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Technical Specification

**Universal Mobile Telecommunications System (UMTS);
Requirements on User Equipments (UEs)
supporting a release-independent frequency band
combination
(3GPP TS 25.317 version 10.0.0 Release 10)**



Reference

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Foreword

This Technical Specification has been produced by the 3rd Generation Partnership Project (3GPP).

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Version x.y.z

where:

- x the first digit:
 - 1 presented to TSG for information;
 - 2 presented to TSG for approval;
 - 3 or greater indicates TSG approved document under change control.
- y the second digit is incremented for all changes of substance, i.e. technical enhancements, corrections, updates, etc.
- z the third digit is incremented when editorial only changes have been incorporated in the document.

1 Scope

The present document specifies requirements on UEs supporting a frequency band combination that is independent of release. TSG-RAN has agreed that the standardisation of new frequency band combinations of DB-DC-HSDPA may be independent of a release. However, in order to implement a UE that conforms to a particular release but supports a band combination of operation that is specified in a later release, it is necessary to specify some extra requirements.

For example, Band I-XI combination for DB-DC-HSDPA (referred to as DB-DC-HSDPA configuration 4 in [2]) is contained in the Release 10 specifications. In order to implement a UE conforming to Release 9 but supporting this configuration, it is necessary for the UE to additionally conform to some parts of the Release 10 specifications, such as the radio frequency and radio resource management requirements for the configuration.

All DB-DC-HSDPA configurations are fully specified in this release of the specifications. The present document does not contain any requirements for UEs supporting DB-DC-HSDPA configurations independent of release.

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.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.

[1] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".

[2] 3GPP TS 25.101 (Release 10): User Equipment (UE) radio transmission and reception (FDD)

[3] 3GPP TS 25.133 (Release 10): Requirements for support of radio resource management (FDD)

3 Definitions and Abbreviations

3.1 Definitions

For the purposes of the present document, the terms and definitions given in [1] apply.

3.2 Abbreviations

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

DB-DC-HSDPA Dual Band Dual Cell HSDPA
RRM Radio Resource Management

4 Applicability of RRM requirements

A UE supporting DB-DC-HSDPA shall meet the measurement requirements specified in subclause 9.1.1 and 9.1.2 [3] corresponding to the release where the particular DB-DC-HSDPA band combination is supported.

5 DB-DC-HSDPA Configuration 4 Independent of Release

DB-DC-HSDPA Configuration 4, i.e. Band I-XI combination, is specified in Release 10 in [2] but is defined as a release-independent frequency band combination. This approach aligns DB-DC-HSDPA configuration 4 with other DB-DC-HSDPA configurations when considering features that have to be supported in different releases.

5.1 DB-DC-HSDPA Configuration 4 UE

UEs that conform to Release 9 and support DB-DC-HSDPA configuration 4 shall support the following requirements in Release 10.

5.1.1 RF Requirements

The UE shall comply with the RF requirements for DB-DC-HSDPA configuration 4, as specified in [2]. These requirements are:

Table 5.1.1-1: RF Requirements for DB-DC-HSDPA Configuration 4 UE

| Section / Clause | Description |
|------------------|---------------------------------|
| 5.2 | Frequency bands |
| 6.2.1 | UE maximum transmit power |
| 7.3 | Reference sensitivity level |
| 7.5 | ACS |
| 7.6 | Blocking characteristics |
| 7.7 | Spurious response |
| 7.8 | Intermodulation Characteristics |

Note: all the receiver core requirements, which are defined relative to reference sensitivity level, shall consider the reference sensitivity as specified in [2].

6 DB-DC-HSDPA Configuration 5 Independent of Release

DB-DC-HSDPA configuration 5, i.e. Band II-V combination, is specified in Release 10 in [2] but is defined as a release-independent frequency band combination. This approach aligns DB-DC-HSDPA configuration 5 with other DB-DC-HSDPA configurations when considering features that have to be supported in different releases.

6.1 DB-DC-HSDPA Configuration 5 UE

UEs that conform to Release 9 and support DB-DC-HSDPA configuration 5 shall support the following requirements in Release 10.

6.1.1 RF Requirements

The UE shall comply with the RF requirements for DB-DC-HSDPA configuration 5, as specified in [2]. These requirements are:

Table 6.1.1-1: RF Requirements for DB-DC-HSDPA Configuration 5 UE

| Section / Clause | Description |
|------------------|---------------------------------|
| 5.2 | Frequency bands |
| 6.2.1 | UE maximum transmit power |
| 7.3 | Reference sensitivity level |
| 7.5 | ACS |
| 7.6 | Blocking Characteristics |
| 7.7 | Spurious response |
| 7.8 | Intermodulation Characteristics |

Note: all the receiver core requirements, which are defined relative to reference sensitivity level, shall consider the reference sensitivity as specified in [2].

Annex A (informative): Change history

Table A.1: Change History

| Date | TSG# | TSG Doc. | CR | Subject | Old | New |
|---------|-------|-----------|----|---|-------|--------|
| 03/2011 | RP-51 | RP-110196 | - | TS 25.317 approved by RAN #51 | 1.0.0 | 9.0.0 |
| 03/2011 | RP-51 | - | - | Upgrade to REL-10 - no technical change | 9.0.0 | 10.0.0 |
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History

| Document history | | |
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