
TECHNICAL SPECIFICATION

Requirements for Road Transport, Traffic Telematics and Ancillary Equipment

TS RE 023, Version 1.0

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TABLE OF CONTENTS

1	GENERAL REQUIREMENTS	3
2	SCOPE	3
3	TECHNICAL REQUIREMENTS	3
3.1	EFFICIENT USE OF RADIO SPECTRUM.....	3
3.2	ELECTROMAGNETIC COMPATIBILITY.....	4
3.3	HEALTH AND SAFETY	5
3.4	ADDITIONAL ESSENTIAL REQUIREMENTS	5
3.5	VALIDITY OF STANDARDS	5

TS RE 023, Version 1.0

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 Road Transport, Traffic Telematics and Ancillary Equipment.

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).

- 5,8 GHz (ISM band): frequency allocation according to EN 300 674-1 (Clause 5.3), power ratings according to the Clause 7.1.7
- 24,05-24,25 GHz: power ratings according to the Clause 7.1.4.1.3 in EN 300 647-1
- 76-77 GHz: power ratings according to the Clause 7.2.3.1 in EN 301 091-1

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

TS RE 023, Version 1.0

- EN 300 674-2-1 Electromagnetic compatibility and Radio spectrum Matters (ERM); Road Transport and Traffic Telematics (RTTT); Dedicated Short Range Communication (DSRC) transmission equipment (500 kbit/s / 250 kbit/s) operating in the 5,8 GHz Industrial, Scientific and Medical (ISM) band; Part 2: Harmonized EN under Article 3.2 of the R&TTE Directive; Sub-part 1: Requirements for the Road Side Units (RSU).
- EN 301 091-2 Electromagnetic compatibility and Radio spectrum Matters (ERM); Road Transport and Traffic Telematics (RTTT) radar equipment operating in the 76 GHz to 77 GHz range; Part 2: Harmonized EN covering essential requirements of article 3.2 of the R&TTE directive.
- EN 302 288-2 Electromagnetic compatibility and Radio spectrum Matters (ERM) - Short Range Devices - Road Transport and Traffic Telematics (RTTT) - Short range radar equipment operating in the 24 GHz range - Part 2: Harmonized EN covering essential requirements of article 3(2) of the R&TTE directive.

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.
- EN 301 489-3 Electromagnetic compatibility and Radio spectrum Matters (ERM); Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 3: Specific conditions for Short Range Devices (SRD) operating on frequencies between 9 kHz and 40 GHz.

TS RE 023, Version 1.0

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:

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