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Technical Report

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This document introduces the specifications and technical reports written and maintained by 3GPP TSG RAN working group 4.

2 Document Structure

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2.1.1 Scope

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

2.2 25.102 UE Radio transmission and reception (TDD)

2.2.1 Scope

This document establishes the minimum RF characteristics of the TDD mode of UTRA for the User Equipment (UE).

2.3 25.103 RF parameters in support of RRM

2.3.1 Scope

This Technical Specification shall describe RF parameters and Requirements for the Radio Resource Management.

2.4 25.104 BTS Radio transmission and reception (FDD)

2.4.1 Scope

This document establishes the Base Station minimum RF characteristics of the FDD mode of UTRA.

2.5 25.105 BTS Radio transmission and reception (TDD)

2.5.1 Scope

This document establishes the minimum RF characteristics of the TDD mode of UTRA.

2.6 25.113 Base station EMC

2.6.1 Scope

This document defines EMC conformance requirements for the basestation necessary to meet relevant EMC regulations.

2.7 25.141 Base station conformance testing (FDD)

2.7.1 Scope

This specification describes the documents being produced by the 3GPP TSG RAN WG4 and first complete versions expected to be available by end of 1999. This specification gives also general description of the physical layer of the UTRA air interface,

[25.141 Editor's note: The following clause shall be revised.]

The S4 series specifies.
For each test, two conformance requirements are specified:

- essential conformance requirements;

- complete conformance requirements.

Essential conformance requirements are those which are required:

a) to ensure compatibility between the radio channels in the same cell;
b) to ensure compatibility between cells, both co-ordinated and unco-ordinated;
c) to ensure compatibility with existing systems in the same or adjacent frequency bands;
d) to verify the important aspects of the transmission quality of the system.

Essential conformance requirements are sufficient to verify the performance of the equipment for radio type approval purposes, in countries where this is applicable.

Complete conformance requirements may be tested to verify all aspects of the performance of a BSS. These requirements are intended to be used by manufacturers and operators to allow conformance and acceptance testing to be performed in a consistent manner; the tests to be performed should be agreed between the parties.

In some tests there are separate requirements for micro-BTS and BTS. If there is no separate requirement for a micro-BTS, the requirements for the BTS apply to a micro-BTS.

In the present document, the reference point for RF connections (except for the measurement of mean transmitted RF carrier power) is the antenna connector, as defined by the manufacturer. This TS does not apply to repeaters or RF devices which may be connected to an antenna connector of a BSS, except as specified in subclause 4.10.

2.8 25.142 Base station conformance testing (TDD)

2.8.1 Scope

The present document specifies the Radio Frequency (RF) test methods and conformance requirements for UTRA Base Transceiver Stations (BTS) operating in the TDD mode. These have been derived from, and are consistent with, the core UTRA specifications specified in the requirements reference subclause of each test.

For each test, two conformance requirements are specified:

- essential conformance requirements;
- complete conformance requirements.

In the context of the present specification, essential conformance requirements are those which are required for an efficient use of the spectrum, so as to avoid undue interference and corresponding service degradation. In detail, essential requirements are required

a) to ensure compatibility between the radio channels in the same cell;
b) to ensure compatibility between cells, both co-ordinated and uncoordinated;
c) to ensure compatibility with existing systems in the same or adjacent frequency bands.

System performance tests are not considered to include essential conformance requirements.

Essential conformance requirements are sufficient to verify the performance of the equipment for radio type approval purposes, in countries where this is applicable.

Complete conformance requirements may be tested to verify all aspects of the performance of a BTS. These requirements are intended to be used by manufacturers and operators to allow conformance and acceptance testing to be performed in a consistent manner; the tests to be performed should be agreed between the parties.

The present release of this specification defines the tests for essential conformance requirements only; tests for complete conformance requirements are due for later releases.

In this TS, the reference point for RF connections (except for the measurement of mean transmitted RF carrier power) is the antenna connector, as defined by the manufacturer. This TS does not apply to repeaters or RF devices which may be connected to an antenna connector of a BTS.

2.9 25.941 Document structure

2.9.1 Scope

This document introduces the specifications and technical reports written and maintained by 3GPP TSG RAN working group 4.

2.10 25.942 RF system scenarios

2.10.1 Scope

During the UTRA standards development, the physical layer parameters will be decided using system scenarios, together with implementation issues, reflecting the environments that UTRA will be designed to operate in.

2.11 30.504 Work plan

2.11.1 Scope

The present document shall provide a work plan and study items as agreed within the 3GPP TSG RAN working group 4.

For the FDD mode, as proposed in the input paper of R4-99160 the items shown in that document absolutely need to be finalised by the Japanese regulatory organisation, Telecommunications Technical Council of Japan, by the end of June 1999 so that MPT will be able to legislate on schedule for the regulation for the 3G system of Japan.

For the TDD mode, some deviations in achieving the intermediate milestones are shown, compared to FDD. However, it is strictly intended to have the same final milestone kept for TDD as for FDD.

History

Document history		
Date	**Version**	**Comment**
February 15th, 1999	0.0.1	Initial version as R4-99058, titled “R4.00 Introduction”
June 13th, 1999	0.0.2	Revised the items pointed out at the WG4#2 - #4 meetings. Change the title to “25.941 Document Structure” Removing temporal section of “Work Plan”
June 17, 1999	25.941 V1.0.0	Version presented to TSG RANmeeting#4 as TSGR#4(99)365 and noted as V1.0.0

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