# ÖVE/ÖNORM
# EN 303 213-5-2 V1.1.1

**Ausgabe: 2022-07-01**

# Advanced Surface Movement Guidance and Control System (A-SMGCS);
## Part 5: Harmonised Standard for access to radio spectrum for Multilateration (MLAT) equipment;
## Sub-part 2: Reference and Vehicle Transmitters

(ETSI EN 303 213-5-2 V1.1.1 (2022-04))



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## Nationales Vorwort

Diese Europäische Norm EN 303 213-5-2 V1.1.1:2022 hat sowohl den Status einer nationalen elektrotechnischen Norm gemäß ETG 1992 als auch den einer nationalen Norm gemäß NormG 2016. Bei ihrer Anwendung ist dieses Nationale Vorwort zu berücksichtigen.

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# ETSI EN 303 213-5-2 V1.1.1 (2022-04)


**Advanced Surface Movement Guidance and Control System (A-SMGCS); Part 5: Harmonised Standard for access to radio spectrum for Multilateration (MLAT) equipment; Sub-part 2: Reference and Vehicle Transmitters**

Reference
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# Foreword

This Harmonised European Standard (EN) has been produced by ETSI Technical Committee Electromagnetic compatibility and Radio spectrum Matters (ERM).

The present document has been prepared under the Commission's standardisation request C (2015) 5376 final [i.3] to provide one voluntary means of conforming to the essential requirements of Directive 2014/53/EU on the harmonisation of the laws of the Member States relating to the making available on the market of radio equipment and repealing Directive 1999/5/EC [i.1].

Once the present document is cited in the Official Journal of the European Union under that Directive, compliance with the normative clauses of the present document given in Table A.1 confers, within the limits of the scope of the present document, a presumption of conformity with the corresponding essential requirements of that Directive and associated EFTA regulations.

The present document is part 5, sub-part 2, of a multi-part deliverable covering Advanced Surface Movement Guidance and Control System (A-SMGCS), as identified below:

Part 1: "Community Specification for A-SMGCS surveillance service including external interfaces";

Part 2: "Community Specification for A-SMGCS airport safety support service";

Part 3: "Community Specification for a deployed cooperative sensor including its interfaces";

Part 4: "Community Specification for a deployed non-cooperative sensor including its interfaces";

**Part 5: "Harmonised Standard for access to radio spectrum for Multilateration (MLAT) equipment":**

Sub-part 1: "Receivers and Interrogators";

**Sub-part 2: "Reference and Vehicle Transmitters";**

Part 6: "Harmonised Standard for access to radio spectrum for deployed surface movement radar sensors";

Part 7: "Community Specification for A-SMGCS routing service";

Part 8: "Community Specification for A-SMGCS guidance service".

| National transposition dates | |
|---|---|
| Date of adoption of this EN: | 26 April 2022 |
| Date of latest announcement of this EN (doa): | 31 July 2022 |
| Date of latest publication of new National Standard or endorsement of this EN (dop/e): | 31 January 2023 |
| Date of withdrawal of any conflicting National Standard (dow): | 31 January 2024 |

# Modal verbs terminology

In the present document "**shall**", "**shall not**", "**should**", "**should not**", "**may**", "**need not**", "**will**", "**will not**", "**can**" and "**cannot**" are to be interpreted as described in clause 3.2 of the ETSI Drafting Rules (Verbal forms for the expression of provisions).

"**must**" and "**must not**" are **NOT** allowed in ETSI deliverables except when used in direct citation.

# Introduction

A-SMGCS are systems providing routing, guidance, surveillance and control to aircraft and affected vehicles in order to maintain movement rate under all local weather conditions within the Aerodrome Visibility Operational Level (AVOL) whilst maintaining the required level of safety.

# 1 Scope

The present document specifies technical characteristics and methods of measurements for the following equipment:

1) devices transmitting in the 1 090 MHz band, used as ground-based reference transmitters in Mode S multilateration equipment in an Advanced Surface Movement Guidance and Control System (A-SMGCS);

2) devices transmitting in the 1 090 MHz band, used for ground vehicle tracking in an Advanced Surface Movement Guidance and Control System (A-SMGCS).

Antennas for this equipment are considered to be passive without an additional amplifier.

NOTE: The relationship between the present document and essential requirements of article 3.2 of Directive 2014/53/EU [i.1] is given in Annex A.

# 2 References

## 2.1 Normative references

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the referenced document (including any amendments) applies.

Referenced documents which are not found to be publicly available in the expected location might be found at https://docbox.etsi.org/Reference/.

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The following referenced documents are necessary for the application of the present document.

[1] EUROCAE ED-117A (September 2016): "Minimum operational performance specification for Mode S Multilateration Systems for Use in Advanced Surface Movement Guidance and Control Systems (A-SMGCS)".

[2] ETSI EN 300 019-1-3 (V2.4.1) (04-2014): "Environmental Engineering (EE); Environmental conditions and environmental tests for telecommunications equipment; Part 1-3: Classification of environmental conditions; Stationary use at weatherprotected locations".

[3] ETSI EN 300 019-1-4 (V2.2.1) (04-2014): "Environmental Engineering (EE); Environmental conditions and environmental tests for telecommunications equipment; Part 1-4: Classification of environmental conditions; Stationary use at non-weatherprotected locations".

[4] ICAO Annex 10, Volume IV: "Surveillance Radar and Collision Avoidance systems", 5th edition, July 2014, including amendments up to amendment 90, November 2018.

## 2.2 Informative references

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