



# **TECHNICAL SPECIFICATION**

# Requirements for Navigation (Air) Equipment

TS RE 025, Version 1.0

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Telecommunications Regulatory Authority (TDRA)
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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 Navigation (Air).

This technical specification defines minimum technical requirements for health and safety, electromagnetic compatibility, efficient use of radio spectrum 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 Efficient use of radio spectrum

The equipment shall comply with allocated frequency bands given in the National Frequency Allocation Table (NFAT), UAE 12.

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

**ITU Radio Regulations edition 2012** 

Recommendation ITU-R SM.329-10

Spurious Emissions.





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#### **Recommendation ITU-R M.1177-3**

Techniques for measurement of spurious emissions of radar systems.

#### **ICAO**

Annex 10 to the Convention on International Civil Aviation, Volume IV: Surveillance Radar and Collision Avoidance Systems.

#### **ICAO**

Annex 10 to the Convention on International Civil Aviation, Volume I and V.

#### **ICAO**

Manual on Testing of Radio Navigation Aids, Doc 8071.

#### **EUROCAE ED 52**

MPS for conventional and Doppler VHF omni-range (C VOR and D VOR) (ground equipment).

#### **EUROCAE ED 53A**

MOPS for microwave landing system (MLS) (ground equipment).

#### **EUROCAE ED 57**

MOPS for Distance Measuring Equipment (DME/N and DME/P) (ground equipment)".

# **EUROCAE ED-114**

MOPS for a Ground Based Augmentation System (GBAS) ground facility to support CAT I approach and landing.





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# 3.2 Electromagnetic compatibility

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

EN 301 489-1 Electromagnetic compatibility and Radio spectrum Matters (ERM);

Electromagnetic Compatibility (EMC) standard for radio equipment and

services; Part 1: Common technical requirements.

#### 3.3 Health and safety

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

# 3.4 Additional essential requirements

A licence must be obtained before equipment of this type can be used.

# 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>;

ITU Recommendations, ICAO documents and Eurocae standards obtained at cost from <a href="https://www.itu.int">www.itu.int</a>, <a href="https://www.itu.int</a>, <a href="https