30.504 V1.4.0 (1999-09)

Work Plan

3rd Generation Partnership Project (3GPP); Technical Specification Group (TSG) RAN; Working Group 4 (WG4);

Work Plan and Study Items

Reference

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Keywords

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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, South Queensferry Scotland, UK

WG4 #7 : September 7 – September 10, Makuhari Chiba, Japan

RAN #5 : October 6 – October 8, Kyongju, Korea

WG4 #8 : October 26 – October 29, Sophia Antipolis, France

WG4 #9 : December 6 – December 9, Bath, UK

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				(1)
25.105 - BTS TX & RX (TDD)	**1**				**2**	3				(1)
25.103 - RF parameters		**1**			**2**				3	(2)
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	(2)
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 agreed as version 2.0.0 at RAN WG4
- **2** (underlined) means the document has already been agreed as version 2.0.0 at RAN WG4
- **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].

(1) Milestone for version 3 has been brought in to be in line with PCG#2(99)21 in ver 1.1.0.
(2) Agreed at the WG4 #7 meeting to push back the milestone for version 3 as seen in the table.

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.

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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 a first draft proposal for an updated version of 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 (FDD)										
Cell Selection Scenario										
• Cell selection delay – Text		X								
• Cell selection delay - Value							X			
Cell Re-Selection Scenario										
• Cell re-selection delay – Text		X								
• Cell re-selection delay – Value							X			
• Cell List Size – Text		X								
• Cell List Size – Value							X			
• Maximum number of cells to be monitored – Text		X								
• Maximum number of cells to be monitored – Value							X			
• Cell Re-selection reaction time – Text					X					
• Cell Re-selection reaction time – Value							X			
RF Parameters used for Cell Re-Selection								X		
PLMN Selection and Re-Selection Scenario – Text							X			
PLMN Selection and Re-Selection Scenario – Values								X		
Location Registration Scenario – Text							X			
Location Registration Scenario – Values								X		
Idle Mode Tasks (TDD)										
Cell Selection Scenario										
• Cell selection delay – Text		X								
• Cell selection delay - Value							X			
Cell Re-Selection Scenario										
• Cell re-selection delay – Text		X								
• Cell re-selection delay – Value							X			
• Cell List Size – Text		X								
• Cell List Size – Value							X			
• Maximum number of cells to be monitored – Text		X								
• Maximum number of cells to be monitored – Value							X			
• Cell Re-selection reaction time – Text					X					

• Cell Re-selection reaction time – Value						X		
• RF Parameters used for Cell Re-Selection							X	
PLMN Selection and Re-Selection Scenario – Text						X		
PLMN Selection and Re-Selection Scenario – Values							X	
Location Registration Scenario – Text						X		
Location Registration Scenario – Values							X	
RRC Connection Mobility								
Handover 3G to 3G								
FDD Soft/Softer Handover								
• Maximum number of cells to be monitored – Text	X							
• Maximum number of cells to be monitored – Value						X		
• Measurement reporting delay – Text	X							
• Measurement reporting delay – Value						X		
• Active set dimension – Text	X							
• Active set dimension – Value						X		
• Active set update time interval – Text	X							
• Active set update time interval – Value						X		
• Frame offset Measurement Accuracy – Text	X							
• Frame offset Measurement Accuracy – Value						X		
FDD Inter-Frequency Handover								
• Maximum number of cells/frequencies to be monitored – Text	X							
• Maximum number of cells/frequencies to be monitored – Value						X		
• Measurement reporting delay – Text	X							
• Measurement reporting delay – Value						X		
• Frame offset Measurement Accuracy – Text	X							
• Frame offset Measurement Accuracy – Value						X		
FDD/TDD Handover								
• Requirements –Text						X		
• Requirements - Values							X	
• RF Parameters							X	
TDD/TDD Handover								
• Requirements –Text						X		
• Requirements- Values							X	
• RF Parameters							X	
Radio Link Management								
Link adaptation								
• Link adaptation delay minimum						X		

requirement – Value									
• Link adaptation accuracy minimum requirement – Value							X		
Cell Update								X	
URA Update								X	
Admission Control (FDD)							X		
Admission Control (TDD)							X		
Radio Access Bearer Control (FDD)							X		
Radio Access Bearer Control (TDD)							X		
Dynamic Channel Allocation (FDD)							X		
Dynamic Channel Allocation (TDD)							X		
Radio Link Surveillance (FDD)							X		
Radio Link Surveillance (TDD)							X		
Radio Link Measurement Requirements – Text							X		
Radio Link Measurement Requirements – Values								X	
Radio Link Failure Requirements – Text							X		
Radio Link Failure Requirements – Values								X	

[Editor's note: The above table was developed by the editor of the TS 25.103.]

