# 30.504 V1.0.1 (1999-07)

*Work Plan*

# 3<sup>rd</sup> Generation Partnership Project (3GPP); Technical Specification Group (TSG) RAN; Working Group 4 (WG4);

# Work Plan and Study Items

Reference

<Workitem> (<Shortfilename>.PDF)

Keywords

Digital cellular telecommunications system,
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# Contents

# 1 Scope

This Technical Reporthas been produced by the 3GPP.

The contents of the present document are subject to continuing work within the TSG and may change following formal TSG approval. Should the TSG modify the contents of this TS, it will be re-released by the TSG with an identifying change of release date and an increase in version number as follows:

Version 3.y.z

where:

x    the first digit:

1    presented to TSG for information;
2    presented to TSG for approval;
3    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 specification;

# 2 Introduction

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.

# 3 Meeting Schedule

The milestones used in this document are based on the following meeting schedule.

WG4 #4 : May 10 – May 12, Kista Stockholm, Sweden
WG4 #5 : June 14 – June 16, Miami Florida, USA
RAN #4 : June 17 – June 18, ditto
WG4 #6 : July 26 – July 29, Queensferry Scotland, UK
WG4 #7 : September 7 – September 10, Makuhari Chiba, Japan
RAN #5 : October 6 – October 8, Korea
WG4 #8 : October 26 – October 29, Sophia Antipolis, France
WG4 #9 : November 29 – December 2, tbd
RAN #6 : December 15 – December 17, Sophia Antipolis, France

Note that some of the future meetings have been re-scheduled.

# 4 Work Plan

Table 4 shows the agreed work plan for the TSG RAN WG4 and document status as well as of the issuance of this document.

**Table 4:Work Plan**

| Specification number | WG4 #4 | WG4 #5 | RAN #4 | WG4 #6 | WG4 #7 | RAN #5 | WG4 #8 | WG4 #9 | RAN #6 | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|
| 25.101 - UE TX & RX (FDD) | **1** | | **2** | | | 3 | | | | |
| 25.104 - BTS TX & RX (FDD) | **1** | | **2** | | | 3 | | | | |
| 25.102 - UE TX & RX (TDD) | **1** | | | | | 2 | | | 3 | |
| 25.105 - BTS TX & RX (TDD) | **1** | | | | | 2 | | | 3 | |
| 25.103 - RF parameters | | **1** | | | | 2 | | | 3 | |
| 25.141 - BS Conformance Test (FDD) | | **1** | | | | 2 | | | 3 | |
| 25.142 - BS Conformance Test (TDD) | | | | 1 | | 2 | | | 3 | |
| 25.113 - BS EMC | | | | 1 | | 2 | | | 3 | |
| 25.941 - Document Structure | **1** | | | | | 2 | | | 3 | |
| 25.942 - RF System Scenarios | | **1** | | | | 2 | | | 3 | |

Notes:
- **1** means the document is agreed as version 1.0.0 at RAN WG4
- **1** (underlined) means the document has already been agreed as version 1.0.00 at RAN WG4
- **2** means the document is endorsed as version 2.0.0 at TSG RAN
- **2** (underlined) means the document has already been endorsed as version 2.0.0 at TSG RAN
- **3** means the document is approved as version 3.0.0 at TSG RAN
- The version numbers must be understood based on the explanation in the section 8 "Document/version numbering" of the Report of the TSG-RAN meeting #3 [RP-99305].

# 5 Study Item

A table "Study Items for 25.xyz" shows all the items that have not been agreed or are tbd in that particular document as of the issuance of this 30.504 document. A mark X indicates that the marked item needs to be agreed and fixed by the indicated milestone. Moreover, X-marked milestones for the FDD mode are **absolute** deadlines.

## 5.1 25.101 (UE TX & RX for FDD)

Table 5-1 shows the agreed study items for the 25.101 specification document.

