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**Universal Mobile Telecommunications System (UMTS);
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(3GPP TS 25.101 version 8.17.0 Release 8)**



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Foreword

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1 Scope

The present document establishes the minimum RF characteristics of the FDD mode of UTRA for the User Equipment (UE).

2 References

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

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
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- [1] (void)
- [2] ITU-R Recommendation SM.329: "Unwanted emissions in the spurious domain".
- [3] (void)
- [4] 3GPP TS 25.433: "UTRAN Iub Interface NBAP Signalling".
- [5] ETSI ETR 273: "Electromagnetic compatibility and Radio spectrum Matters (ERM); Improvement of radiated methods of measurement (using test sites) and evaluation of the corresponding measurement uncertainties; Part 1: Uncertainties in the measurement of mobile radio equipment characteristics; Sub-part 2: Examples and annexes".
- [6] 3GPP TS 45.004: "Modulation".
- [7] 3GPP TS 25.331: "Radio Resource Control (RRC); Protocol Specification".
- [8] 3GPP TS25.214: "Physical layer procedures (FDD)".
- [9] 3GPP TS 25.307: "Requirements on User Equipments (UEs) supporting a release-independent frequency band".

3 Definitions, symbols and abbreviations

3.1 Definitions

For the purposes of the present document, the following definitions apply:

Enhanced performance requirements type 1: This defines performance requirements which are optional for the UE. The requirements are based on UEs which utilise receiver diversity.

Enhanced performance requirements type 2: This defines performance requirements which are optional for the UE. The requirements are based on UEs which utilise a chip equaliser receiver structure.

Power Spectral Density: The units of Power Spectral Density (PSD) are extensively used in this document. PSD is a function of power versus frequency and when integrated across a given bandwidth, the function represents the mean power in such a bandwidth. When the mean power is normalised to (divided by) the chip-rate it represents the mean energy per chip. Some signals are directly defined in terms of energy per chip, (DPCH_{E_c}, E_c, OCNS_{E_c} and S-CCPCH_{E_c}) and others defined in terms of PSD (I_o, I_{oc}, I_{or} and \hat{I}_{or}). There also exist quantities that are a ratio of energy