Source: **TSG-RAN**

Title: **Work Item sheets - latest situation**

This document contains WI sheets in TSG-RAN (latest situation) for all approved Work Items. Those of the approved study items are provided in a separate document.

See RP-000521 (draft minutes of TSG-RAN #9 meeting) for comments on the sheets provided in yellow.

Sheets in green have been re-issued and (if indeed based on the comments in RP-000521) should be considered endorsed.

For the approved Work Items in red, there is not yet a WI sheet.

WI sheets in blue are new or have changed since TSG-RAN #9 (other than because of comments at TSG-RAN #8) and also need to be endorsed.

The approved Work Items at the end of TSG-RAN #9 are:

1. Low chip rate TDD option
2. Base station classification
3. FDD Base station classification
4. TDD Base station classification
5. UE positioning in UTRA TDD (replaced by 34. and 35.)
6. UE positioning in UTRA FDD (replaced by 34. and 35.)
7. Hybrid ARQ II/III
8. NodeB Synchronisation for TDD
9. UTRA FDD Repeater Specification
10. QoS optimization for AAL type 2 connections over Iub and Iur interfaces
11. Terminal power saving features
12. PS-Domain handover for real-time services
13. RAB Quality of Service Negotiation/Renegotiation over Iu
14. RRM optimizations for Iur and Iub
15. Radio access bearer support enhancement
16. Improvement of inter-frequency and inter-system measurements
17. Improved usage of downlink resource in FDD for CCTrCHs of dedicated type
18. IP Transport in UTRAN
19. Transcoder Free Operations in UTRAN
20. Evolution of the transport in the UTRAN
21. Radio Interface Improvement Feature
22. RAN Improvement Feature
23. UE Positioning
24. Void (originally Radio Interface Testing)
25. Requirement on Equipment
26. Low Chip Rate TDD Physical Layer
27. Low chip rate TDD layer 2 and layer 3 protocol aspects
28. Low Chip Rate TDD RF Radio Transmission/ Reception, System Performance Requirements and Conformance Testing
29. Smart antenna
30. Low Chip Rate TDD UE radio access Capability
31. Low chip rate TDD UTRAN network Iub/Iur protocol aspects
32. RAB Quality of Service Negotiation over Iu
33. RAB Quality of Service Renegotiation over Iu
34. Iub/Iur interfaces for UE positioning methods supported on the radio interface release 99
35. UE positioning enhancements
36. RAN Technical Small Enhancements and Improvements

37. DSCH power control improvement in soft handover
38. Migration to Modification procedure
39. UMTS 1800

1 Low chip rate TDD option

Distributed as: RAN_Work_Items_after_RAN_9 (originally RP-000191)

Work Item Description

Title

Low chip rate TDD option

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

Low Chip Rate TDD Physical Layer
Low chip rate TDD layer 2 and layer 3 protocol aspects
Low Chip Rate TDD RF Radio Transmission/ Reception, System Performance Requirements and Conformance Testing
Low Chip Rate TDD UE radio access Capability
Low chip rate TDD UTRAN network Iub/Iur protocol aspects

3 Justification

The integration of TDD low chip rate option in Release 2000 is discussed and approved in RAN#6. This paper is to describe the work plan of the integration for low chip rate TDD in R00.

4 Objective

The technical objective of this work item is the integration of the low chiprate TDD functionality in UTRA TDD, in line with decisions at RAN#6.

- For physical layer, the features include:
  - The frame structure and the burst structure
  - Channel description and mapping
  - Modulation and spreading
  - Channel coding and multiplexing
  - Physical layer procedures
  - Measurements by physical layer

– For higher layers:
  The work will focus on adding extensions and Add-Ons for low chip rate support.

– For Iur/Iub interface:
  For the adoption of some new features, e.g. the smart antenna, baton hand-over, some additional messages in Iur and Iub interface signalling for low chip rate TDD option should be taken into consideration.

– For radio transmission and reception:
  – The system performance requirements supporting low chip rate services
  – The Rx characteristics requirement
  – The Transmitter characteristics requirement
  – The frequency bands and channel arrangements

5 Service Aspects

None

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

None

9 Impacts

Affects:	USIM	ME	AN	CN	Others
Yes		X	X		
No	X			X	X
Don't know					

10 Expected Output and Time scale (to be updated at each plenary)

New specifications						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for endorsement at plenary#	Approved at plenary#	Comments

Affected existing specifications				
Spec No.	CR	Subject	Approved at plenary#	Comments

The expected finalisation date is TSG-RAN #11

11 Work item raporteurs

Mr. Guiliang Yang (CATT/CWTS)

12 Work item leadership

TSG-RAN WG1

13 Supporting Companies

TSG-RAN

14 Classification of the WI (if known)

X	Feature (go to 14a)
	Building Block (go to 14b)
	Work Task (go to 14c)

14a The WI is a Feature: List of building blocks under this feature

(list of Work Items identified as building blocks)
The building blocks should be discussed and approved via email discussion

14b The WI is a Building Block: parent Feature

(one Work Item identified as a feature)

14c The WI is a Work Task: parent Building Block

(one Work Item identified as a building block)

2. Base station classification

Distributed as: RAN_Work_Items_after_RAN_9 (originally RP-000186)

Work Item Description

Title

Base station classification

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

None

3 Justification

This work item proposes a building block for new base station classifications

4 Objective

This is the parent building block for the TDD and FDD basestation classification work tasks. Technical details for the work tasks can be found in TDoc RP-000132, and RP-000183

5 Service Aspects

None

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

None

9 Impacts

Affects :	USIM	ME	AN	CN	Others
Yes			X		
No	X	X		X	
Don't know					

10 Expected Output and Time scale (to be updated at each plenary)

New specifications						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for endorsement at plenary#	Approved at plenary#	Comments
		R4		RAN #11	RAN #11	

Affected existing specifications				
Spec No.	CR	Subject	Approved at plenary#	Comments

11 Work item raporteurs

Antti Toskala, Nokia

12 Work item leadership

TSG-RAN WG4

13 Supporting Companies

TSG-RAN

14 Classification of the WI (if known)

	Feature (go to 14a)
X	Building Block (go to 14b)
	Work Task (go to 14c)

14b The WI is a Building Block: parent Feature – Radio Interface Improvement

3. FDD Base station classification

Distributed as: RAN_Work_Items_after_RAN_9 (originally RP-000183)

Work Item Description

Title

FDD Base Station Classification

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

none

3 Justification

Current TSG RAN WG4 specifications have been done according to the requirements for the macrocell base stations (NodeBs). For the UTRA evolution requirements specific for other type of base stations are needed as well (e.g. micro, pico)

4 Objective

- definition of base station classes according to deployment scenarios (e.g. macro, micro, pico)
- identification, review and possible update of radio parameters dependent on deployment scenarios
- identification, review and possible update of UTRAN (Node B) measurement requirements and conformance where the maximum base station output power is reflected, dependent on deployment scenarios
- review and possible update of conformance test specifications
- recording of related information into RF System Scenarios

5 Service Aspects

None

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

None

9 Impacts

Affects :	USIM	ME	AN	CN	Others
Yes			X		
No	X	X		X	
Don't know					

10 Expected Output and Time scale (to be updated at each plenary)

New specifications						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for endorsement at plenary#	Approved at plenary#	Comments
25.951	FDD Base station classification	R4		RAN #11	RAN #11	

Affected existing specifications				
Spec No.	CR	Subject	Approved at plenary#	Comments
25.104		UTRA (BS) FDD, Radio Transmission and Reception	RAN #11	
25.141		Base Station Conformance Testing (FDD)	RAN #11	
25.133		Requirements for Support of Radio Resource Management (FDD)	RAN #11	?
25.942		RF System Scenarios	RAN #11	

11 Work item raporteurs

Antti Toskala, Nokia Networks

12 Work item leadership

TSG-RAN WG4

13 Supporting Companies

TSG-RAN

14 Classification of the WI (if known)

	Feature (go to 14a)
	Building Block (go to 14b)
X	Work Task (go to 14c)

14a The WI is a Feature: List of building blocks under this feature

(list of Work Items identified as building blocks)

14b The WI is a Building Block: parent Feature

(one Work Item identified as a feature)

14c The WI is a Work Task: parent Building Block: Base Station Classification

(one Work Item identified as a building block)

4. TDD Base station classification

Distributed as: RAN_Work_Items_after_RAN_9 (originally RP-000185)

Work Item Description

Title

TDD Base Station Classification

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

none

3 Justification

Current TSG RAN WG4 specifications have been done according to the requirements for the macrocell base stations (NodeBs). For the UTRA evolution requirements specific for other type of base stations are needed as well (e.g. micro, pico)

4 Objective

- definition of base station classes according to deployment scenarios (e.g. macro, micro, pico)
- identification, review and possible update of radio parameters dependent on deployment scenarios
- identification, review and possible update of UTRAN (Node B) measurement requirements and conformance where the maximum base station output power is reflected, dependent on deployment scenarios
- review and possible update of conformance test specifications
- recording of related information into RF System Scenarios

5 Service Aspects

None

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

None

9 Impacts

Affects :	USIM	ME	AN	CN	Others
Yes			X		
No	X	X		X	
Don't know					

10 Expected Output and Time scale (to be updated at each plenary)

New specifications						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for endorsement at plenary#	Approved at plenary#	Comments
25.952	TDD Base station classification	R4		RAN #11	RAN #11	

Affected existing specifications				
Spec No.	CR	Subject	Approved at plenary#	Comments
25.105		UTRA (BS) TDD, Radio Transmission and Reception	RAN #11	
25.142		Base Station Conformance Testing (TDD)	RAN #11	
25.123		RF parameters in support of RRM (TDD)	RAN #11	?
25.942		RF System Scenarios	RAN #11	

11 Work item raporteurs

Antti Toskala, Nokia Networks

12 Work item leadership

TSG-RAN WG4

13 Supporting Companies

TSG-RAN

14 Classification of the WI (if known)

	Feature (go to 14a)
	Building Block (go to 14b)
X	Work Task (go to 14c)

14a The WI is a Feature: List of building blocks under this feature

(list of Work Items identified as building blocks)

14b The WI is a Building Block: parent Feature

(one Work Item identified as a feature)

14c The WI is a Work Task: parent Building Block: Base Station Classification

(one Work Item identified as a building block)

5. UE positioning in UTRA TDD

Distributed as: (originally RP-000053)

This WI and WI 6. were replaced by WIs 34. and 35. in TSG-RAN #9.

6. UE positioning in UTRA FDD

Distributed as: (originally RP-000135)

This WI and WI 5. were replaced by WIs 34. and 35. in TSG-RAN #9.

7. Hybrid ARQ II/III

Distributed as: RAN_Work_Items_after_RAN_9 (originally RP-000054)

Work Item Description

Title

Hybrid ARQ type II/III

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

none

3 Justification

This feature has been shown to have the potential of efficiently enhancing the performance of packet data transmission by transmitting incremental redundancy at the request of the receiver.