**Table 5-1:Study Items for 25.101**

| Items | WG4 #4 | WG4 #5 | RAN #4 | WG4 #6 | WG4 #7 | RAN #5 | WG4 #8 | WG4 #9 | RAN #6 | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|
| **Frequency Bands and Channel Assignment** | | | | | | | | | | |
| • TX-RX frequency separation | | X | | | | | | | | |
| **TX characteristics** | | | | | | | | | | |
| • Max output power | | X | | | | | | | | |
| • Closed loop power control in DL | | X | | | | | | | | |
| • Power control steps | | X | | | | | | | | |
| • Adjacent Channel Leakage Ratio (ACLR) | | X | | | | | | | | (1) |
| • Modulation Accuracy | | X | | | | | | | | |
| • Peak code Domain error | | X | | | | | | | | |
| **RX characteristics** | | | | | | | | | | |
| • Static reference sensitivity level | | X | | | | | | | | |
| • Maximum input level | | X | | | | | | | | |
| • Adjacent Channel Selectivity (ACS) | | X | | | | | | | | |
| • Blocking characteristics | | X | | | | | | | | |
| • Spurious response | | X | | | | | | | | |
| • Intermodulation characteristics | | X | | | | | | | | |
| **Performance Requirement** | | | | | | | | | | |
| • Test Environment (Packet switched data) | | | | | X | | | | | |
| • Demodulation in non fading channel | | | | | X | | | | | |
| • Demodulation of DTCH | | | | | X | | | | | |
| • Inter-cell Soft Handover | | | | | X | | | | | |
| • RX Synch. Characteristics | | | | | X | | | | | |
| • Timing Characteristics | | | | | X | | | | | |

Notes:
• (1) Milestone was moved from WG4 #4 to WG4 #5 in ver 0.0.2.

## 5.2 25.104 (BTS TX & RX for FDD)

Table 5-2 shows the agreed study items for the 25.104 specification document.

**Table 5-2:Study Items for 25.104**

| Items | WG4#4 | WG4#5 | RAN#4 | WG4#6 | WG4#7 | RAN#5 | WG4#8 | WG4#9 | RAN#6 | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|
| **Frequency Bands and Channel Assignment** | | | | | | | | | | |
| • TX-RX frequency separation | | X | | | | | | | | |
| **TX characteristics** | | | | | | | | | | |
| • BS Max output power | | | | | | | | X | | Extreme conditions |
| • Frequency Stability | | X | | | | | | | | |
| • Output Power Dynamics | | | | X | | | | | | |
| • Adjacent Channel Leakage Ratio (ACLR) | | X | | | | | | | | |
| • Spurious Emissions | | X | | | | | | | | |
| • Transmit Intermodulation | | X | | | | | | | | |
| • Modulation Accuracy | | X | | | | | | | | |
| • Peak code Domain error | | X | | | | | | | | |
| **RX characteristics** | | | | | | | | | | |
| • Reference Sensitivity level | | X | | | | | | | | |
| • Maximum frequency Deviation for Receiver Performance | | | | | X | | | | | |
| • Dynamic Range | | | | X | | | | | | |
| • Adjacent Channel Selectivity (ACS) | | X | | | | | | | | |
| • Blocking characteristics | | | | X | | | | | | |
| • Spurious response | | X | | | | | | | | |
| • Intermodulation characteristics | | X | | | | | | | | |
| • Spurious Emissions | | | | X | | | | | | |
| **Performance Requirement** | | | | | | | | | | |
| • Performance in AWING Channel | | | | X | | | | | | |
| • Performance in Multipath Fading Channels | | | | | | | | X | | |

## 5.3  25.102 (UE TX & RX for TDD)

Table 5-3 shows the agreed study items for the 25.102 specification document.

**Table 5-3:Study Items for 25.102**

| Items | WG4 #4 | WG4 #5 | RAN #4 | WG4 #6 | WG4 #7 | RAN #5 | WG4 #8 | WG4 #9 | RAN #6 | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|
| **Frequency Bands and Channel Assignment** | | | | | | | | | | |
| • Frequency Bands | | X | | | | | | | | |
| **TX characteristics** | | | | | | | | | | |
| • Max output power | | | | | X | | | | | |
| • UE frequency stability | | X | | | | | | | | |
| • Open loop power control UL | | | | X | | | | | | |
| • Closed power control UL | | | | X | | | | | | |
| • Power control steps | | | | X | | | | | | |
| • Power control cycles per second | | | | X | | | | | | |
| • Minimum transmit output power | | X | | | | | | | | |
| • Transmit on/off ratio/DTX | | | | | X | | | | | |
| • Adjacent Channel Leakage Ratio (ACLR) | | | | X | | | | | | |
| • Transmit intermodulation | | | | | X | | | | | |
| • Modulation Accuracy | | | | X | | | | | | |
| **RX characteristics** | | | | | | | | | | |
| • Static reference sensitivity level | | | | | X | | | | | |
| • Maximum input level | | | | | X | | | | | |
| • Adjacent Channel Selectivity (ACS) | | | | | X | | | | | |
| • Blocking characteristics | | | | | X | | | | | |
| • Spurious response | | | | | X | | | | | |
| • Intermodulation characteristics | | | | | X | | | | | |
| • Spurious emissions | | | | | X | | | | | |
| **Performance Requirement** | | | | | | | | | | |
| • Test Environment | | | | | | | | X | | |
| • Demodulation in non fading channel | | | | | | | X | | | |
| • Demodulation of PCH/FACH/DTCH | | | | | | | X | | | |
| • Multi-Link Performance | | | | | | | | X | | |
| • RX Synch. Characteristics | | | | | | | X | | | |
| • Interfrequency handover | | | | | | | X | | | |
| • Timing Requirements | | | | | | | X | | | |

## 5.4 25.105 (BTS TX & RX for TDD)

Table 5-4 shows the agreed study items for the 25.105 specification document.

