INTERNATIONAL TELECOMMUNICATION UNION

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OF ITU

X.25

Corrigendum 1

(09/98)

SERIES X: DATA NETWORKS AND OPEN SYSTEM COMMUNICATIONS

Public data networks – Interfaces

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

Corrigendum 1

ITU-T Recommendation X.25 – Corrigendum 1

(Previously CCITT Recommendation)

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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

CORRIGENDUM 1

Source

Corrigendum 1 to ITU-T Recommendation X.25 was prepared by ITU-T Study Group 7 (1997-2000) and was approved by Study Group 7 at its Plenary on the 25th of September 1998.

FOREWORD

ITU (International Telecommunication Union) is the United Nations Specialized Agency in the field of telecommunications. The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of the ITU. The ITU-T is responsible for studying technical, operating and tariff questions and issuing Recommendations on them with a view to standardizing telecommunications on a worldwide basis.

The World Telecommunication Standardization Conference (WTSC), which meets every four years, establishes the topics for study by the ITU-T Study Groups which, in their turn, produce Recommendations on these topics.

The approval of Recommendations by the Members of the ITU-T is covered by the procedure laid down in WTSC Resolution No. 1.

In some areas of information technology which fall within ITU-T's purview, the necessary standards are prepared on a collaborative basis with ISO and IEC.

NOTE

In this Recommendation the term *recognized operating agency (ROA)* includes any individual, company, corporation or governmental organization that operates a public correspondence service. The terms *Administration*, *ROA* and *public correspondence* are defined in the *Constitution of the ITU (Geneva, 1992).*

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As of the date of approval of this Recommendation, the ITU had not received notice of intellectual property, protected by patents, which may be required to implement this Recommendation. However, implementors are cautioned that this may not represent the latest information and are therefore strongly urged to consult the TSB patent database.

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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

CORRIGENDUM 1

(Geneva, 1998)

1) Subclause 4.4.1.2, Window Description, 4th paragraph

Change: The standard window size W is 2 for each direction of data transmission at the DTE/DCE interface.

To: The standard window size W is 2 for modulo 8 and 128, and 128 for modulo 32 768, for each direction of data transmission at the DTE/DCE interface.

2) Table 5-2/X.25

Delete: DCE REJ (modulo 32 768)[a)]

3) Subclause 5.6.2

Change: When the *diagnostic* packet is issued as a result of the reception of an erroneous packet from the DTE (see Tables C.1 and C.2), this field contains the first three octets of header information from the erroneous DTE packet. If the packet contains less than 3 octets, this field contains whatever bits were received.

To: When the *diagnostic* packet is issued as a result of the reception of an erroneous packet from the DTE (see Tables C.1 and C.2), this field contains the first three octets of header information from the erroneous DTE packet for modulo 8 and 128 operation and the first four octets of header information from the erroneous DTE packet for modulo 32 768 operation. If the packet contains less than 3 octets for modulo 8 and 128 operation and less than 4 octets for modulo 32 768 operation, this field contains whatever bits were received.

Change: When the *diagnostic* packet is issued as a result of a DCE time-out (see Table D.1), the diagnostic explanation field contains 2 octets coded as follows:

– bits 8, 7, 6 and 5 of the first octet contain the general format identifier for the interface;

– bits 4 to 1 of the first octet and bits 8 to 1 of the second octet are all 0 for expiration of time-out T10 and give the number of the logical channel on which the time-out occurred for expiration of time-out T12 or T13.

To: When the *diagnostic* packet is issued as a result of a DCE time-out (see Table D.1), the diagnostic explanation field contains 2 octets for modulo 8 and 128 operation, coded as follows:

– bits 8, 7, 6 and 5 of the first octet contain the general format identifier for the interface;

– bits 4 to 1 of the first octet and bits 8 to 1 of the second octet are all 0 for expiration of time-out T10 and give the number of the logical channel on which the time-out occurred for expiration of time-out T12 or T13.

When the *diagnostic* packet is issued as a result of a DCE time-out (see Table D.1), the diagnostic explanation field contains 3 octets for modulo 32 768 operation, coded as follows:

– bits 8, 7, 6 and 5 of the second octet contain the general format identifier for the interface;

– bits 4 to 1 of the second octet and bits 8 to 1 of the third octet are all 0 for expiration of time-out T10 and give the number of the logical channel on which the time-out occurred for expiration of time-out T12 or T13.