4 Objective

In order to support the general mechanism, required signalling, and combining of existing information with incremental redundancy, the specifications for physical layer, as well as for higher layers and testing will be changed and/or extended. Note that Hybrid ARQ type I with soft combining is a special case of Hybrid ARQ type II.

5 Service Aspects

None

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

None

9 Impacts

Affects:	USIM	ME	AN	CN	Others
Yes		X	X		
No	X			X	
Don't know					

10 Expected Output and Time scale (to be updated at each plenary)

New specifications						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for endorsement at plenary#	Approved at plenary#	Comments
25.835	Hybrid ARQ II/III	WG2		RAN #12	RAN #13	
25.837	Hybrid ARQ II/III	WG3		RAN #12	RAN #13	

Affected existing specifications				
Spec No.	CR	Subject	Approved at plenary#	Comments
25.211		Physical channels and mapping of transport channels onto physical channels (FDD)	RAN #13	
25.212		Multiplexing and Channel Coding (FDD)	RAN #13	
25.214		Physical Layer Procedures (FDD)	RAN #13	
25.221		Physical channels and mapping of transport channels onto physical channels (TDD)	RAN #13	
25.222		Multiplexing and Channel Coding (TDD)	RAN #13	
25.224		Physical Layer Procedures (TDD)	RAN #13	
25.301		Radio Interface Protocol Architecture	RAN #13	
25.302		Services provided by the physical layer	RAN #13	
25.303		Interlayer procedures in connected mode	RAN #13	
25.304		UE Procedures in Idle Mode and Procedures for Cell Reselection in Connected Mode	RAN #13	
25.321		MAC Protocol Specification	RAN #13	
25.322		RLC Protocol Specification	RAN #13	
25.331		RRC Protocol Specification	RAN #13	
25.401		UTRAN Overall Description	RAN #13	
25.420		UTRAN Iur Interface: General Aspects and Principles	RAN #13	
25.423		UTRAN Iur Interface RNSAP Signalling	RAN #13	
25.425		UTRAN Iur interface user plane protocols for CCH data streams	RAN #13	
25.430		UTRAN Iub Interface: General Aspects and Principles	RAN #13	
25.433		UTRAN Iub Interface NBAP Signalling	RAN #13	
25.435		UTRAN Iub interface user plane protocols for CCH data streams	RAN #13	

11 Work item raporteurs

Armin Sitte, Siemens AG

12 Work item leadership

TSG-RAN WG2

13 Supporting Companies

TSG-RAN

14 Classification of the WI (if known)

	Feature (go to 14a)
X	Building Block (go to 14b)
	Work Task (go to 14c)

14a The WI is a Feature: List of building blocks under this feature

(list of Work Items identified as building blocks)

14b The WI is a Building Block: parent Feature

Radio Interface Improvements

14c The WI is a Work Task: parent Building Block

(one Work Item identified as a building block)

8. NodeB Synchronisation for TDD

Distributed as: RAN_Work_Items_after_RAN_9 (originally RP-000055)

Work Item Description

Title

NodeB Synchronisation for UTRA TDD mode

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

none

3 Justification

NodeB synchronisation is beneficial in UTRA TDD to minimise cross-interference in neighbouring cells. Currently, no method has been specified how NodeB synchronisation can be achieved with UTRAN's and UE's internal resources such as signalling via the air interface.

The following benefits of the introduction of NodeB synchronisation by means of internal resources are seen:

- A substantial reduction of the cost of the transmission network.
- An autonomous synchronisation procedure without the need of external references.
- An easily extendable method for the purpose of inter-system NodeB synchronisation.

4 Objective

The purpose of this new work item is to enable the synchronisation of NodeBs in UTRA TDD by means of UTRAN's and UE's internal resources such as air interface signals and NodeB cross measurements. NodeB synchronisation involves

- radio frame und multi frame synchronisation and
- intra-system and inter-system synchronisation.

5 Service Aspects

None

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

None

9 Impacts

Affects:	USIM	ME	AN	CN	Others
Yes		X	X		
No	X			X	
Don't know					

10 Expected Output and Time scale (to be updated at each plenary)

New specifications						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for endorsement at plenary#	Approved at plenary#	Comments
25.836	NodeB synchronisation for TDD	WG1		RAN #10	RAN #11	
25.838	NodeB synchronisation for TDD	WG3		RAN #10	RAN #11	

Affected existing specifications				
Spec No.	CR	Subject	Approved at plenary#	Comments
25.123		Requirements for Support of Radio Resource Management (TDD)	RAN #11	
25.221		Physical channels and mapping of transport channels onto physical channels (TDD)	RAN #11	
25.224		Physical Layer Procedures (TDD)	RAN #11	
25.225		Physical layer – Measurements (TDD)	RAN #11	
25.301		Radio Interface Protocol Architecture	RAN #11	
25.302		Services provided by the physical layer	RAN #11	
25.303		Interlayer procedures in connected mode	RAN #11	
25.321		MAC Protocol Specification	RAN #11	
25.331		RRC Protocol Specification	RAN #11	
25.402		Synchronisation in UTRAN Stage 2	RAN #11	
25.433		UTRAN Iub Interface NBAP Signalling	RAN #11	
25.423		UTRAN Iur Interface RNSAP Signalling	RAN #11	

11 Work item raporteurs

Stefan Oestreich, Siemens AG

12 Work item leadership

TSG-RAN WG1

13 Supporting Companies

TSG-RAN

14 Classification of the WI (if known)

	Feature (go to 14a)
X	Building Block (go to 14b)
	Work Task (go to 14c)

14a The WI is a Feature: List of building blocks under this feature

(list of Work Items identified as building blocks)

14b The WI is a Building Block: parent Feature

Radio Interface Improvements and RAN Improvements Features

14c The WI is a Work Task: parent Building Block

(one Work Item identified as a building block)

9. UTRA FDD Repeater Specification

Distributed as: RAN_Work_Items_after_RAN_9 (originally RP-000083)

Work item Description

Title:

UTRA FDD Repeater Specification

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1 3GPP work area

Radio Access

2 Linked work items

None

3 Justification

Repeaters have proven to be useful for extending the coverage into buildings, train/car tunnels, subways, highways, etc in 2nd generation systems. Also, by installing repeaters at the sector borders or in highly dense areas, the transmitted power from the MS and the BS could possibly be lowered, leading to an improvement in C/I and thereby capacity.

For the installation of repeaters in cellular networks a specification is needed in e.g. Europe due to regulatory requirements.

For operators without the capability of handover to 2nd generation systems, extending the coverage of UTRA will be of importance especially at the initial rollout stage. For operators with capability of handover to 2nd generation systems, user requirements (e.g. high data rates) may not be met by those systems and extended UTRA coverage might be needed.

4 Objective

The objective of the work item is to create a technical specification of the UTRA repeater's minimum RF characteristics which, at least, should include:

- Spurious emissions
- Intermodulation products
- Out of band gain
- Frequency stability
- Modulation accuracy
- Blocking characteristics

In addition to the minimum RF characteristics, conformance requirements and Electro Magnetic Compatibility (EMC) shall also be specified.

5 Service Aspects

The use of repeater in a network may reduce the performance of the LCS method OTDOA. This is addressed in more detail in document R4-000012.

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

None

9 Impacts

Affects:	USIM	ME	Access Network	Core Network	Others
Yes			X		
No	X	X		X	
Don't know					

10 Expected Output and Time scales

New specifications						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
TS 25.106	UTRA Repeater; Radio transmission and reception	WG4		RAN#9	RAN#11	Repeater minimum RF characteristics
TS 25.143	UTRA Repeater; Conformance testing	WG4		RAN#9	RAN#11	Repeater conformance testing

Affected existing specifications				
Spec No.	CR	Subject	Approved at plenary#	Comments
TS 25.113		UTRA Repeater EMC	RAN#11	Repeater EMC requirements

11 Work item rapporteurs

Martin Nilsson, Allgon AB
Thomas Kummetz, Mikom GmbH

12 Work item leadership

TSG-RAN WG4

13 Supporting companies

TSG-RAN

14 Classification of the WI (if known)

	Feature (go to 14a)
X	Building Block (go to 14b)
	Work Task (go to 14c)

14b The WI is a Building Block:
This is a building block part of the radio interface improvement feature.
In addition there is a relation to the building block UE positioning in UTRA FDD.

10. QoS optimization for AAL type 2 connections over Iub and Iur interfaces

Distributed as: RAN_Work_Items_after_RAN_9 (originally RP-000188)

Work Item Description

Title

QoS optimization for AAL type 2 connections over Iub and Iur interfaces

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

(list of linked Wis)

3 Justification

In Release 99, traffic like compressed voice (AAL type 2 connection) and traffic like data (AAL type 2 connection) are accommodated in common underlying VC for AAL type 2 connections as real time traffics over Iub and Iur interfaces to ease management of CFN (Connection Frame Number) allocation to Down link data frame or scheduling at SRNC (Serving RNC). In addition to that, in sections with AAL type 2 switches, I.363.2 and Q.2630.1 referred in Release 99 have no capability to prioritize real time traffic like compressed voice or non-real time traffic like data.

This requires much broader underlying VC for AAL type 2 connections to achieve delay budget for real time traffic like compressed voice especially in case of real time traffic data frame (smaller) right after non-real time traffic data frame (much bigger). Typical simulation on the case was given in TSG R3#8(99)e19 by Alcatel in Release 99 time frame. Broader underlying VC for AAL type 2 connections over Iub interface impacts very much on initial and running costs of the Iub interface which usually consists of leased line.

4 Objective

This work item intends to introduce the capability to optimize the bandwidth of underlying VC for AAL type 2 connections over Iub and Iur interfaces in addition to the scheduling capability at SRNC in Release 2000 time frame.

The capability should be realized with standardized solution(s) for multi-vendor environment, and the one(s) should cover all possible UTRAN transport network configurations.

