecommunications Authority
29/F Wu Chung House
213 Queen's Road East
Wanchai
Hong Kong

Fax: +852 2838 5004

Email: standards@ofta.gov.hk

8. Enquiries about this specification may be directed to:-

Senior Telecommunications Engineer
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1. SCOPE

This network connection specification covers the minimum technical requirements for connection of customer premises equipment (CPE) to the packet switched public data network in Hong Kong using ITU-T Recommendation X.25.

2. ELECTRICAL SAFETY

2.1 PRINCIPLE OF PROTECTION

In order to safeguard operating personnel, users, and plant, it is essential to prevent the transmission of excessive voltages from the CPE into the public telecommunications networks in Hong Kong.

2.2 SAFETY REQUIREMENTS

The CPE shall comply with the HKTA 2001 specification entitled “Compliance Test Specification - Safety and Electrical Protection Requirements for Subscriber Equipment Connected to the Public Telecommunications Networks in Hong Kong”. issued by the Telecommunications Authority.

3. INTERCONNECT POINT

3.1 Interconnection with X.25 data circuits will require the installation of the FTNS operators' equipment and internal cabling in customer premises. A normal office air-conditional environment is required as well as a maintained power supply. Either a mains power supply at 220 Vrms ± 10% taken from the same point in the building distribution as the CPE or a suitable power supply at -48 Vdc ± 10% should be provided by the customer.

3.2 The interconnect point (IP) marks the division of responsibility between the FTNS operator and the customer (see Figure 1).

3.3 The FTNS operators should provide appropriate sockets for connection, disconnection or re-connection of CPE to the IP. The customer shall be responsible for connection and disconnection of the CPE at the IP.

3.4 The connector used for connecting the CPE to the socket at the IP will depend on the type of interface used:

(a) For a V.35 interface, 34 pole ISO 2593 (M34) connector will be used.

(b) For a V.24 interface, 25 pole ISO 2110 (DB25) connector will be used.

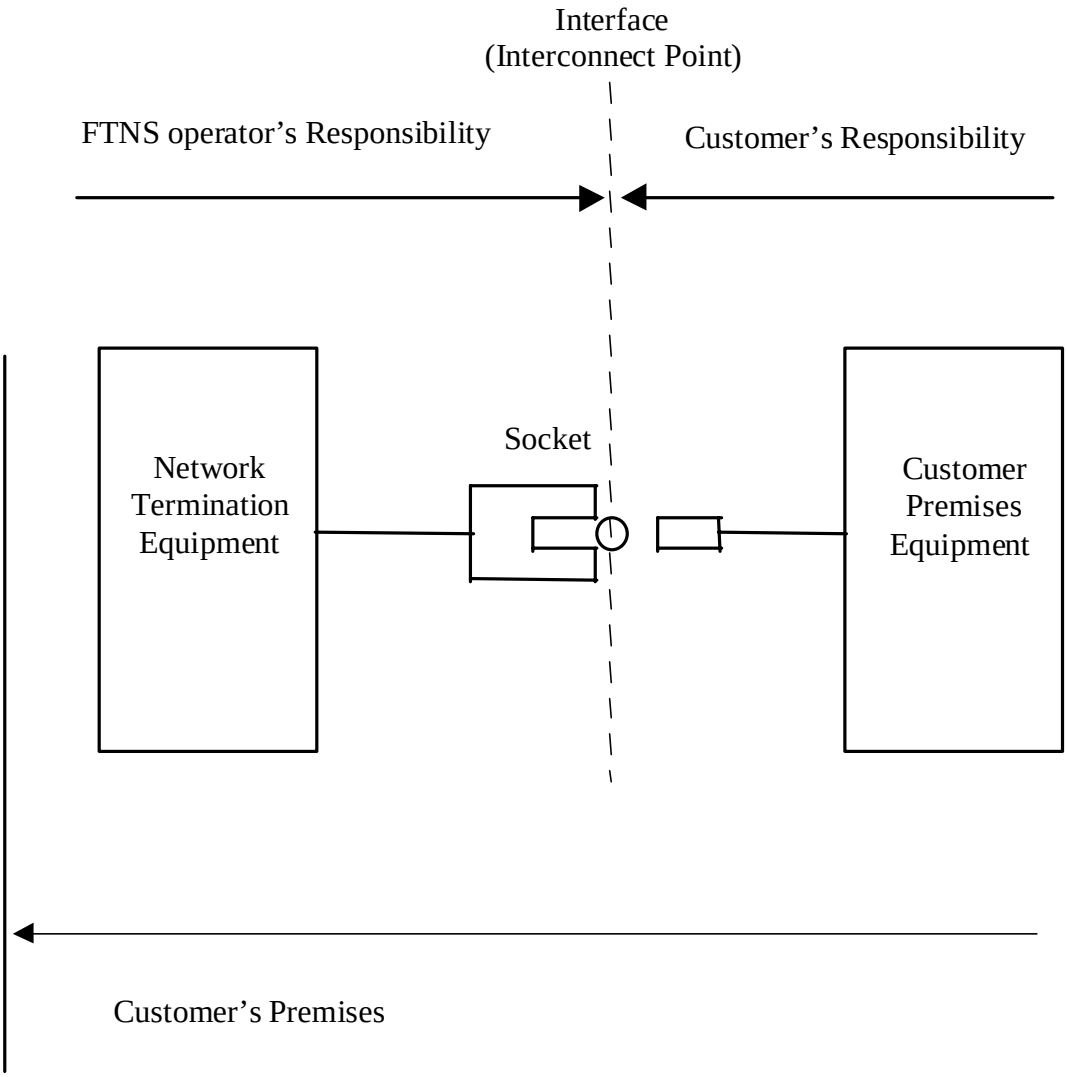

Figure 1 Interconnection of X.25 CPE to FTNS operator's network

4. TECHNICAL REQUIREMENT

4.1 The physical interface of the CPE shall conform to either one of the following ITU-T Recommendations :

(a) V.35
(b) V.24

Note : Other types of interface may be provided to the customer at the discretion of individual FTNS operator.

4.2 The CPE shall comply with the requirements of ITU-T X.25 "Interface between Data Terminal Equipment (DTE) and Data Circuit-terminating Equipment (DCE) for Terminals operating in the Packet Mode and connected to Public Data Networks by Dedicated Circuit".

5. REFERENCE

[1] HKTA 2001 “Compliance Test Specification - Safety and Electrical Protection Requirements for Subscriber Equipment Connected to the Public Telecommunications Networks in Hong Kong” issued by the Telecommunications Authority

[2] ITU-T Recommendation X.21 : Interface between Data Terminal Equipment and Data Circuit-terminating equipment for synchronous operation on Public Data Network

[3] ITU-T Recommendation X.21 bis : Use on Public Data Networks of Data Terminal Equipment (DTE) which is designed for interfacing to Synchronous V-Series Modems

[4] ITU-T Recommendation X.25 : Interface between Data Terminal Equipment (DTE) and Data Circuit-terminating Equipment (DCE) for Terminals operating in the Packet Mode and connected to Public Data Networks by Dedicated Circuit

[5] ITU-T Recommendation V.24 : List of definitions for interchange circuits between data terminal equipment (DTE) and data circuit-terminating equipment (DCE)

[6] ITU-T Recommendation V.35 : Data transmission at 48 Kilobits per second using 60-108 kHz group band circuits

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