



## CITC Technical Specification

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### Specification for Equipment connecting to the Analogue PSTN

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 Analogue PSTN services 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.

Equipment covered by this specification includes, but is not limited to the Analogue PSTN interfaces of the following equipment types:

Product type	Notes
Single line telephones	
Key systems	
Fax machines	
Modems	
Pay telephones	Privately owned payphones
PBX	
Answering machines	
Security alarms	
Cordless phones	Base station –Radio requirements also apply
DECT	Base station - Radio requirements also apply
SMS	
Remote telemetry	
Subscriber meters	
Other equipment directly connecting to analogue PSTN services	

### **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

Testing should be carried out to ensure compliance with the following specifications.

### ES 203 021-1

Access and Terminals (AT);Harmonized basic attachment requirements for Terminals for connection to analogue interfaces of the Telephone Networks; Update of the technical contents of TBR 021, EN 301 437, TBR 015, TBR 017;Part 1: General aspects.

### ES 203 021-2

Access and Terminals (AT);Harmonized basic attachment requirements for Terminals for connection to analogue interfaces of the Telephone Networks; Update of the technical contents of TBR 021, EN 301 437, TBR 015, TBR 017;Part 2: Basic transmission and protection of the network from harm.

### ES 203 021-3

Access and Terminals (AT);Harmonized basic attachment requirements for Terminals for connection to analogue interfaces of the Telephone Networks; Update of the technical contents of TBR 021, EN 301 437, TBR 015, TBR 017;Part 3: Basic interworking with the Public Telephone Networks.

If no issue or revision number is quoted along with the title of a technical specification, the latest published version should be used.

## Additional requirements

### Pulse Dialling

For products that offer Pulse or Loop Disconnect dialling, the conformance should be confirmed through testing in accordance with ETSI ES 201 187 based on the following:

8 to 12 pulses per second  
Make period 40+/-10ms  
Break period 60+/-10ms.

### ES 201 187

"2-wire analogue voice band interfaces; Loop Disconnect (LD) dialling specific requirements".

### Analogue Voice

Analogue telephones and other equipment which offer analogue handset telephony such as fax machines or DECT should comply with the requirements of the following standard.

### TBR 38

Public Switched Telephone Network (PSTN); Attachment requirements for a terminal equipment incorporating an analogue handset function capable of supporting the justified case service when connected to the analogue interface of the PSTN in Europe

#### **TBR 10**

Digital Enhanced Cordless Telecommunications (DECT); General Terminal Attachment Requirements; Telephony Applications

#### **Volume control**

Where a terminal is fitted with a receive volume control, the default position of the volume control should fall within the acceptable range of RLR described above.

#### **Caller Line Identification (CLI)**

Products which offer CLI should recognize DTMF signalling in accordance with the following standard:

#### **ES 201 235-3**

Access and terminals (AT) specification of Dual-Tone Multi Frequency (DTMF) transmitters and receivers; Part 3 Receivers.

#### **Fixed Line Short Message Service (SMS)**

Terminals offering the SMS feature must comply with the relevant parts of requirements of ETSI ES 201 912 in particular the physical layer characteristics of section 5.3.1.

#### **ES 201 912**

Access and Terminals (AT); Short Message Service (SMS) for PSTN/ISDN; Short Message Communication between a fixed network Short Message Terminal Equipment and a Short Message Service Centre

#### **EN 300 659-2**

Access and Terminals (AT); Analogue access to the Public Switched Telephone Network (PSTN); Subscriber line protocol over the local loop for display (and related) services; Part 2: Off-hook data transmission.

#### **ES 200 778-2**

Access and Terminals (AT); Analogue access to the Public Switched Telephone Network (PSTN); Protocol over the local loop for display and related services; Terminal equipment requirements.

#### **Meter pulse detection**

When in the off hook state, equipment which offers meter pulse detection should recognize the presence of a transverse 12 KHz meter pulse of duration and levels described by the network operator. The equipment should present an impedance of greater than 200Ω at 12 KHz under all line conditions.

## 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