**Table 5-4:Study Items 25.105**

| Items | WG4 #4 | WG4 #5 | RAN #4 | WG4 #6 | WG4 #7 | RAN #5 | WG4 #8 | WG4 #9 | RAN #6 | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|
| **Frequency Bands and Channel Assignment** | | | | | | | | | | |
| • Frequency Bands | | X | | | | | | | | |
| **TX characteristics** | | | | | | | | | | |
| • Max output power | | | | | X | | | | | Extreme Conditions |
| • UE Frequency Stability | | X | | | | | | | | |
| • Open Loop Power Control UL | | | | X | | | | | | |
| • Closed Power Control UL | | | | X | | | | | | |
| • Power control steps | | | | X | | | | | | |
| • Power Control Steps per Second | | | | X | | | | | | |
| • Minimum Transmit Output Power | | X | | | | | | | | |
| • Transmit on/off ratio/DTX | | | | | X | | | | | |
| • Adjacent Channel Leakage Ratio (ACLR) | | | | X | | | | | | |
| • Intermodulation Characteristics | | | | | X | | | | | |
| • Modulation Accuracy | | | | X | | | | | | |
| **RX characteristics** | | | | | | | | | | |
| • Static reference sensitivity level | | | | | X | | | | | |
| • Maximum input level | | | | | X | | | | | |
| • Adjacent Channel Selectivity (ACS) | | | | | X | | | | | |
| • Blocking characteristics | | | | | X | | | | | |
| • Spurious response | | | | | X | | | | | |
| • Intermodulation characteristics | | | | | X | | | | | |
| • Spurious Emissions | | | | | X | | | | | |
| **Performance Requirement** | | | | | | | | | | |
| • Test Environment | | | | | | | | X | | |
| • Demodulation in non fading channel | | | | | | | X | | | |
| • Demodulation of PCH/FACH/DTCH | | | | | | | X | | | |
| • Multi-Link Performance | | | | | | | | X | | |
| • RX Synch. Characteristics | | | | | | | X | | | |
| • Interfrequency handover | | | | | | | X | | | |
| • Timing Characteristics | | | | | | | X | | | |

## 5.5 25.103 (RF Parameters)

Table 5-5 shows the agreed study items for the 25.103 specification document.

**Table 5-5:Study Items for 25.103**

| Items | WG4 #4 | WG4 #5 | RAN #4 | WG4 #6 | WG4 #7 | RAN #5 | WG4 #8 | WG4 #9 | RAN #6 | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|
| **Idle Mode Tasks** | | | | | | | | | | |
| • Cell Selection Requirements Text | | X | | | | | | | | |
| • Cell Selection Requirements Values | | | | | | | X | | | (1) |
| • Cell Re-Selection Requirements Text | | X | | | | | | | | |
| • Cell Re-Selection Requirements Values | | | | | | | X | | | (1) |
| **RRC Connection Mobility** | | | | | | | | | | |
| • Soft Handover Requirements Text | | X | | | | | | | | |
| • Soft Handover Requirements Values | | | | | | | X | | | (1) |
| • Hard Handover Requirements Text | | X | | | | | | | | |
| • Hard Handover Requirements Values | | | | | | | X | | | (1) |
| • Radio Link Measurement Requirements Text | | X | | | | | | | | |
| • Radio Link Measurement Requirements Values | | | | | | | X | | | (1) |
| **Admission Control** | | | | | | | X | | | (2) |
| **Radio Access Bearer Control** | | | | | X | | | | | |
| **Dynamic Channel Allocation** | | | | | | | X | | | (2) |

Notes:
- (1) Milestone was moved from WG4 #6 to WG4 #8 in ver 1.0.0.
- (2) Milestone was moved from WG4 #7 to WG4 #8 in ver 1.0.0.

# History

| Document history | | |
|---|---|---|
| **Date** | **Version** | **Comment** |
| May 11th, 1999 | 0.0.1 | Initial version as R4-99251 based on R4-99190 and R4-99252. |
| June 3rd, 1999 | 0.0.2 | Revised the items pointed out at the WG4 #4 meeting. Incorporated the Study Items shown in R4-99253. |
| June 16th, 1999 | 1.0.0 | Table 5.5 was revised to incorporate agreed part of R4-99316. |
| July 15th, 1999 | 1.0.1 | Minor editorial changes incorporated. |
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