5 Service Aspects

None

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

None

9 Impacts

Affects:	USIM	ME	AN	CN	Others
Yes			X		
No	X	X		X	X
Don't know					

10 Expected Output and Time scale (to be updated at each plenary)

New specifications						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for endorsement at plenary#	Approved at plenary#	Comments
25.934	QoS optimization for AAL type 2 connections over Iub and Iur interfaces	WG3		RAN #10	RAN #11	

Affected existing specifications				
Spec No.	CR	Subject	Approved at plenary#	Comments
TS 25.410		UTRAN Iu interface: general aspects and principles	RAN #11	
TS 25.414		UTRAN Iu interface: data transport & transport signalling	RAN #11	
TS 25.415		UTRAN Iu interface: user plane protocols	RAN #11	
TS 25.420		UTRAN Iur interface: general aspects and principles	RAN #11	
TS 25.424		UTRAN Iur interface: data transport & transport signalling for common transport channel data streams	RAN #11	
TS 25.425		UTRAN Iur interface: user plane protocols for common transport channel data streams	RAN #11	
TS 25.426		UTRAN Iur and Iub interfaces: data transport & transport signalling for DCH data streams	RAN #11	
TS 25.430		UTRAN Iub interface: general aspects and principles	RAN #11	
TS 25.434		UTRAN Iub interface: data transport & transport signalling for common transport channel data streams	RAN #11	
TR 25.931		UTRAN functions, examples on signalling procedures	RAN #11	

11 Work item rapporteurs

Takayuki Yoshimura (Japan Telecom)

12 Work item leadership

TSG-RAN WG3

13 Supporting Companies

TSG-RAN

14 Classification of the WI (if known)

	Feature (go to 14a)
	Building Block (go to 14b)
X	Work Task (go to 14c)

14a The WI is a Feature: List of building blocks under this feature

(list of Work Items identified as building blocks)

14b The WI is a Building Block: parent Feature

(one Work Item identified as a feature)

14c The WI is a Work Task: parent Building Block

Evolution of transport in UTRAN

11. Terminal power saving features

Distributed as: RAN_Work_Items_after_RAN_9 (originally RP-000189)

Work Item Description

Title

Terminal power saving features

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

None

3 Justification

The UE battery saving, UL/DL interference reduction, and capacity increase are important for deploying the UMTS services. The gated DPCCH transmission can be one of the solutions.

4 Objective

Improving the terminal power saving features, UL/DL interference reduction, and capacity increase.

5 Service Aspects

None

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

None

9 Impacts

Affects:	USIM	ME	AN	CN	Others
Yes		×	×		
No	×			×	×
Don't know					

10 Expected Output and Time scale (to be updated at each plenary)

New specifications						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for endorsement at plenary#	Approved at plenary#	Comments
25.840		WG1		RAN #10	RAN #11	
Affected existing specifications						
Spec No.	CR	Subject		Approved at plenary#		Comments
25.214				RAN #11		
25.301				RAN #11		
25.302				RAN #11		
25.331				RAN #11		
25.101				RAN #11		
25.423				RAN #11		
25.433				RAN #11		

11 Work item raporteurs

Hokyu Choi, Samsung (choihk@telecom.samsung.co.kr)

12 Work item leadership

TSG-RAN WG1

13 Supporting Companies

TSG-RAN

14 Classification of the WI (if known)

	Feature (go to 14a)
X	Building Block (go to 14b)
	Work Task (go to 14c)

14b The WI is a Building Block: parent Feature is "Radio Interface improvement"

12. PS-Domain handover for real-time services

Distributed as: RAN_Work_Items_after_RAN_9 (originally RP-000127)

Work Item Description

Title

PS-Domain handover for real-time services

1 3GPP Work Area

X	Radio Access
X	Core Network
	Services

2 Linked work items

(list of linked WIs)

3 Justification

In release 99, Relocation for services from PS domain is only optimised for non-real-time services. In current design, the content of the data buffers from the source RNC are fetched, which is not fully optimal for real-time services, and means that delay may exceed the requirement for real-time services. It is expected that real-time services from the PS domain, such as voice over IP would benefit from fully optimised handover.

4 Objective

This work item should design handover in RAN (mainly Iu) that supports real-time services from PS domain in an optimised way. The solution should be as simple as possible.

5 Service Aspects

The intention with the work item is to assure more optimised support for services such as voice over IP.

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

None

9 Impacts

Affects :	USIM	ME	AN	CN	Others
Yes			X	X	
No	X	X			X
Don't know					

10 Expected Output and Time scale (to be updated at each plenary)

New specifications						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for endorsement at plenary#	Approved at plenary#	Comments
25.936	PS-Domain handover for real-time services	R3		RAN #10	RAN #11	

Affected existing specifications				
Spec No.	CR	Subject	Approved at plenary#	Comments
25.413			RAN #11	

11 Work item raporteurs

Atte Länsisalmi (Nokia)

12 Work item leadership

TSG-RAN WG3

13 Supporting Companies

TSG-RAN

14 Classification of the WI (if known)

	Feature (go to 14a)

X	Building Block (go to 14b)
	Work Task (go to 14c)

14a The WI is a Feature: List of building blocks under this feature

(list of Work Items identified as building blocks)

14b The WI is a Building Block: parent Feature

Radio Interface Improvement, RAN Improvement and Evolution of bearers on the radio to enable IP based multimedia in UMTS Features

14c The WI is a Work Task: parent Building Block

(one Work Item identified as a building block)

13. RAB Quality of Service Negotiation/Renegotiation over Iu

Distributed as: RAN_Work_Items_after_RAN_9 (originally RP-000137, major revision RP-000498, rest in WI 32. RAB Quality of Service Negotiation)

Work Item Description

Title

RAB Quality of Service Negotiation/Renegotiation over Iu

1 3GPP Work Area

X	Radio Access
X	Core Network
	Services

2 Linked work items

None

3 Justification

In release 99, UTRAN can only accept or reject a radio access bearer request from the core network. For services that could accept looser QoS requirements than those requested by the CN in the RAB establishment request there exist no means for UTRAN to propose alternative (looser) QoS. For such services the RAB establishment will fail, or alternatively the CN could re-attempt the RAB reestablishment with looser QoS requirements which would significantly increase the setup time.

Release 99 also does not allow the UTRAN to renegotiate RAB/QoS parameters for on-going calls/session. Since the UTRAN is responsible for managing the radio resources, it is necessary for the UTRAN to be able to initiate RAB renegotiation for efficient use of the radio interface.

4 Objective

This work item should enhance the Radio Access Bearer setup to something more sophisticated using e.g. QoS profiles to align with the already existing CN solution used in GPRS. However, it should be as simple as possible.

This work item should also enhance the management of Radio Access Bearers for on-going calls/session so that QoS parameters can be renegotiated by the UTRAN.

5 Service Aspects

The intention with the work item is to reduce the setup time of services.

The intention is also to allow continuation of service through UTRAN initiated QoS renegotiation.

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

None

9 Impacts

Affects :	USIM	ME	AN	CN	Others
Yes			X	X	
No	X	X			X
Don't know					

10 Expected Output and Time scale (to be updated at each plenary)

New specifications						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments

Affected existing specifications				
Spec No.	CR	Subject	Approved at plenary#	Comments
25.413			RAN #11	
23.060				
24.008				

11 Work item raporteurs

Anders Molander, Ericsson

12 Work item leadership

TSG-RAN WG3

13 Supporting Companies

TSG-RAN

14 Classification of the WI (if known)

	Feature (go to 14a)
X	Building Block (go to 14b)
	Work Task (go to 14c)

14a The WI is a Feature: List of building blocks under this feature

14b The WI is a Building Block: parent Feature

14c The WI is a Work Task: parent Building Block

UTRAN Improvement Feature

14. RRM optimizations for Iur and Iub

Distributed as: RAN_Work_Items_after_RAN_9 (originally RP-000310)

Work Item Description

Title

RRM optimizations for Iur and Iub

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

None

3 Justification

Optimising the existing procedures will increase the efficiency of UTRAN and the quality of service to the end user.

4 Objective

This work item focuses on optimising the existing procedures and functions related to:

1) Congestion handling of DCH
   Currently a DRNC accepting a dedicated RL, in principle needs to reserve resources for the maximum bitrate which could possibly be required for the DCH's on this RL. This because the DRNC has a very limited view on the load statistics of the DCH's (source descriptor) and has no possibility to control the DL-rate of the DCH's in congestion situations.

2) Procedure parallelism on Iub/Iur
   Currently almost no procedure parallelism is allowed in NBAP/RNSAP (dedicated) procedures. As a result, an RRM procedure used for handling problems in a fast changing radio environment, could have to wait for termination of a procedure e.g. introducing a new service on the RL.

   In order to improve the capability of the UTRAN to respond to fast changes in the radio environment, the restrictions on parallelism between procedures coping with radio environment changes (e.g. RL_ADDITION/RL_DELETION) and other procedures (e.g. RL_RECONFIGURATION) should be decreased.

3) DPC Rate Reduction in soft handover
   Currently R1 describes two DPC_modes in 25.214, however mode change signalling is not

supported by R3.

By supporting DPC-mode change signalling in the UTRAN, the UTRAN should be better capable of combating power drifting in the DL.

4) Introduction of common measurements over Iur
It is proposed to study the usefulness of / possibilities for introducing common measurements on Iur. For example, at present an SRNC has no information regarding cell load information in neighbouring cells on a DRNC when making soft handover decisions. A study should indicate whether clear benefits exist of providing such load information to a neighbouring CRNC.

If this, or other possible measurements are identified, a common measurement procedure as currently supported on Iub could be introduced in RNSAP.

5) Extension of Radio Interface Parameters updating in the user plane
Currently the Iub/Iur DCH FP supports a fast update of the TPC Power Offset in the DL RL via user plane signalling.

It should be studied if more radio interface parameters would benefit from a similar handling. If such parameters are identified, the user plane should be extended for this purpose.

6) Separation of resource reservation and radio link activation
This work task aims at introducing the possibility to have dedicated resources reserved in UTRAN without transmitting energy on the corresponding radio link(s). Furthermore, a separate mechanism for activating and deactivating radio transmission related to the reserved resources shall be introduced.

The separation will enable the following optimisations in UTRAN:
- delayed activation of a radio link at soft handover for high bit rate users, thus avoiding a potential handover problem;
- quicker channel type switching back to Cell_DCH;
- quicker radio link additions of radio links that recently were part of the active set;

7) Triggering of the Common Transport Channel Resources Initiation procedure by DRNC
Currently the DRNC has no possibility to request an SRNC to move a UE from using one combination of RACH/FACH channels to other RACH/FACH channels. However this functionality is provided by R(99) RRC signalling and is considered beneficial for obtaining a good distribution of the common resource usage in the DRNS.

For R(00) an appropriate solution should be specified to provide this capability to the DRNC.

5 Service Aspects

None

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

None

9 Impacts

Affects :	USIM	ME	AN	CN	Others
Yes		X	X		
No	X			X	X
Don't know					

10 Expected Output and Time scale (to be updated at each plenary)

New specifications						
Spec No.	Title	Prime rsp. WG	2nd ary rsp. WG(s)	Presented for endorsement at plenary#	Approved at plenary#	Comments
25.935	RRM optimizations for Iur and Iub	WG3		RAN #11	RAN #11	

Affected existing specifications				
Spec No.	CR	Subject	Approved at plenary#	Comments
25.420		Iur general aspects and principles	RAN #11	
25.430		Iub general aspeects and principles	RAN #11	
25.423		RNSAP	RAN #11	
25.433		NBAP	RAN #11	
25.427		Iub/Iur dedicated transport channel user plane	RAN #11	
25.425		Iur common transport channel user plane	RAN #11	
25.435		Iub common transport channel user plane	RAN #11	

11 Work item raporteurs

Gert-Jan van Lieshout (Ericsson)

12 Work item leadership

TSG-RAN WG3

13 Supporting Companies

TSG-RAN

14 Classification of the WI (if known)

	Feature (go to 14a)
X	Building Block (go to 14b)
	Work Task (go to 14c)

14a The WI is a Feature: List of building blocks under this feature

14b The WI is a Building Block: parent Feature

Radio Interface Improvement feature and UTRAN Improvement feature

14c The WI is a Work Task: parent Building Block

The BB is considered to consist of 7 separate Work Tasks, corresponding to the headings 1) to 7) in section 4.

