



## **CITC Technical Specification**

Document Number: DI001  
Revision: Issue 2  
Date: 10/01/2010 G

### **Specification for Equipment connecting to 2.048 Mb/s Digital Leased Line Services**

Issued by The Communications and Information Technology Commission of Saudi Arabia in accordance with article 89 of the Telecommunications Bylaw.

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## Scope

This document applies to terminal equipment which includes interfaces that may be connected to 2.048Mb/s Digital Leased Line connections offered by public network operators in the Kingdom of Saudi Arabia

All telecommunications and radio terminal equipment must comply with the relevant technical specifications established by CITC. In addition, such equipment may be subject to regulations for Declaration of Conformity or registration. See <http://www.citc.gov.sa/> for details.

If more than one interface type is offered by a piece of equipment, each interface must meet the applicable technical specifications.

Product type	Details/comments
PBX	
Modems	
Routers	
Remote telemetry	
Other equipment directly connecting to analogue Leased Lines	

## Entry into force

This specification shall enter into force on 10/01/2010 G

## **Proof of compliance**

It is recommended that test reports are obtained from a laboratory that has been accredited by a body that is a member of the ILAC Mutual Recognition Arrangement.

## **Technical requirements**

It is recognised that a number of largely equivalent specifications exist for terminal equipment that offers connection to E1 120 $\Omega$  2.048 Mb/s services. It is also recognised that a great number of manufacturers continue to reference to older ETSI specifications such as TBR12 and TBR13 for structured and unstructured interfaces respectively. Testing should be carried out to ensure compliance with at least one of the following specifications:

### **TBR12**

Business TeleCommunications (BTC);  
2048 kbit/s digital unstructured leased lines (D2048U);  
Attachment requirements for terminal equipment interface

### **TBR012/A1**

Business TeleCommunications (BTC); Open Network Provision (ONP) technical requirements; 2048 kbit/s digital unstructured leased line (D2048U); Attachment requirements for terminal equipment interface

### **TBR13**

Business TeleCommunications (BTC);  
2048 kbit/s digital structured leased lines (D2048S);  
Attachment requirements for terminal equipment interface

### **EN 300 248**

Access and Terminals (AT); 2048 kbit/s digital unstructured leased line (D2048U); Terminal equipment interface

## **Additional requirements**

It must be possible to ground the outer conductor or screen of the coaxial pair or the screen of the symmetrical pair in accordance with ITU-T G.703. Section 9.4.

If it is intended that a 75 $\Omega$  interface connects via a Balun to 120 $\Omega$  services testing should be carried out with the Balun in place.

## Obtaining technical standards

ETSI technical standards may be obtained free of charge for individual use from the ETSI website [www.etsi.org](http://www.etsi.org).

## Network information (only for network interfaces))

Further information on the characteristics and presentation of network interfaces can be found by visiting operator's website.

## Document history

Description	Status	Date
	Issue 1	11/03/2006 G
	Issue 2	10/01/2010 G