



# **TECHNICAL SPECIFICATION**

# Requirements for Health and Safety

TS HS 001, Version 1.0

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# 1 General requirements

Technical specification has been prepared and approved by Telecommunications Regulatory Authority (TDRA) based on 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 Radio Equipment (RE) and Telecommunication Terminal Equipment (TTE).

This technical specification defines the minimum technical requirements for health and safety of all Radio Equipment (RE) and Telecommunication Terminal Equipment (TTE) based on Telecommunication apparatus Type Approval Regime.

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

# 3 Technical Requirements

#### 3.1 Electrical safety

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

EN 60950-1	Information technology equipment – Safety – Part 1: General requirements
EN 60950-22	Information technology equipment - Safety - Part 22: Equipment installed outdoors
EN 60950-23	Information technology equipment - Safety - Part 23: Large data storage equipment
EN 60065	Audio, video and similar electronic apparatus - Safety requirements
EN 62368-1	Audio/video, information and communication technology equipment - Part 1: Safety requirements





EN 60215 Safety requirements for radio transmitting equipment

EN 41003 Particular safety requirements for equipment to be connected to

telecommunication networks and/or a cable distribution system

#### 3.2 Human exposures to electromagnetic fields

The Radio Equipment (RE) shall meet the requirements of following applicable standard(s):

EN 50360 Product standard to demonstrate the compliance of mobile phones with the

basic restrictions related to human exposure to electromagnetic fields (300

MHz - 3 GHz)

EN 50364 Limitation of human exposure to electromagnetic fields from devices

operating in the frequency range 0 Hz to 300 GHz, used in Electronic Article

Surveillance (EAS), Radio Frequency Identification (RFID) and similar

applications

EN 50371 Generic standard to demonstrate the compliance of low power electronic

and electrical apparatus with the basic restrictions related to human exposure to electromagnetic fields (10 MHz - 300 GHz) - General public

EN 50383 Basic standard for the calculation and measurement of electromagnetic field

strength and SAR related to human exposure from radio base stations and fixed terminal stations for wireless telecommunication systems (110 MHz -

40 GHz)

EN 50384 Product standard to demonstrate the compliance of radio base stations and

fixed terminal stations for wireless telecommunication systems with the basic restrictions or the reference levels related to human exposure to radio

frequency electromagnetic fields (110 MHz - 40 GHz) - Occupational

EN 50385 Product standard to demonstrate the compliance of radio base stations and

fixed terminal stations for wireless telecommunication systems with the basic

restrictions or the reference levels related to human exposure to radio frequency electromagnetic fields (110 MHz - 40 GHz) - General public

EN 50392 Generic standard to demonstrate the compliance of electronic and electrical

apparatus with the basic restrictions related to human exposure to

electromagnetic fields (0 Hz - 300 GHz)

EN 50401 Product standard to demonstrate the compliance of fixed equipment for

radio transmission (110 MHz - 40 GHz) intended for use in wireless telecommunication networks with the basic restrictions or the reference levels related to general public exposure to radio frequency electromagnetic

fields, when put into service





EN 62209-1	Human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices - Human models, instrumentation, and procedures - Part 1: Procedure to determine the specific absorption rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz)
EN 62209-2	Human exposure to radio frequency fields from hand-held and body- mounted wireless communication devices - Human models, instrumentation,

and procedures - Part 2: Procedure to determine the specific absorption rate (SAR) for wireless communication devices used in close proximity to the

human body (frequency range of 30 MHz to 6 GHz)

EN 62311 Assessment of electronic and electrical equipment related to human

exposure restrictions for electromagnetic fields (0 Hz - 300 GHz)

EN 62479 Assessment of the compliance of low power electronic and electrical

equipment with the basic restrictions related to human exposure to

electromagnetic fields (10 MHz to 300 GHz)

# 3.3 Human exposures to laser radiation

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

EN 60825-1 Safety of laser products - Part 1: Equipment classification and requirements EN 60825-2 Safety of laser products - Part 2: Safety of optical fibre communication systems (OFCS) EN 60825-4 Safety of laser products - Part 4: Laser guards EN 60825-12 Safety of laser products - Part 12: Safety of free space optical

communication systems used for transmission of information

# 3.4 Additional essential requirements

1. The instructions and safety information, in case requested by applicable standard(s), shall be provided in Arabic and English language and shall be supplied with the equipment.

#### Power supply:

- UAE rated voltage: 230 V / 400 V 3N, 50 Hz;
- UAE shape of the plugs: C / D / G1.

To preserve, protect and improve the quality of the environment, protect human health and utilise natural resources prudently and rationally the rate of recovery shall be a minimum of 75%

<sup>&</sup>lt;sup>1</sup> See http://www.iec.ch/worldplugs for explanation of plug shapes.





by average weight per equipment and its component, material and substance reuse and recycling shall be a minimum of 65% by average weight per appliance.

# 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:

For EN standards:
 <a href="http://ec.europa.eu/growth/single-market/european-standards/harmonised-standards/rtte/index\_en.htm">http://ec.europa.eu/growth/single-market/european-standards/harmonised-standards/rtte/index\_en.htm</a>.