
TECHNICAL SPECIFICATION

Requirements for Equipment connecting to the Analogue PSTN

TS TTE 010, Version 1.0

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1 General requirements

Technical specification has been prepared and approved by the Telecommunications Regulatory Authority (TDRA) based on the Telecommunication apparatus Type Approval Regime.

Several technical specifications may apply to the equipment. If equipment within the scope of this technical specification also incorporates functions that are covered by another technical specification, the relevant technical specification is applied to each function separately. The influence of one function on the other is taken into account.

2 Scope

This technical specification applies to terminal equipment which includes interfaces that may be connected to Analogue PSTN services offered by public network operators.

This technical specification defines minimum technical requirements for health and safety, electromagnetic compatibility and additional essential requirements based on the Telecommunication apparatus Type Approval Regime.

Unless the context requires otherwise, the expressions and wordings appearing in the Telecommunication apparatus Type Approval Regime shall have the same meaning described thereto.

3 Technical Requirements

3.1 Network connection

The equipment shall meet the requirements of following standard(s):

TBR 21 Terminal Equipment (TE); Attachment requirements for pan-European approval for connection to the analogue Public Switched Telephone Networks (PSTNs) of TE (excluding TE supporting the voice telephony service) in which network addressing, if provided, is by means of Dual Tone Multi Frequency (DTMF) signalling.

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- 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.

3.2 Electromagnetic compatibility

The equipment shall meet the requirements of following standard(s):

- EN 55022 Information technology equipment; Radio disturbance characteristics; Limits and methods of measurement (CISPR 22).
- EN 55024 Information technology equipment; Immunity characteristics; Limits and methods of measurement (CISPR 24).
- EN 55032 Electromagnetic compatibility of multimedia equipment - Emission requirements.
- EN 300 386 Electromagnetic compatibility and Radio spectrum Matters (ERM); Telecommunication network equipment; ElectroMagnetic Compatibility (EMC) requirements

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3.3 Health and safety

The equipment shall meet the requirements of Technical specification TS HS 001.

3.4 Additional essential requirements

Pulse Dialling

For products that offer Pulse or Loop Disconnect dialling, the requirements of ES 201 187 shall be applied, based on the following:

8 to 12 pulses per second

Make period 66+/-10ms

Break period 33+/-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 modems or fax machines should comply with the requirements of the following standard:

I-ETS 300 677 Public Switched Telephone Network (PSTN); Requirements for handset telephony

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.

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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:

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

TS 103 912 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 (Corrections to ES 201 912 V1.1.1)

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.

3.5 Validity of standards

If no issue or revision number is quoted along with the title of a standard, the valid edition should be used. The valid of the standard can be checked on:

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- For EN standards:

http://ec.europa.eu/growth/single-market/european-standards/harmonised-standards/rtte/index_en.htm;

- For I-ETS, ES and TS standards:

<http://www.etsi.org/>