Global Crossing

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1.0 Scope

1.1   Requirement to publish network interface specifications

The requirements of the Radio and Telecommunications Terminal Equipment (R+TTE) Directive state, public telecommunications operators are required to publish accurate technical specifications about their interfaces. This document provides information in accordance to article 4.2 of the (R+TTE). The literature supplied should be in sufficient detail to permit the design of telecommunications terminal equipment capable of utilising all services provided through the corresponding interface.   An Interface is a network termination point, which is a physical connection point at which a user is provided with access to a public telecommunications network and an air interface specifying the radio path between the radio equipment.

Users of this document should not rely solely on the information provided, but should carry out there own tests to satisfy themselves that their terminal equipment will work with the Global Crossing network. This document does not form a part of any contract with Global Crossing customers or suppliers. Global Crossing reserves the right to amend or replace this information at any time. Publication of these customer interfaces does not give or imply any licence to any intellectual property rights belonging to Global Crossing or others.

The information collated has been produced in the format recommended by OFTEL in their 'OFTEL / NICC Guidelines for Interface Publication' (Issue 2, Annex B 'Customer Interface Publication For Digital Networks').

1.2   Contact Information

Enquiries relating to the technical content of this document and the availability of other publications should be directed to:

> Global Crossing Ltd,
> Regulatory Affairs
> Centennium House
> London
> EC3R 6DL

1.3   Changes To the Network

Details of future changes to the Global Crossing network will be published in revised versions of this document and will be available on the company's public web site or via the OFTEL web site.

2.0 The Network Terminating Point

2.1 Physical Connections used at NTP

For structured services, the network termination point shall be either two unbalanced 75ohm BNC sockets or one balanced 120ohm pair terminated on an RJ45 socket. The sockets shall be mounted on the Network Terminating and Test Apparatus (NTTA) / Network Terminating Equipment (NTE).

3.0 Customer Interfaces

Digital services offered by Global Crossing are as follows:

DASS 2 BTNR 190 http://www.sinet.bt.com/
DPNSS BTNR 188 http://www.sinet.bt.com/
ETSI Q 931 (Limited ETSI Call Control) http://www.etsi.org/

♦ Primary Rate ISDN (30B+D)

Bearer services supported:

♦ 64KB/s unrestricted digital information
♦ Speech
♦ 3.1KHz

4.0 Physical Interfaces

The normal working voltages of the ITU-T recommendation G.703 are defined in clause 9 of ITU-T recommendation G.703.

The network equipment and network terminating equipment related to the provision of the interface comply with the current EMC regulations. Whilst predominantly installed in commercial and light environments, this does not preclude the interface being installed in other environments e.g. residential or industrial. The terminal equipment manufacturer should take this into account when determining the limits of compliance relevant to their equipment in relation to the protection requirements of the EMC directive.

5.0 Supplementary Services

5.1   Primary Rate ISDN

- Direct Dialling In
- Calling Line Identification Presentation
- Calling Line Identification Restriction
- Closed User Group
- Connected Line Identification Presentation
- Connected Line Identification Restriction
- Explicit Call Transfer
- Diversion
- User-to-user Signalling

5.2   DASS 2

- Direct Dialling In
- Calling Line Identification Presentation
- Calling Line Identification Restriction
- Diversion
- User-to-user Signalling

5.3   DPNSS

- Direct Dialling In
- Calling Line Identification Presentation
- Calling Line Identification Restriction
- Connected Line Identification Presentation
- Connected Line Identification Restriction
- Diversion

6.0 Recommended Terminal Equipment Standards

The minimum recommended terminal equipment performance specifications are:

ITU-T G.703 service   BS PD 7024 [2]   (unstructured 75 ohm)

TBR12 [20]   (structured 120 ohm)

The minimum recommended terminal equipment EMC specifications are listed in the Official Journal of the Communities for use under the Electromagnetic Comparability Directive (89/336). The minimum recommended terminal equipment electrical safety specifications are listed in the Official Journal of the European Communities for use under the Low Voltage Directive (73/23/EEC). These lists are updated regularly and the terminal manufacturer is recommended to comply with the listed standards applicable to their equipment.

7.0 Glossary

BS   British Standard

DASS Digital Access Signalling System No 2

DPNSS   Digital Private Network Signalling System

EMC   Electromagnetic Compatability

EN   European Standard

ETS   European Telecommunications Standard

ETSI   European Telecommunications Standards Institute

ITU-T International Telecommunications Union – Telecommunications Sector

NTE   Network Termination Equipment

NTP   Network Termination Point

PD   Published Document

R+TTE Radio and Telecommunications Terminal Equipment

TBR   Technical Basis for Regulation

TE   Terminal Equipment

8.0 References

[1] ITU-T Recommendation G.703
   Physical / Electrical Characteristics of hierarchical digital interfaces. (4/91)
[2] PD 7024: 1995
   Essential requirements for Terminal Equipment intended for connection to digital leased
   lines with 75 ohm G.703 interfaces and rates of 2Mbits/s unstructured.

[3] ETS 300 011 Layer 1 (Physical)
[4] ETS 300 402 Layer 2 (Data Link)
[5] ETS 300 403 Layer 3 (Basic Call Control)
[6] ETS 300 092 Calling Line Identification Presentation (CLIP)
[7] ETS 300 093 Calling Line Identification Restriction (CLIR)
[8] ETS 300 064 Direct Dialling In (DDI)
[9] ETS 300 052 Multiple Subscriber Number (MSN)
[10] ETS 300 055 Terminal Portability (TP)
[11] ETS 300 359 Call Completion to Busy Subscriber (CCBS)
[12] ETS 300 138 Closed User Group (CUG)
[13] ETS 300 097 Connected Line Identification Presentation (COLP)
[14] ETS 300 098 Connected Line Identification Restriction (COLR)
[15] ETS 300 369 Explicit Call Transfer (ECT)
[16] ETS 300 130 Malicious Call Identification (MCI)
[17] EN 300 207 Diversion
[18] ETS 300 061 Sub addressing (SUB)
[19] ETS 300 286 User-to-user Signalling (UUS)
[20] ETSI TBR 12 Open Network Provision Technical requirements.