

**ElectroMagnetic Compatibility (EMC)
standard for radio equipment and services;
Part 50: Specific conditions for Cellular Communication
Base Station (BS), repeater and ancillary equipment;
Harmonised Standard covering the essential requirements
of article 3.1(b) of Directive 2014/53/EU
(ETSI EN 301 489-50 V2.2.1 (2019-04))**

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Nationales Vorwort

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ÖVE/ÖNORM EN 301 489-50 V2.1.1:2017-04-01.

ETSI EN 301 489-50 V2.2.1 (2019-04)



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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.15] 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 has been produced to rationalize the current ETSI EN 301 489 series [i.9] of EMC standards by collating the EMC requirements for Digital Cellular Communication Base Station (BS), repeater and ancillary Equipment into a single standard, there are no technical changes to product EMC Test requirements. The present document has been produced to replace ETSI EN 301 489-8 [i.9] (GSM/EDGE), ETSI EN 301 489-23 [i.9] (WCDMA and LTE, UTRA/E-UTRA), ETSI EN 301 489-26 [i.9] CDMA, 2000 1x and those parts of ETSI EN 301 489-4 [i.9] which pertain to OFDMA WMAN BS and to incorporate MSR and OFDMA WMAN.

The present document is part 50 of a multi-part deliverable. Full details of the entire series can be found in part 1 [1].

National transposition dates	
Date of adoption of this EN:	12 June 2017
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Date of latest publication of new National Standard or endorsement of this EN (dop/e):	31 January 2020
Date of withdrawal of any conflicting National Standard (dow):	31 January 2021

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).

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1 Scope

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

- 1) digital cellular base station equipment;
- 2) repeaters;
- 3) associated ancillary equipment.

Including individually and combinations of:

- UTRA, WCDMA (IMT-2000 Direct Spread, W-CDMA, UMTS);
- E-UTRA, LTE (IMT-2000 and IMT advanced);
- GSM (IMT-2000 SC, Technology GSM/EDGE);
- MSR (IMT-2000 and IMT advanced, combination of technologies above);
- OFDMA WMAN (IMT-2000 OFDMA, OFDMA WMAN);
- CDMA (CDMA2000 - IMT MC, CDMA2000 1X).

Technical specifications related to the antenna port and emissions from the enclosure port of radio equipment (base station (BS), and repeaters) are not included in the present document. Such technical specifications are found in the relevant product standards for the effective use of the radio spectrum.

Examples of base station equipment covered by the present document are given in annex B.

In case of differences (for instance concerning special conditions, definitions, abbreviations) between the present document and ETSI EN 301 489-1 [1], the provisions of the present document take precedence.

The present document covers the essential requirements of article 3.1(b) of Directive 2014/53/EU under the conditions identified in annex A.

Technical specifications related to the antenna port of radio equipment and radiated emissions from the enclosure port of radio equipment and combinations of radio and associated ancillary equipment are given in the harmonised product standards ETSI EN 301 908-1 [28] or ETSI EN 301 502 [8] for the effective and efficient use of the radio spectrum.

2 References

2.1 Normative references

References are specific, identified by date of publication and/or edition number or version number. Only the cited version applies.

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

- [1] ETSI EN 301 489-1 (V2.2.0) (03-2017): "ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements; Harmonised Standard covering the essential requirements of article 3.1(b) of Directive 2014/53/EU and the essential requirements of article 6 of Directive 2014/30/EU".