15. Radio access bearer support enhancement

Distributed as: RAN_Work_Items_after_RAN_9 (originally RP-000140)

Work Item Description

Title

Radio Access Bearer support enhancement

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

3 Justification

The increasing interest in IP based services demands special optimisation of the means by which a radio access bearer can be provided by UTRAN.

4 Objective

This work item should have the scope of adding necessary functionality to the Uu and Iu interface in order to efficiently support RT traffic, e.g. VoIP. Examples of such functionality are:

- Radio Access Bearer multiplexing in PDCP
- Header compression for VoIP
  - Normally referenced from an IETF RFC
- Support of variable formats over Iu and unequal error protection over Uu
- Channel type switching for logical channels
  - Today it is only possible to switch all logical channels of one UE, not individual. For DSCH it would be much better to be able to switch single logical channels
- IP header removal as developed within GERAN

5 Service Aspects

The intention with the work item is to better and more efficient support IP based services.

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

None

9 Impacts

Affects :	USIM	ME	AN	CN	Others
Yes		X	X		
No	X			X	X
Don't know					

10 Expected Output and Time scale (to be updated at each plenary)

New specifications						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for endorsement at plenary#	Approved at plenary#	Comments

Affected existing specifications				
Spec No.	CR	Subject	Approved at plenary#	Comments
25.331		RRC protocol specification	RAN#11	
25.323		PDCP protocol specification	RAN#11	
25.413		UTRAN Iu interface RANAP signalling	RAN#11	
25.415		UTRAN Iu interface user plane protocols	RAN#11	

11 Work item raporteurs

TSG-RAN WG2: Ainkaran Krishnarajah (Ericsson)
TSG-RAN WG3: Martin Israelsson (Ericsson)

12 Work item leadership

TSG-RAN WG2

13 Supporting Companies

TSG-RAN

14 Classification of the WI (if known)

	Feature (go to 14a)
X	Building Block (go to 14b)
	Work Task (go to 14c)

14a The WI is a Feature: List of building blocks under this feature

(list of Work Items identified as building blocks)

14b The WI is a Building Block: parent Feature
(one Work Item identified as a feature)
- RAN Improvement
- Evolution of bearers on the radio to enable IP based multimedia in UMTS

14c The WI is a Work Task: parent Building Block

(one Work Item identified as a building block)

16. Improvement of inter-frequency and inter-system measurements

Distributed as: RAN_Work_Items_after_RAN_9 (originally RP-000180)

Work Item Description

Title

Improvement of inter-frequency and inter-system measurements

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

none

3 Justification

Compressed mode in Release-99 covers limited set of methods of implementing the compressed mode for enabling measurements on other frequencies. There have been methods suggested that potentially improve the system capacity and operational flexibility in addition to the existing methods.

- The following two technologies have been identified as candidates for Release 2000 for compressed mode improvements:

1. Compressed mode with puncturing and flexible positions
2. Combination of the existing methods (including method in point 1)

4 Objective

The purpose of this work item is to work on the compressed mode improvements for improved system performance.

5 Service Aspects

None

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

None

9 Impacts

Affects :	USIM	ME	AN	CN	Others
Yes		X	X		
No	X			X	
Don't know					

10 Expected Output and Time scale (to be updated at each plenary)

New specifications						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for endorsement at plenary#	Approved at plenary#	Comments

Affected existing specifications				
Spec No.	CR	Subject	Approved at plenary#	Comments
25.212		Multiplexing and channel coding (FDD)	RAN #14	
25.215		Physical layer – Measurements (FDD)	RAN #14	
25.331		RRC Protocol Specification	RAN #14	Parameter update
25.423		UTRAN Iur Interface RNSAP Signalling	RAN #14	Parameter update
25.433		UTRAN Iub Interface NBAP Signalling	RAN #14	Parameter update

11 Work item raporteurs

Antti Toskala, Nokia Networks

12 Work item leadership

TSG-RAN WG1

13 Supporting Companies

TSG-RAN

14 Classification of the WI (if known)

	Feature (go to 14a)
X	Building Block (go to 14b)
	Work Task (go to 14c)

14a The WI is a Feature: List of building blocks under this feature

(list of Work Items identified as building blocks)

14b The WI is a sub-building block part of the radio interface improvement building block.

(one Work Item identified as a feature)

14c The WI is a Work Task: parent Building Block

(one Work Item identified as a building block)

17. Improved usage of downlink resource in FDD for CCTrCHs of dedicated type

Distributed as: RAN_Work_Items_after_RAN_9 (originally RP-000169)

Work Item Description

Title

Improved usage of downlink resource in FDD for CCTrCHs of dedicated type

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

None

3 Justification

In the RAN 1 specifications, one CCtrCH of dedicated type may be mapped onto several physical channels (channelisation codes). However these codes must have the same spreading factor in order to have an equal physical channel segmentation. In order to have some flexibility in the resource allocation in downlink, the possibility to have multiple CCtrCHs of dedicated type was introduced in the RAN 1 specifications for R99. This allows to have codes with different spreading factors and distribute transport channels onto separate CCtrCHs taking into account possibly very different QoS requirements, which results in some cases in a smaller amount of allocated resource. RAN 2 and RAN 3 specifications do not support multiple CCTrCHs of dedicated types in R99, limiting hence the flexibility on resource allocation.

4 Objective

Introduction of the possibility to map transport channels belonging to a radio link onto multiple codes with different spreading factors as a way to minimise the overall amount of allocated resource, while fulfilling possibly very different QoS requirements for each of the transport channels,

5 Service Aspects

None

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

None

9 Impacts

Affects :	USIM	ME	AN	CN	Others
Yes		X	X		
No	X			X	
Don't know					

10 Expected Output and Time scale (to be updated at each plenary)

New specifications						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for endorsement at plenary	Approved at plenary	Comments

Affected existing specifications				
Spec No.	CR	Subject	Approved at plenary	Comments
25.331			RAN #11	
25.423			RAN #11	
25.433			RAN #11	
25.212			RAN #11	?
25.214			RAN #11	
25.926			RAN #11	

11 Work item raporteurs

Claudiu Mihailescu (Nortel Networks)

12 Work item leadership

TSG-RAN WG2

13 Supporting Companies

TSG-RAN

14 Classification of the WI (if known)

	Feature (go to 14a)
x	Building Block (go to 14b)
	Work Task (go to 14c)

14a The WI is a Feature: List of building blocks under this feature

(list of Work Items identified as building blocks)

14b The WI is a Building Block: parent Feature

radio interface improvement feature

14c The WI is a Work Task: parent Building Block

(one Work Item identified as a building block)

18. IP transport in UTRAN

Distributed as: RAN_Work_Items_after_RAN_9

Work Item Description

Title

IP-transport in UTRAN

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

None

3 Justification

Release 2000 workplan includes, as an option, an all-IP transport architecture aimed at allowing operators to deploy IP technology to deliver 3rd generation services.

The foreseen benefits of the introduction of IP as transport technology inside the UTRAN are:

- To give the operator the option to use IP transport as an alternative to AAL2/ATM transport within UTRAN.
- In which networks, or parts of network, the IP option is beneficial over the AAL2/ATM option will vary between different operators, e.g. depending on existing transport network infrastructure, other applications using the same transport, available physical links, etc.
- A consistent approach allowing for end-to-end IP transport solutions.
- The more detailed requirements and expected benefits will be documented in the Technical Report.

4 Objective

The purpose of this new work task is to enable the usage of IP technology for the transport of signalling and user data over Iu, Iur and Iub in the UTRAN. This work task is only related to the transport aspects.

5 Service Aspects

None

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

Security aspects linked with the use of IP as transport technology.

9 Impacts

Affects :	USIM	ME	AN	CN	Others
Yes			X	X[1]	
No	X	X			
Don't know					

10 Expected Output and Time scale (to be updated at each plenary)

The first step of the work will consist in providing the necessary changes to the generic specifications (TS 25.401, TS 25.402). Then, the CRs to the other specs introducing the possibility to use IP as a transport mechanism will be generated.
The QOS aspects should be studied closely with IETF.

New specifications						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for endorsement at plenary#	Approved at plenary#	Comments
TR 25.933	IP Transport in UTRAN Work Task Technical Report	WG3		RAN #10	RAN #11	

Affected existing specifications				
Spec No.	CR	Subject	Approved at plenary#	Comments
TS 25.401		UTRAN Overall Description	RAN #11	Only text related to Transport Network Layer.
TS 25.402		Synchronisation in UTRAN, Stage 2	RAN #11	To be confirmed during the study
TS 25.410		UTRAN Iu Interface: General Aspects and Principles	RAN #11	Only text related to Transport Network Layer.
TS 25.411		UTRAN Iu Interface Layer 1	RAN #11	
TS 25.412		UTRAN Iu interface signalling transport	RAN #11	

[1] None of the TSG-CN specifications are impacted.

TS 25.413		UTRAN Iu Interface RANAP Signalling	RAN #11	Only parameters and interface related to the Transport Network Layer.
TS 25.414		UTRAN Iu interface data transport & transport signalling	RAN #11	
TS 25.415		UTRAN Iu interface user plane protocols	RAN #11	Only parameters and interface related to the Transport Network Layer.
TS 25.420		UTRAN Iur Interface: General Aspects and Principles	RAN #11	Only text related to Transport Network Layer.
TS 25.422		UTRAN Iur interface signalling transport	RAN #11	
TS 25.423		UTRAN Iur Interface RNSAP Signalling	RAN #11	Only parameters and interface related to the Transport Network Layer.
TS 25.424		UTRAN Iur interface data transport & transport signalling for CCH data streams	RAN #11	
TS 25.425		UTRAN Iur interface user plane protocols for CCH data streams	RAN #11	Only parameters and interface related to the Transport Network Layer.
TS 25.426		UTRAN I_{ur} and I_{ub} Interface Data Transport & Transport Signalling for DCH Data Streams	RAN #11	
TS 25.430		UTRAN I_{ub} Interface General Aspects and Principles	RAN #11	Only text related to Transport Network Layer.
TS 25.432		UTRAN Iub interface signalling transport	RAN #11	
TS 25.433		UTRAN Iub Interface NBAP Signalling	RAN #11	Only parameters and interface related to the Transport Network Layer.
TS 25.434		UTRAN Iub interface data transport & transport signalling for CCH data streams	RAN #11	
TS 25.435		UTRAN Iub interface user plane protocols for CCH data streams	RAN #11	Only parameters and interface related to the Transport Network Layer.
TS 25.442		UTRAN Implementation Specific O&M Transport	RAN #11	
TR 25.931		UTRAN Functions, Examples on Signalling Procedures	RAN #11	Only messages related to transport bearers.
TR 25.932		Delay Budget within the Access Stratum	RAN #11	

11 Work item rapporteurs

Nicolas Drevon, Alcatel

12 Work item leadership

TSG-RAN WG3

13 Supporting Companies

TSG-RAN

14 Classification of the WI (if known)

	Feature (go to 14a)
	Building Block (go to 14b)
X	Work Task (go to 14c)

14a The WI is a Feature: List of building blocks under this feature

(list of Work Items identified as building blocks)

14b The WI is a Building Block: parent Feature

(one Work Item identified as a feature)

14c The WI is a Work Task: parent Building Block

Parent Building Block is "Evolution of the Transport in the UTRAN".