5.6 25.141 (BS Conformance Test for FDD)

Table 5-6 shows the identified study items for the 25.141 specification document.

Table 5-6:Study Items for 25.141

Items	WG4 #4	WG4 #5	RAN #4	WG4 #6	WG4 #7	RAN #5	WG4 #8	WG4 #9	RAN #6	Remarks
General test conditions and declarations										
• BTS Configurations					X					
Transmitter										
• Base station maximum output power					X					
• Frequency stability					X					
• Clock Frequency accuracy						X				
• Output power dynamics					X					
• Transmitted RF carrier power versus time					X					
• Output RF spectrum emissions							X			
• Transmit intermodulation							X			
Receiver characteristics										
• General					X					
• Test conditions and measurement methods							X			
• Dynamic range							X			
• Adjacent Channel Selectivity (ACS)							X			
• Blocking characteristics							X			
• Spurious response							X			
• Spurious emissions							X			
Performance requirement										
• BS Dynamic reference sensitivity performance					X					

[Editor's note: The above table was developed by the editor based on the open item list included in TS 25.141 V1.0.4.]

5.7 25.142 (BS Conformance Test for TDD)

Table 5-7 shows the identified study items for the 25.142 specification document.

Table 5-7:Study Items for 25.142

Items	WG4 #4	WG4 #5	RAN #4	WG4 #6	WG4 #7	RAN #5	WG4 #8	WG4 #9	RAN #6	Remarks
Transmitter characteristics										
• Maximum output power				X						
• Frequency stability				X						
• Output power dynamics					X					
• Transmitted ON/OFF ratio					X					
• Output RF spectrum emissions							X			
• Transmit intermodulation							X			
• Modulation accuracy							X			
Receiver characteristics										
• Reference sensitivity level							X			
• Dynamic range							X			
• Adjacent Channel Selectivity (ACS)							X			
• Blocking characteristics							X			
• Spurious response							X			
• Intermodulation characteristics								X		
• Spurious emissions								X		
• Timing advance (TA) requirements								X		
Performance requirement										
• Dynamic reference sensitivity performance								X		

[Editor's note: The above table was developed by the editor of the TS 25.142.]

5.8 25.113 (BS EMC)

Table 5-8 shows the identified study items for the 25.113 specification document.

Table 5-8:Study Items for 25.113

Items	WG4#4	WG4#5	RAN#4	WG4#6	WG4#7	RAN#5	WG4#8	WG4#9	RAN#6	Remarks
Definitions, symbols and abbreviations										
• Definition of: Loss of service & Loss of call							X			
• Definition of:Transient phenomena & Continuous phenomena							X			
Test Conditions							X			
Performance Assessment							X			
Performance Criteria										
• Number of tests							X			
• Self recovery							X			
Applicability Overview							X			

[Editor's note: The above table was developed by the editor based on the open item list included in TS 25.113 V1.1.1.]

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.
July 24th, 1999	1.1.0	Milestone change incorporated to be in line with PCG#2(99)21.
August 25th, 1999	1.2.0	Revised the meeting schedule for #9 meeting as agreed at #6 meeting and updated Table 4:Work Plan.
September 8th, 1999	1.3.0	Incorporated the following pages. 5.6 25.141 (BS CONFORMANCE TEST FOR FDD) 5.7 25.142 (BS CONFORMANCE TEST FOR TDD) 5.8 25.113 (BS EMC)
September 30th, 1999	1.4.0	Editorial error in Table 4 corrected. Milestone change incorporated as agreed at the WG4 #7 meeting. Updated the following pages. 5.5 25.103 (RF Parameters) 5.7 25.142 (BS CONFORMANCE TEST FOR TDD) 5.8 25.113 (BS EMC).

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