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**Universal Mobile Telecommunications System (UMTS);
Base station (BS) and repeater electromagnetic compatibility
(EMC)
(3GPP TS 25.113 version 13.0.1 Release 13)**



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650 Route des Lucioles
F-06921 Sophia Antipolis Cedex - FRANCE

Tel.: +33 4 92 94 42 00 Fax: +33 4 93 65 47 16

Siret N° 348 623 562 00017 - NAF 742 C
Association à but non lucratif enregistrée à la
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Foreword

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1 Scope

The present document covers the assessment of base stations, repeaters and associated ancillary equipment in respect of Electromagnetic Compatibility (EMC).

The present document specifies the applicable test conditions, performance assessment and performance criteria for base stations, repeaters and associated ancillary equipment in one of the following categories:

- base stations for the FDD mode of UTRA meeting the requirements of TS 25.104 [1], with conformance demonstrated by compliance to TS 25.141 [3].
- base stations for both options of the TDD mode of UTRA meeting the requirements of TS 25.105 [2], with conformance demonstrated by compliance to TS 25.142 [4]. The two options are the 3,84 Mcps and 1,28 Mcps options respectively. The requirements are listed in different subsections only if the parameters deviate.
- repeaters for the FDD mode of UTRA meeting the requirements of TS 25.106 [10], with conformance demonstrated by compliance to TS 25.143 [11].

Technical requirements related to the antenna port of base stations or repeaters are not included in the present document. These are found in the relevant product standards [1], [2], [3], [4], [10], [11].

The environment classification used in the present document refers to the environment classification used in IEC 61000-6-1 [5] and IEC 61000-6-3 [6].

The EMC requirements have been selected to ensure an adequate level of compatibility for apparatus at residential, commercial and light industrial environments. The levels, however, do not cover extreme cases which may occur in any location but with low probability of occurrence.

2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

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- [1] 3GPP TS 25.104: "UTRA (BS) FDD; Radio transmission and reception".
- [2] 3GPP TS 25.105: "UTRA (BS) TDD; Radio transmission and reception".
- [3] 3GPP TS 25.141: "UTRA (BS) FDD; Base station conformance testing (FDD)".
- [4] 3GPP TS 25.142: "UTRA (BS) TDD; Base station conformance testing (TDD)".
- [5] IEC 61000-6-1: 2005; "Electromagnetic compatibility (EMC) - Part 6: Generic standards - Section 1: Immunity for residential, commercial and light-industrial environments".
- [6] IEC 61000-6-3: 1996; "Electromagnetic compatibility (EMC) - Part 6: Generic standards - Section 3: Emission standard for residential, commercial and light industrial environments".
- [7] IEC 60050(161): "International Electrotechnical Vocabulary - Chapter 161: Electromagnetic compatibility".
- [8] 3GPP TS 25.101: "UTRA (UE) FDD; UE Radio transmission and reception (FDD)".
- [9] 3GPP TS 25.102: "UTRA (UE) TDD: UE Radio transmission and reception (TDD)".