19. Transcoder Free Operations in UTRAN

Distributed as: RAN_Work_Items_after_RAN_9 (originally RP-000507)

Work Item Description

Transcoder Free Operations in UTRAN

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

Out of band Transcoder Control (CN Work Item)

3 Justification

This WI is the complementary part of the WI that has been agreed for TSG CN. It shall provide more details for the Radio Access Network standardisation that is required for the Transcoder Free Operations.

4 Objective

- *The number of transcoders to be installed in the core network can be minimised.*
- *The bandwidth to be provided in the core network may be reduced by TrFO or transcoder at the core network edge for both MS to MS calls and for MS from/to wireline calls.*

5 Service Aspects

The service aspects for Transcoder Free Operations are:

- *Usage of the Iu UP Framing in the Core Network needs to be supported*
- *Symmetrical set of RFCIs needs to be supported*
- *The behaviour of a RNC for receiving RFCIs at Iu UP initialisation from the core network shall be changed to be applied for both uplink and downlink.*
- *The possibility of standardisation the RFCI indexes needs to be analysed*
- *The mechanism to make the RFCIs available during TrFO Break needs to be supported (e.g. interrogation, storage of RFCIs)*

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

None

9 Impacts

Affects:	USIM	ME	AN	CN	Others
Yes			X		
No	X	X		X	
Don't know					X

10 Expected Output and Time scale (to be updated at each plenary)

New specifications						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
23.153	Out of Band Transcoder Control - Stage 2	CN4	RAN3	TSG-CN#7	TSG-CN#10	

Affected existing specifications				
Spec No.	CR	Subject	Approved at plenary#	Comments
TS 25.401			TSG-RAN#11	
TS 25.410			TSG-RAN#11	
TS 25.413		To support the mechanism to make the RFCI set available during TrFO Break	TSG-RAN#11	
TS 25.415		To support the mechanism to make the RFCI set available during TrFO Break	TSG-RAN#11	

11 Work item rapporteurs

Yun-Chao Hu (TrFO Convenor)

12 Work item leadership

TSG-RAN WG3

13 Supporting Companies

TSG-RAN

14 Classification of the WI (if known)

	Feature (go to 14a)
	Building Block (go to 14b)
X	Work Task (go to 14c)

14a The WI is a Feature: List of building blocks under this feature

14b The WI is a Building Block: parent Feature

14c The WI is a Work Task: parent Building Block

Out of Band Transcoder Control

20. Evolution of the transport in the UTRAN

Distributed as: RAN_Work_Items_after_RAN_9 (originally WI-EVUTRAN)

Work Item Description

Title: Evolution of the transport in the UTRAN

This work item intends to introduce mechanism necessary to allow an evolutuon of transport mechanism in the RNS following requirement put by the core network.

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

None

3 Justification

In order to cope with new requirement coming from new service definition, it is necessary to introduce mechanism to support new transport mechanisms or to improve the existing ones. Typical examples of such mechanisms are the following: introduction of an IP transport inside the RNS and AAL2 QoS optimisation

4 Objective

The main objective for this building block is to ensure that adequate mechanism are provided to handle the different type of traffic (i.e. signalling and user flow) inside the RNS to ensure that requirements in terms of QoS and delay are taken into account.

This shall be valid also for efficient O&M transport of the different interfaces inside the RNS. This includes the Iub, Iur and any protocol suites at the Iu reference point.

5 Service Aspects

None

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

None

9 Impacts

Affects :	USIM	ME	AN	CN	Others
Yes			X	X (1)	
No					
Don't know					

Note 1: This cross indicates that as soon as there is an impact on the Iu supported protocol this also touch upon the Access stratum part situated in the Core network

10 Expected Output and Time scale (to be updated at each plenary)

(to be defined on a per WT basis but all specifications 25 4x2 and 254x4)

11 This is a generic task which will be valid for all major releases

New specifications						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for endorsement at plenary#	Approved at plenary#	Comments

Affected existing specifications				
Spec No.	CR	Subject	Approved at plenary#	Comments

11 Work item raporteurs

Francois Courau (Alcatel)

12 Work item leadership

TSG-RAN WG3

13 Supporting Companies

TSG-RAN

14 Classification of the WI (if known)

	Feature (go to 14a)
X	Building Block (go to 14b)
	Work Task (go to 14c)

14a The WI is a Feature: List of building blocks under this feature

Not Relevant

14b The WI is a Building Block: parent Feature

Evolution of Transport

14c The WI is a Work Task: parent Building Block

Not Relevant

21. Radio Interface Improvement Feature

Distributed as: WI-Radio-if-improve

Work Item Description

Title: Radio Interface Improvement

This work item intends to introduce new mechanism allowing improvement on the way the Radio Interface is used.

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

None

3 Justification

In order to cope with new techniques providing more efficient use of the bandwidth for the radio interface, it is necessary to ensure that backward compatibility in terms of service offering.
When a new system is designed it is quite normal that some work is required also to enhance the already defined mechanism at the physical layer as well as at the signalling level. Thus this work item will cope with technical enhancement and improvement for the Radio path.

4 Objective

The main objective for this feature is to ensure that adequate mechanism are provided to handle the different type of traffic (i.e. signalling and user flow) inside the RNS to ensure that requirements in terms of QoS and delay are taken into account.

This shall be valid also for efficient O&M transport of the different interfaces inside the RNS. This includes the Iub, Iur and any protocol suites at the Iu reference point.

5 Service Aspects

None

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

None

9 Impacts

Affects :	USIM	ME	AN	CN	Others
Yes		X	X		
No	X			X	X
Don't know					

12 Expected Output and Time scale (to be defined on a per building block basis but potentially all specifications and report of the 25 series)

13 This is a generic task which will be valid for all major releases

New specifications						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for endorsement at plenary#	Approved at plenary#	Comments

Affected existing specifications				
Spec No.	CR	Subject	Approved at plenary#	Comments

11 Work item raporteurs

TSG RAN

12 Work item leadership

TSG RAN

13 Supporting Companies

Alcatel, …

14 Classification of the WI (if known)

X	Feature (go to 14a)
	Building Block (go to 14b)
	Work Task (go to 14c)

14a The WI is a Feature: List of building blocks under this feature

Not Relevant

14b The WI is a Building Block: parent Feature

Evolution of Transport

14c The WI is a Work Task: parent Building Block

Not Relevant

22. RAN Improvement Feature

Distributed as: WI-RAN-improve

Work Item Description

Title: RAN Improvement

This work item intends to introduce new mechanism allowing improvement on the all the aspects dealing with the RNS interfaces. This includes as well the internal mechanism to the RNS.

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

None

3 Justification

4 Objective

5 Service Aspects

None

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

None

9 Impacts

Affects :	USIM	ME	AN	CN	Others
Yes			X	X	
No	X	X			X
Don't know					

14 Expected Output and Time scale (to be updated at each plenary)
(to be defined on a per Building block or WT basis but this may impact most of the specifications 25 .4 series and some of the 25.3 series)

15 This is a generic task which will be valid for all major releases

New specifications						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for endorsement at plenary#	Approved at plenary#	Comments

Affected existing specifications				
Spec No.	CR	Subject	Approved at plenary#	Comments

11 Work item raporteurs

TSG RAN

12 Work item leadership

TSG RAN

13 Supporting Companies

Alcatel, …

14 Classification of the WI (if known)

X	Feature (go to 14a)
	Building Block (go to 14b)
	Work Task (go to 14c)

14a The WI is a Feature: List of building blocks under this feature

To be updated when WTs are identified belonging to this Feature

14b The WI is a Building Block: parent Feature

Evolution of Transport

14c The WI is a Work Task: parent Building Block

Not Relevant

23. UE Positioning

Distributed as: UE_positioning.doc

Work Item Description

1. Title

UE positioning

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

- Location Based Services (LCS)
- Low Chip rate TDD option

3 Justification

UE positioning is a function of UE and UTRAN (Access Stratum) which can be useful for a number of purposes:

- Radio Resource Management
- Support for location based services (LCS)

4 Objective

UE positioning is a feature that allows:

- UTRAN to calculate the geographical co-ordinates of a UE known by UTRAN
- UTRAN to provide sufficient information so that capable UEs can calculate autonomously their geographical co-ordinates
- UTRAN to answer to Core Networks requests for UE position

UE positioning feature encompasses a collection of positioning methods, allowing different level of accuracy and operational scenarios.

5 Service Aspects

None

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

None

9 Impacts

Affects:	USIM	ME	AN	CN	Others
Yes		X	X		
No	X			X	
Don't know					

10 Expected Output and Time scale (to be updated at each plenary)

This is a feature which is supported in release 99. For output and timescales, refer to the appropriate building block under the feature.

11 Work item rapporteur

Denis Fauconnier, Nortel Networks

12 Work item leadership

TSG-RAN WG2

13 Supporting Companies

TSG-RAN

14 Classification of the WI (if known)

x	Feature (go to 14a)
	Building Block (go to 14b)
	Work Task (go to 14c)

14a The WI is a Feature: List of building blocks under this feature

- UE positioning enhancements
- Iub/Iur interfaces for UE positioning methods supported on the radio interface release 99

14b The WI is a Building Block: parent Feature

14c The WI is a Work Task: parent Building Block

24. Void (Radio Interface Testing)

Distributed as: -

This Work Item was deleted from the approved Work Items at TSG-RAN #9

25. Requirement on Equipment

Distributed as: -

26. Low chip rate TDD physical layer

Distributed as: RAN_Work_Items_after_RAN_9 (originally RP-000311)

Work Item Description

Title

Low chip rate TDD physical layer

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

Low Chip Rate TDD UE radio access capabilities
Low chip rate TDD Layer 2 and Layer 3 protocol aspects
Low chip rate TDD Iub/Iur protocol aspects
Smart Antenna
Low chip rate TDD RF Radio Transmission/Reception, System Performance Requirements and Conformance Testing
Low Chip Rate TDD Inter-working with GERAN

3 Justification

For the low chip rate TDD, it has commonalties but also difference on physical layer with the high chip rate TDD option e.g. chip rate, frame structure, burst structure, some physical layer procedures etc. This paper is to describe one of the low chip rate TDD building blocks –physical layer.

