

# **Working Implementation Agreements for Open Systems Interconnection Protocols: Part 2 - Subnetworks**

Output from the September 1993 Open Systems  
Environment Implementors' Workshop (OIW)

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## **Foreword**

This part of the Working Implementation Agreements was prepared by the Lower Layers Special Interest Group (LLSIG) of the Open Systems Environment Implementors' Workshop (OIW). See Procedures Manual for Workshop charter.

Text in this part has been approved by the Plenary of the Workshop. This part replaces the previously existing part on this subject.

Future changes and additions to this version of these Implementor Agreements will be published as a new part. Deleted and replaced text will be shown as struck. New and replacement text will be shown as shaded.

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## **Part 2 - Subnetworks**

**Editor's Note** - All references to Stable Agreements in this Section are to Version 5.

### **0 Introduction**

(Refer to Stable Implementation Agreements Document)

### **1 Scope**

(Refer to Stable Implementation Agreements Document)

### **2 Normative References**

(Refer to Stable Implementation Agreements Document)

### **3 Status**

This material is current as of March 12, 1993.

### **4 Errata**

Errata are reflected in replacement pages of Version 5, Stable Document.

### **5 Local Area Networks**

(Refer to Stable Implementation Agreements Document)

#### **5.1 IEEE 802.2 Logical Link Control**

(Refer to Stable Implementation Agreements Document)

#### **5.2 IEEE 802.3 CSMA/CD Access Method**

(Refer to Stable Implementation Agreements Document)

**5.3 IEEE 802.4 Token Bus Access Method**

(Refer to Stable Implementation Agreements Document)

**5.4 IEEE 802.5 Token Ring Access Method**

(Refer to Stable Implementation Agreements Document)

**5.5 Fiber Distributed Data Interface (FDDI)**

**5.5.1 Token Ring Media Access Control (MAC, X3.139-1987)**

(Refer to Stable Implementation Agreements Document)

Further study is needed to confirm whether a lower default value or range for T\_Req would be useful.

**5.5.2 Token Ring Physical Layer (PHY,X3.148-1988)**

(Refer to Stable Implementation Agreements Document)

**5.5.3 Physical Layer Media Dependent (PMD, X3.166-1989)**

(Refer to Stable Implementation Agreements Document)

**6 X.25 Wide Area Networks**

**6.1 CCITT Recommendation X.25**

(Refer to the Stable Implementation Agreements Document).

**6.2 ISO 7776**

(Refer to the Stable Implementation Agreements Document).



### **6.3 ISO 8208**

(Refer to the Stable Implementation Agreements Document).

## **7 Integrated Services Digital Networks (ISDN)**

### **7.1 Introduction**

(Refer to the Stable Implementation Agreements Document).

### **7.2 Implementation Agreements**

(Refer to the Stable Implementation Agreements Document).

#### **7.2.1 Physical Layer, Basic Access at "U"**

(Refer to the Stable Implementation Agreements Document).

#### **7.2.2 Physical Layer, Basic Access at S and T**

(Refer to the Stable Implementation Agreements Document).

#### **7.2.3 Physical Layer, Primary Rate at "U"**

(Refer to the Stable Implementation Agreements Document).

#### **7.2.4 Data Link Layer, D-Channel**

(Refer to the Stable Implementation Agreements Document).

#### **7.2.5 Signaling**

(Refer to the Stable Implementation Agreements Document).

**7.2.6 Data Link Layer B-Channel**

(Refer to the Stable Implementation Agreements Document).

**7.2.7 Packet Layer**

(Refer to the Stable Implementation Agreements Document).

**8 Frame Relay Subnetworks**

(Refer to the Stable Implementation Agreements Document).

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**Annex A** (informative)

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**Cross Reference Between CCITT and ANSI Text Relating to ISDN Agreements**

(Refer to the Stable Implementation Agreements Document.)

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**Annex B** (informative)

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**Bibliography**

(Refer to Stable Implementation Agreements Document)

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**Annex C** (informative)

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**Cross Reference between CCITT and ANSI Text Relating to Frame Relay Agreements**

This annex provides a cross-reference listing between those sections of the ANSI Standards mentioned in clause 8 of this part and the sections of the corresponding CCITT Recommendations.

**C.1 Physical Layer**

ANSI T1.403, which is referenced in 8.3.1 of this part, is equivalent to sections related to the 1544 kbit/s service in the combination of CCITT Recommendations G.703 and G.704. Exceptions to Recommendations G.703 and G.704 are listed below:

**CCITT Recommendation G.703**

The sections related to the 1544 kbit/s interface in this Recommendation apply with the following exception:

- a) Section 2.5: The current text is replaced by: "The B8ZS code shall be used because connecting line systems require suitable signal content to guarantee adequate timing information."

**CCITT Recommendation G.704**

The sections related to the 1544 kbit/s interface in this Recommendation apply with the following exceptions:

- a) Section 2.1.3 - Allocation of the F-bit: The current text is to be replaced by: "Table 1/G.704 which provides the recommended F-bits allocation;"
- b) Table 1/G.704:
  - 1) In the column "For character signal," all instances of '1-7' are replaced by '1-8' (related bits are: 966, 2124, 3282, and 4440);
  - 2) The column "For signalling" is not applicable;
  - 3) The column "Signalling channel designation" is not applicable;
  - 4) The note a) below the figure is not applicable as it pertains to items 2) and 3) above;
- c) Table 2/G.704: The table is not applicable;
- d) Section 2.1.3.1.1 - Multiframe alignment signal: The portion starting with "...as well as to identify..." to the end of the sentence is not applicable;
- e) Section 2.1.3.1.3 - 4 kbit/s data link, (third paragraph): The entire paragraph is replaced by: "The idle pattern is the HDLC flag bit pattern (011111110);"

- f) Section 2.1.3.2 - Method: twelve-frame multiframe: This section is not applicable;
- g) Section 3.1.2 - Use of 64 kbit/s channel time slots: This section is not applicable;
- h) Section 3.1.3 - Signalling: All sections under 3.1.3 are not applicable;
- i) Section 3.2 - Interface at 1544 kbit/s carrying 32 kbit/s channel time slots: All sections under 3.2 are not applicable;
- j) Section 3.3 - Interface at 1544 kbit/s carrying n\*64kbit/s: This section is not applicable.

## **C.2 Data Transfer**

The following list provides the cross-reference between those sections of ANSI Standards referenced in 8.3.2 of this document and the corresponding CCITT Recommendations.

- a) list to be provided later.

## **C.3 Control (Signalling) Procedures**

The following provides the cross-reference between those sections of ANSI standard T1.617 referenced in 8.3.3 of this document and the corresponding CCITT Recommendation.

- a) item to be provided later.

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**Annex D** (informative)

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**Frame Relay Network-to-Network Interface**

(Refer to the Stable Implementation Agreements Document.)