4) Subclause 6.2, Note

Change:

NOTE – In addition, some networks may permit the DTE to choose to use modulo 32 768 or modulo 128 or modulo 8 on a per-virtual call or logical channel basis. In this case, the use of either modulo 8 or modulo 128 or modulo 32 768 is permitted at the same DTE/DCE interface, with dynamic selection by the calling DTE. The same modulo applies to both directions of transmission. The means for the network to select the modulo in the *incoming call* packet for a given call is beyond the scope of this Recommendation.

To:

NOTE – In addition, some networks may permit the DTE to choose to use modulo 32 768 or modulo 128 or modulo 8 on a per-virtual call or logical channel basis. In this case, the use of either modulo 8 or modulo 128 or modulo 32 768 is permitted at the same DTE/DCE interface, with dynamic selection by the calling DTE. The same modulo applies to both directions of transmission. The means for the network to select the modulo in the *incoming call* packet for a given call is beyond the scope of this Recommendation. For *restart* and *diagnostic* packets, any valid format can be used in this case.

5) Table 6-1/X.25

Change:

Table 6-1/X.25 – Valid facility request in call accepted packets in response to facility indications in incoming call packets

Facility indication	Valid facility request
W(indicated) ≥ 2 W(indicated) = 1	W(indicated) ≥ W(requested) ≥ 2 W(requested) = 1 or 2
P(indicated) ≥ 128 P(indicated) < 128	P(indicated) ≥ P(requested) ≥ 128 128 ≥ P(requested) ≥ P(indicated)

To:

Table 6-1/X.25 – Valid facility request in call accepted packets in response to facility indications in incoming call packets

Modulo	Facility indication	Valid facility request
8 and 128	W(indicated) ≥ 2 W(indicated) = 1	W(indicated) ≥ W(requested) ≥ 2 W(requested) = 1 or 2
32 768	W(indicated) ≥ 128 W(indicated) ≤ 128	W(indicated) ≥ W(requested) ≥ 128 W(indicated) ≤ W(requested) ≤ 128
Any modulo is applicable	P(indicated) ≥ 128 P(indicated) < 128	P(indicated) ≥ P(requested) ≥ 128 128 ≥ P(requested) ≥ P(indicated)

6) Table 6-2/X.25

Change:

Table 6-2/X.25 – Valid facility requests in call accepted packets in response to facility indication in incoming call packets

Facility request	Valid facility request
W(requested) ≥ 2 W(requested) = 1	W(requested) ≥ W(indicated) ≥ 2 W(indicated) = 1 or 2
P(requested) ≥ 128 P(requested) < 128	P(requested) ≥ P(indicated) ≥ 128 128 ≥ P(indicated) ≥ P(requested)

To:

Table 6-2/X.25 – Valid facility requests in call accepted packets in response to facility indication in incoming call packets

Modulo	Facility request	Valid facility request
8 and 128	W(requested) ≥ 2 W(requested) = 1	W(requested) ≥ W(indicated) ≥ 2 W(indicated) = 1 or 2
32 768	W(requested) ≥ 128 W(requested) ≤ 128	W(requested) ≥ W(indicated) ≥ 128 W(requested) ≤ W(indicated) ≤ 128
Any modulo is applicable	P(requested) ≥ 128 P(requested) < 128	P(requested) ≥ P(indicated) ≥ 128 128 ≥ P(indicated) ≥ P(requested)

7) Subclause 7.3.1.3, last paragraph

Change: Window sizes of 128 to 32 768 are only valid if super extended sequence numbering is used (see 6.2).

To: Window sizes of 128 to 32 767 are only valid if super extended sequence numbering is used (see 6.2).

8) Table C.2/X.25

Change: Restart request or DTE restart confirmation with bits 1 to 4 of octet 1 or bits 1 to 8 of octet 2 unequal to zero

To: Restart request or DTE restart confirmation with bits 1 to 4 of the octet containing the GFI and bits 1 to 8 of the following octet unequal to zero

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