4 Objective

The technical objective of this work item is to clarify the integration work to be done for the physical layer. And this work will affect the specifications for working group on physical layer. The integration work for low chip rate TDD with its properties should maximize the commonality with high chip rate TDD options.

- For physical layer, it includes the following work tasks:
  - Physical Channels and Mapping of Transport Channels onto Physical Channels
  - Multiplexing and Channel Coding
  - Modulation and spreading
  - Physical layer procedures
  - Physical Layer Measurements

5 Service Aspects

None

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

None

9 Impacts

Affects:	USIM	ME	AN	CN	Others
Yes		X	X		
No	X			X	X
Don't know					

10 Expected Output and Time scale (to be updated at each plenary)

New specifications						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for endorsement at plenary#	Approved at plenary#	Comments
25.928	Low Chip Rate TDD Physical Layer	WG1		RAN #10	RAN #11	

Affected existing specifications				
Spec No.	CR	Subject	Approved at plenary#	Comments
25.201		Physical layer – General description	RAN#11	

25.221		Physical channels and mapping of transport channels onto physical channels (TDD)	RAN#11	
25.222		Multiplexing and channel coding (TDD)	RAN#11	
25.223		Spreading and modulation (TDD)	RAN#11	
25.224		TDD; physical layer procedures	RAN#11	
25.225		Physical layer; measurements	RAN#11	
25.302		Services Provided by the physical layer	RAN#11	
25.944		Channel coding and multiplexing examples	RAN#11	

11 Work item raporteurs

Mr. Guiliang Yang (CATT/CWTS)

12 Work item leadership

TSG-RAN WG1

13 Supporting Companies
TSG-RAN

14 Classification of the WI (if known)

	Feature (go to 14a)
X	Building Block (go to 14b)
	Work Task (go to 14c)

14a The WI is a Feature: List of building blocks under this feature

(list of Work Items identified as building blocks)

14b The WI is a Building Block: parent Feature

Low chip rate TDD

14c The WI is a Work Task: parent Building Block

(one Work Item identified as a building block)

27. Low chip rate TDD layer 2 and layer 3 protocol aspects

Distributed as: RAN_Work_Items_after_RAN_9 (originally RP-000312)

Work Item Description

Title

Low chip rate TDD layer 2 and layer 3 protocol aspects

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

Low Chip Rate TDD physical layer
Low chip rate TDD Iub/Iur protocol aspects
Smart Antenna
Low chip rate TDD RF Radio Transmission/Reception, System Performance Requirements and Conformance Testing
Low Chip Rate TDD Inter-working with GERAN

Low chip rate TDD UE radio access capabilities

3 Justification

Although most of the L2/L3 features are common with high chip rate TDD option , there are some differences ,e.g. modification of signalling, baton handover etc., which should be described and clarified. Basically, most of them were originated from the differences of physical layer between low chip rate TDD and UTRA TDD and the involvement of Smart Antenna. This paper is to describe one of the low chip rate TDD building blocks – layer 2 and layer 3 protocol aspects.

4 Objective

The technical objective of this work item is to complete the low chip rate TDD L2/L3 functionality adaptation in UTRA TDD. And this work will affect the specifications for working group on L2/L3. The integration work for low chip rate TDD with its properties should follow the principle to maximize the commonality with high chip rate TDD.

- For layer 2 and layer 3 protocol aspects, it includes the following work tasks:
  - UE procedures in idle mode
  - Interlayer procedures in connected mode
  - Control plane protocol aspects
  - User plane protocol aspects
  - mobility aspects

5 Service Aspects

None

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

None

9 Impacts

Affects:	USIM	ME	AN	CN	Others
Yes		X	X		
No	X			X	X
Don't know					

10 Expected Output and Time scale (to be updated at each plenary)

New specifications						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for endorsement at plenary#	Approved at plenary#	Comments
25.834	Low chip rate TDD layer 2 and layer 3 protocol aspects	WG2		RAN #11	RAN #11	

Affected existing specifications				
Spec No.	CR	Subject	Approved at plenary#	Comments
25.301		Radio interface protocol architecture	RAN#11	
25.302		Service provided by the physical Layer	RAN#11	
25.303		UE functions and Inter-layer procedures in connected mode	RAN#11	
25.304		UE procedures in idle mode and procedures for cell reselection in connected mode	RAN#11	
25.305		Stage 2 functional specification of location service in UTRAN (LCS)	RAN#11	
25.321		Medium access control (MAC) protocol specification	RAN#11	
25.322		Radio link control(RLC) protocol specification	RAN#11	
25.331		Radio resource control (RRC) protocol specification	RAN#11	
25.324		Radio Interface for Broadcast/Multicast Services	RAN#11	
25.925		Radio Interface for Broadcast/Multicast Services	RAN#11	
25.922		Radio Resource Management Strategies	RAN#11	

1.1.1 11 Work item raporteurs

Mr. Yanhui LIU (CATT/CWTS)

12 Work item leadership

TSG-RAN WG2

13 Supporting Companies

TSG-RAN

14 Classification of the WI (if known)

	Feature (go to 14a)
X	Building Block (go to 14b)
	Work Task (go to 14c)

14a The WI is a Feature: List of building blocks under this feature

(list of Work Items identified as building blocks)

14b The WI is a Building Block: parent Feature

low chip rate TDD

14c The WI is a Work Task: parent Building Block

(one Work Item identified as a building block)

14b The WI is a Building Block: parent Feature

low chip rate TDD

14c The WI is a Work Task: parent Building Block

(one Work Item identified as a building block)

28. Low Chip Rate TDD RF Radio Transmission/ Reception, System Performance Requirements and Conformance Testing

Distributed as: RAN_Work_Items_after_RAN_9 (originally RP-000313)

Work Item Description

Title

RF Radio Transmission/Reception, System Performance Requirements and Conformance Testing

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

Low chip Rate TDD physical layer
Low Chip Rate TDD UE radio access capabilities
Low chip rate TDD Layer 2 and Layer 3 protocol aspects
Low chip rate TDD Iub/Iur protocol aspects
Low Chip Rate TDD Inter-working with GERAN
Smart Antenna

3 Justification

For the low chip rate TDD, due to the difference on chip rate, the parameters for RF are affected like e.g. operation band width, mask, out of band emission, blocking, etc. This paper is to describe one of the low chip rate TDD building blocks - RF Radio Transmission/Reception, System Performance Requirements and Conformance Testing.

4 Objective

The technical objective of this work item is the description of the low chiprate TDD RF characters, the system performance requirements and conformance testing. And this work will affect the specifications for working group on RF character and other working group related to the system performance and conformance testing and the work on UE radio access capability.

- As a building block, it includes the following work task:
- UE radio transmission and reception
- BTS radio transmission and reception
- BTS Conformance testing
- BTS Electromagnetic compatibility
- Requirements for support of Radio Resource Management

5 Service Aspects

None

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

None

9 Impacts

Affects:	USIM	ME	AN	CN	Others
Yes		X	X		
No	X			X	X
Don't know					

10 Expected Output and Time scale (to be updated at each plenary)

New specifications						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for endorsement at plenary#	Approved at plenary#	Comments
25.945		WG4		RAN #10	RAN #11	

Affected existing specifications				
Spec No.	CR	Subject	Approved at plenary#	Comments
25.102		UE Radio Transmossion and Reception (TDD)	RAN#11	
25.105		BTS Radio Transmission and Reception (TDD)	RAN#11	
25.123		Requirements for support of Radio Resource Management (TDD)	RAN#11	
25.142		Base station conformance testing(TDD)	RAN#11	
25.942		RF system scenarios	RAN#11	
25.113		Base station EMC	RAN#11	
25.133		Requirements for support of Radio Resource Management (FDD)	RAN#11	

11 Work item raporteurs

Mr. Daijun Zhang (CATT/CWTS)

12 Work item leadership

TSG-RAN WG4

13 Supporting Companies
TSG-RAN

14 Classification of the WI (if known)

	Feature (go to 14a)
X	Building Block (go to 14b)
	Work Task (go to 14c)

14a The WI is a Feature: List of building blocks under this feature

(list of Work Items identified as building blocks)

14b The WI is a Building Block: parent Feature

Low chip rate TDD

14c The WI is a Work Task: parent Building Block

(one Work Item identified as a building block)

29. Smart antenna

Distributed as: RAN_Work_Items_after_RAN_9 (originally RP-000314)

Work Item Description

Title

Smart antenna

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

Low Chip Rate TDD physical layer
Low chip rate TDD layer2 and layer3 protocol aspects
Low chip rate TDD Iub/Iur protocol aspects
Low chip rate TDD RF Radio Transmission/Reception, System Performance Requirements and Conformance Testing
Low chip rate TDD UE radio access capabilities
Low Chip Rate TDD Inter-working with GERAN

3 Justification

The smart antennas with the property of beamforming are the essential part of the 1.28 Mcps UTRA TDD option enhancing the system capacity , and this may cover e.g. RNS, layer 1, layer 2/3 aspects for the 1.28 Mcps TDD,. For the UTRA FDD as well as 3.84 Mcps UTRA TDD the needed support for the use of adaptive antenna is covered in UTRA specifications.This paper is to describe the smart antenna building blocks.

4 Objective

The objective of this work item is to clarify the technology of smart antenna and the impact of smart antenna on other layers. And as a building block, it will most affect the physical layer specification with maximizing the commonalities with high chip rate TDD.

5 Service Aspects

None

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

None

9 Impacts

Affects:	USIM	ME	AN	CN	Others
Yes		X	X		
No	X			X	X
Don't know					

10 Expected Output and Time scale (to be updated at each plenary)

New specifications						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for endorsement at plenary#	Approved at plenary#	Comments
25.842	Smart antenna	WG1		RAN #10	RAN #11	

Affected existing specifications

Spec No.	CR	Subject	Approved at plenary#	Comments
25.201		Physical layer – General description	RAN#11	
25.221		Physical channels and mapping of transport channels onto physical channels (TDD)	RAN#11	
25.222		Multiplexing and channel coding (TDD)	RAN#11	
25.223		Spreading and modulation (TDD)	RAN#11	
25.224		TDD; physical layer procedures	RAN#11	
25.225		Physical layer; measurements	RAN#11	
25.302		Services Provided by the physical layer	RAN#11	

11 Work item raporteurs

Mr. Guiliang Yang (CATT/CWTS)

12 Work item leadership

TSG-RAN WG1

13 Supporting Companies
TSG-RAN

14 Classification of the WI (if known)

	Feature (go to 14a)
X	Building Block (go to 14b)
	Work Task (go to 14c)

14a The WI is a Feature: List of building blocks under this feature

(list of Work Items identified as building blocks)

14b The WI is a Building Block: parent Feature

RAN improvement

14c The WI is a Work Task: parent Building Block

(one Work Item identified as a building block)

30. Low Chip Rate TDD UE radio access Capability

Distributed as: RAN_Work_Items_after_RAN_9 (originally RP-000315)

Work Item Description

Title

Low chip rate TDD UE radio access capability

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

Low Chip Rate TDD physical layer
Low chip rate TDD Layer 2 and Layer 3 protocol aspectsLow chip rate TDD Iub/Iur protocol aspects
Smart Antenna
Low chip rate TDD RF Radio Transmission/Reception, System Performance Requirements and Conformance Testing
Low Chip Rate TDD Inter-working with GERAN

3 Justification

For the low chip rate TDD, it has commonalties but also difference on radio access capabilities with the high chip rate TDD option e.g. usage of timeslots for different UE classes, usage of USCH /DSCH, etc. This paper is to describe one of the low chip rate TDD building block – UE radio access capabilities.

4 Objective

The technical objective of this work item is complete the UE radio access capabilities. And this work will affect the specifications for working group on UE radio access capability.

- For UE radio access capability, it includes the following work tasks:
  - Definition of UE radio access capabilities for low chip rate option

5 Service Aspects

None

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

None

9 Impacts

Affects:	USIM	ME	AN	CN	Others
Yes		X	X		
No	X			X	X
Don't know					

10 Expected Output and Time scale (to be updated at each plenary)

New specifications						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for endorsement at plenary#	Approved at plenary#	Comments

Affected existing specifications				
Spec No.	CR	Subject	Approved at plenary#	Comments
25.926		UE Radio Access Capabilities	RAN #11	

11 Work item raporteurs

Mr. Yanhui LIU (CATT/CWTS)

12 Work item leadership

TSG-RAN WG2

13 Supporting Companies
TSG-RAN

14 Classification of the WI (if known)

	Feature (go to 14a)
X	Building Block (go to 14b)
	Work Task (go to 14c)

14a The WI is a Feature: List of building blocks under this feature

(list of Work Items identified as building blocks)

14b The WI is a Building Block: parent Feature

Low chip rate TDD

14c The WI is a Work Task: parent Building Block

(one Work Item identified as a building block)

31. Low chip rate TDD UTRAN network Iub/Iur protocol aspects

Distributed as: RAN_Work_Items_after_RAN_9 (originally RP-000316)

Work Item Description

Title

Low chip rate TDD Iub/Iur protocol aspects

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

Low Chip Rate TDD physical layer
Low chip rate TDD layer2 and layer3 protocol aspects
Smart Antenna
Low chip rate TDD RF Radio Transmission/Reception, System Performance Requirements and Conformance Testing
Low chip rate TDD UE radio access capabilities
Low Chip Rate TDD Inter-working with GERAN

3 Justification

In Iub and Iur interfaces, especially, low chip rate TDD will result in adaptations of Information Elements in radio link related signaling, to support the changed physical channel parameters. In addition, low chip rate TDD should define some procedures which are different from those of UTRA TDD to provide services such as location services, and uplink synchronisation. This paper is to describe one of the low chip rate TDD building blocks – UTRAN architecture aspects

4 Objective

The integration work for low chip rate TDD with its properties should follow the principle to maximize the commonality with high chip rate TDD.

- For UTRAN architecture aspects, it includes the following work tasks:
  - Iub aspects
  - Iur aspects

5 Service Aspects

None

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

None

9 Impacts

Affects:	USIM	ME	AN	CN	Others
Yes			X		
No	X	X		X	X
Don't know					

10 Expected Output and Time scale (to be updated at each plenary)

New specifications						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for endorsement at plenary#	Approved at plenary#	Comments
25.937		WG3		RAN #10	RAN #11	

Affected existing specifications				
Spec No.	CR	Subject	Approved at plenary#	Comments
25.401		UTRAN Overall Description	RAN#11	
25.402		Synchronisation in UTRAN Stage 2	RAN#11	
25.433		UTRAN Iub Interface NBAP Signalling	RAN#11	
25.423		UTRAN Iur Interface RNSAP Signalling	RAN#11	
25.427		UTRAN Iub/Iur Interface User Plane Protocols for DCH data streams	RAN#11	
25.435		UTRAN Iub Interface User Plane Protocols for Common Transport Channel data streams	RAN#11	

11 Work item raporteurs

Mr. Yanhui Liu (CATT/CWTS)

12 Work item leadership

TSG-RAN WG3

13 Supporting Companies
TSG-RAN

14 Classification of the WI (if known)

	Feature (go to 14a)
X	Building Block (go to 14b)
	Work Task (go to 14c)

14a The WI is a Feature: List of building blocks under this feature

(list of Work Items identified as building blocks)

14b The WI is a Building Block: parent Feature

low chip rate TDD

14c The WI is a Work Task: parent Building Block

(one Work Item identified as a building block)

32. RAB Quality of Service Negotiation over Iu

Distributed as: RAN_Work_Items_after_RAN_9 (originally partly in RP-000137, revised in RP-000499)

Work Item Description

Title

RAB Quality of Service Negotiation over Iu

1 3GPP Work Area

X	Radio Access
X	Core Network
	Services

2 Linked work items

None

3 Justification

In release 99, UTRAN can only accept or reject a radio access bearer request from the core network. For services that could accept looser QoS requirements than those requested by the CN in the RAB establishment request there exist no means for UTRAN to propose alternative (looser) QoS. For such services the RAB establishment will fail, or alternatively the CN could re-attempt the RAB reestablishment with looser QoS requirements which would significantly increase the setup time.

4 Objective

This work item should enhance the Radio Access Bearer setup to something more sophisticated using e.g. QoS profiles to align with the already existing CN solution used in GPRS. However, it should be as simple as possible.

5 Service Aspects

The intention with the work item is to reduce the setup time of services.

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

None

9 Impacts

Affects :	USIM	ME	AN	CN	Others
Yes			X	X	
No	X	X			X
Don't know					

10 Expected Output and Time scale (to be updated at each plenary)

New specifications						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments

Affected existing specifications				
Spec No.	CR	Subject	Approved at plenary#	Comments
25.413			RAN #11	
23.060				
24.008				

11 Work item raporteurs

Anders Molander, Ericsson

12 Work item leadership

TSG-RAN WG3

13 Supporting Companies

TSG-RAN

14 Classification of the WI (if known)

	Feature (go to 14a)
	Building Block (go to 14b)
X	Work Task (go to 14c)

14a The WI is a Feature: List of building blocks under this feature

14b The WI is a Building Block: parent Feature

14c The WI is a Work Task: parent Building Block

UTRAN Improvement Feature

33. RAB Quality of Service Renegotiation over Iu

Distributed as: RAN_Work_Items_after_RAN_9 (originally RP-000500)

Work Item Description

Title

RAB Quality of Service Renegotiation over Iu

1 3GPP Work Area

X	Radio Access
X	Core Network
	Services

2 Linked work items

None

3 Justification

Release 99 also does not allow the UTRAN to renegotiate RAB/QoS parameters for on-going calls/session. Since the UTRAN is responsible for managing the radio resources, it is necessary for the UTRAN to be able to initiate RAB renegotiation for efficient use of the radio interface.

4 Objective

This work item should also enhance the management of Radio Access Bearers for on-going calls/session so that QoS parameters can be renegotiated by the UTRAN.

5 Service Aspects

The intention is also to allow continuation of service through UTRAN initiated QoS renegotiation.

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

None

9 Impacts

Affects :	USIM	ME	AN	CN	Others
Yes			X	X	
No	X	X			X
Don't know					

10 Expected Output and Time scale (to be updated at each plenary)

New specifications						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments

Affected existing specifications				
Spec No.	CR	Subject	Approved at plenary#	Comments
25.413			RAN #11	
23.060				
24.008				

11 Work item raporteurs

Sania Irwin, Motorola

12 Work item leadership

TSG-RAN WG3

13 Supporting Companies

TSG-RAN

14 Classification of the WI (if known)

	Feature (go to 14a)
	Building Block (go to 14b)
X	Work Task (go to 14c)

14a The WI is a Feature: List of building blocks under this feature

14b The WI is a Building Block: parent Feature

14c The WI is a Work Task: parent Building Block

UTRAN Improvement Feature

34. Iub/Iur interfaces for UE positioning methods supported on the radio interface release 99

Distributed as: RAN_Work_Items_after_RAN_9 (originally RP-000509)

Work Item Description

Title

Iub/Iur interfaces for UE positioning methods supported on the radio interface release 99

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

none

3 Justification

Currently, the UE positioning if a function of UTRAN where several methods are supported on the radio interface:

- cell coverage based positioning method;
- OTDOA method with network configurable idle periods; and
- network assisted GPS method.

Nevertheless, only the cell coverage based positioning method is supported on the Iub and Iur interface of release 99.

4 Objective

The purpose of this work item is to add on the Iub and Iur protocols the necessary support for the positioning methods defined for release 99.

5 Service Aspects

None

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

None

9 Impacts

Affects :	USIM	ME	AN	CN	Others
Yes			X		
No	X	X		X	
Don't know					

10 Expected Output and Time scale (to be updated at each plenary)

New specifications						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments

Affected existing specifications				
Spec No.	CR	Subject	Approved at plenary#	Comments
25.401		UTRAN Overall Description	RAN #10	
25.420		UTRAN Iur Interface: General Aspects and Principles	RAN #10	
25.423		UTRAN Iur Interface RNSAP Signalling	RAN #10	
25.430		UTRAN Iub Interface: General Aspects and Principles	RAN #10	
25.433		UTRAN Iub Interface NBAP Signalling	RAN #10	

11 Work item raporteurs

to be decided by RAN WG3

12 Work item leadership

TSG-RAN WG3

13 Supporting Companies

TSG-RAN

14 Classification of the WI (if known)

	Feature (go to 14a)
	Building Block (go to 14b)
X	Work Task (go to 14c)

14a The WI is a Feature: List of building blocks under this feature

14b The WI is a Building Block: parent Feature

14c The WI is a Work Task: parent Building Block

UE positioning

35. UE positioning enhancements

Distributed as: RAN_Work_Items_after_RAN_9 (originally RP-000509)

Work Item Description

2. Title

UE positioning enhancements

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

none

3 Justification

UE positioning is a function of UE and UTRAN (Access Stratum) which can be utilised for a number of purposes:

- Radio Resource Management
- Support for location based services (LCS)

Different accuracy can be requested when positioning a UE for these purposes.

4 Objective

The purpose of this work item are to increase the accuracy of the UE positioning or define methods allowing UE positioning with less complexity for a given accuracy.

Examples of enhancements are:

- Addition of IPDL for UE positioning in TDD
- Almanac corrections

5 Service Aspects

None

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

None

9 Impacts

Affects :	USIM	ME	AN	CN	Others
Yes		X	X		
No	X			X	
Don't know					

10 Expected Output and Time scale (to be updated at each plenary)

New specifications						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments

Affected existing specifications				
Spec No.	CR	Subject	Approved at plenary#	Comments
25.305		Stage 2 Functional Specification of Location Services in UTRAN	RAN #11	
25.123		Requirements for Support of Radio Resource Management (TDD)	RAN #11	
25.224		Physical Layer Procedures (TDD)	RAN #11	
25.225		Physical layer – Measurements (TDD)	RAN #11	
25.302		Services provided by the physical layer	RAN #11	
25.303		Interlayer procedures in connected mode	RAN #11	
25.304		UE Procedures in Idle Mode and Procedures for Cell Reselection in Connected Mode	RAN #11	
25.331		RRC Protocol Specification	RAN #11	

25.420		UTRAN Iur Interface: General Aspects and Principles	RAN #11	
25.423		UTRAN Iur Interface RNSAP Signalling	RAN #11	
25.430		UTRAN Iub Interface: General Aspects and Principles	RAN #11	
25.433		UTRAN Iub Interface NBAP Signalling	RAN #11	

11 Work item rapporteur

Mark Beckmann, Siemens AG

12 Work item leadership

TSG-RAN WG2

13 Supporting Companies

TSG-RAN

14 Classification of the WI (if known)

	Feature (go to 14a)
x	Building Block (go to 14b)
	Work Task (go to 14c)

14a The WI is a Feature: List of building blocks under this feature

14b The WI is a Building Block: parent Feature

UE positioning

14c The WI is a Work Task: parent Building Block

36. RAN Technical Small Enhancements and Improvements

Distributed as: in RP-000468 as R4-000729

Work Item Description

Title

Work Item Descriptions for RAN radio interface technical enhancements and improvements

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

Independent feature.

3 Justification

The RAN work item will provide a flexible means to include technical enhancements and improvements that are not normally linked to services, but –as experience with a number of cellular standards show- are required to include technical enhancements and improvements (as opposed to corrections) based on experiences gained in designing, testing and operating the system, where issues unforeseen in standardization are revealed, that need clarifications and/or additions in the standard.

4 Objective

The RAN work item will provide a flexible means to solve unforeseen shortcomings in the standard.

5 Proposed building blocks and work tasks:

6 Service Aspects

None.

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

None.

9 Impacts

Affects:	SIM	ME	AN	CN	Others
Yes		X	X		
No	X			x	
Don't know					

10 Expected Output and Time scale (to be updated at each plenary)

Open ended.

11 Work item raporteurs

T-Mobil – Han van Bussel

12 Work item leadership

TSG RAN4

13 Supporting Companies

Motorola, Telia, T-Mobil, Vodafone Group

14 Classification of the WI (if known)

X	Feature (go to 14a)
	Building Block (go to 14b)
	Work Task (go to 14c)

14a The WI is a Feature: List of building blocks under this feature
14b The WI is a Building Block: parent Feature
14c The WI is a Work Task: parent Building Block

37. DSCH power control improvement in soft handover

Distributed as: RAN_Work_Items_after_RAN_9 (originally RP-000442)

Work Item Description

Title

DSCH power control improvement in soft handover

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

none

3 Justification

After consideration in TSG RAN WG1 it was identified that DSCH power control operation in case of soft handover possibility (for the associated DCH is) needs improvement. This topic has been studied in TSG RAN WG1 as part of the study item "radio link performance improvements".

1.1.2 4 Objective

- The purpose of this work item is to specify improvement for the DSCH power control operation.
-

5 Service Aspects

None

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

None

9 Impacts

Affects :	USIM	ME	AN	CN	Others
Yes		X	X		
No	X			X	
Don't know					

10 Expected Output and Time scale (to be updated at each plenary)

New specifications						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
25.841	DSCH power control improvement in SHO	WG1		RAN #11	RAN #11	

Affected existing specifications				
Spec No.	CR	Subject	Approved at plenary#	Comments
25.211		Physical Channels and mapping of transport channels to physical channels (FDD)	RAN #11	
25.214		Physical Layer Procedures (FDD)	RAN #11	
25.331		RRC Protocol Specification	RAN #11	
25.423		UTRAN Iur Interface RNSAP Signalling	RAN #11	
25.433		UTRAN Iub Interface NBAP Signalling	RAN #11	
25.101			RAN #11	
25.104			RAN #11	
25.141			RAN #11	
34.121			RAN #11	

11 Work item raporteurs

Antti Toskala, Nokia

12 Work item leadership

TSG-RAN WG1

13 Supporting Companies

TSG-RAN

14 Classification of the WI (if known)

	Feature (go to 14a)
X	Building Block (go to 14b)
	Work Task (go to 14c)

14a The WI is a Feature: List of building blocks under this feature

(list of Work Items identified as building blocks)

14b The WI is a Building Block: parent Feature

This is a building block part of the radio interface improvement feature.

14c The WI is a Work Task: parent Building Block

(one Work Item identified as a building block)

38. Migration to Modification procedure

Distributed as: RAN_Work_Items_after_RAN_9 (originally RP-000446)

Work Item Description

Title

Migration to Modification procedure

1 3GPP Work Area

X	Radio Access
X	Core Network
	Services

2 Linked work items

(list of linked Wis)

3 Justification

Subclause 7.8 “Radio access bearer modification” of 3G TR 25.931 “UTRAN functions, examples on signalling procedures” (Release 99) utilizes Modification procedure of transport network bearer. But it is associated with a note that if the referred signalling protocol does not have the modification procedure, tentative procedure with establish new bearer and then release old one is applied to. The referred signalling protocol does not have the procedure.

The modification procedure has advantages to the tentative procedure in the transport network bearer bandwidth optimization and required number of signalling messages for the capability. Furthermore the procedure also becomes functionally less complex; A transport channel needs no longer be moved from one transport bearer to another. Especially in the unsynchronised reconfiguration case (e.g. subclause 7.14.1 (should be 7.14.2) "Unsyncronised transport channel reconfiguration" in TR 25.931), the current/tentative procedure seems quite complex with respect to the "moment of moving".

4 Objective

In Release 2000 time frame, the modification procedure is available in enhanced the referred transport network signalling protocol.

This work item is to make successful migration from the tentative procedure to the modification procedure.

5 Service Aspects

None

6 *MMI-Aspects*

None

7 Charging Aspects

None

8 Security Aspects

None

9 Impacts

Affects:	USIM	ME	AN	CN	Others
Yes			X		
No	X	X		X	X
Don't know					

10 Expected Output and Time scale (to be updated at each plenary)

New specifications						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
		WG3			RAN #10	

Affected existing specifications				
Spec No.	CR	Subject	Approved at plenary#	Comments
TS 25.410		UTRAN Iu interface: general aspects and principles	RAN #11	
TS 25.413		UTRAN Iu Interface RANAP Signalling	RAN #11	
TS 25.414		UTRAN Iu interface: data transport & transport signalling	RAN #11	
TS 25.415		UTRAN Iu interface: user plane protocols	RAN #11	
TS 25.420		UTRAN Iur interface: general aspects and principles	RAN #11	
TS 25.423		UTRAN Iur Interface RNSAP Signalling	RAN #11	
TS 25.424		UTRAN Iur interface: data transport & transport signalling for common transport channel data streams	RAN #11	
TS 25.425		UTRAN Iur interface: user plane protocols for common transport channel data streams	RAN #11	
TS 25.426		UTRAN Iur and Iub interfaces: data transport & transport signalling for DCH data streams	RAN #11	
TS 25.430		UTRAN Iub interface: general aspects and principles	RAN #11	
TS 25.433		UTRAN Iub Interface NBAP Signalling	RAN #11	
TS 25.434		UTRAN Iub interface: data transport & transport signalling for common transport channel data streams	RAN #11	
TR 25.931		UTRAN functions, examples on signalling procedures	RAN #11	

11 Work item rapporteurs

Takayuki Yoshimura (Japan Telecom)

12 Work item leadership

TSG-RAN WG3

13 Supporting Companies

TSG-RAN

14 Classification of the WI (if known)

	Feature (go to 14a)
	Building Block (go to 14b)
X	Work Task (go to 14c)

14a The WI is a Feature: List of building blocks under this feature

(list of Work Items identified as building blocks)

14b The WI is a Building Block: parent Feature

(one Work Item identified as a feature)

14c The WI is a Work Task: parent Building Block

Evolution of transport in UTRAN

39. UMTS 1800

Distributed as: RAN_Work_Items_after_RAN_9 (originally RP-000448)

Work Item Description

Title

UMTS 1800

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

none

3 Justification

A decision was made at WARC 00 to extend the current IMT 2000 frequency allocation to include the current 2G cellular bands.

4 Objective

The purpose of this work item is to add the following frequency band to the 3GPP specifications

UMTS 1 800 Band:

1 710 - 1 785 MHz: mobile transmit, base receive
1 805 - 1 880 MHz: base transmit, mobile receive

A report will be generated to study the radio compatibilities of DCS1800 and UMTS1800.

TSG RAN WG2 will be asked to study the terminal capabilities. TSG RAN WG3 will be asked to study any possible interface impacts.

The following time schedule is considered for TSG RAN:

Task	**Planned Start**	**Planned Finish**
Work Item Creation	9/2000	9/2000
Work Item Approval		9/2000
Drafting and discussion, updates of	9/2000	12/2000

specifications		
Update of specifications	12/2000	3/2001
Submission of RAN WG4 specifications to TSG RAN for approval		3/2001
Possible remaining corrections, clarifications and test specifications	12/2000	03/2001

5 Service Aspects

None

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

None

9 Impacts

Affects :	USIM	ME	AN	CN	Others
Yes		X	X		
No	X			X	X
Don't know					

10 Expected Output and Time scale (to be updated at each plenary)

New specifications						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments

Affected existing specifications				
Spec No.	CR	Subject	Approved at plenary#	Comments
25.101		UE Radio transmission and reception (FDD)	RAN #11	
25.104		UTRA (BS) FDD; Radio transmission and reception	RAN #11	

25.141		Base station conformance testing (FDD)	RAN #11	
34.121		Terminal Conformance Specification, Radio Transmission and Reception	T #11	

11 Work item raporteurs

Howard Benn (howard.benn@motorola.com)

12 Work item leadership

TSG-RAN WG4

13 Supporting Companies

TSG-RAN

14 Classification of the WI (if known)

	Feature (go to 14a)
	Building Block (go to 14b)
X	Work Task (go to 14c)

14a The WI is a Feature: List of building blocks under this feature

(list of Work Items identified as building blocks)

14b The WI is a Building Block: parent Feature

This is a building block part of the radio interface improvement feature.

14c The WI is a Work Task: parent Building Block

Radio Interface Improvement Feature