TSG-RAN Meeting #13 Beijing, China, 18 - 21 September 2001

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, RAN_Study_Items. The WI sheets for finished WIs can be found in RAN_Work_Items_History (this is mentioned under the header of all relevant WIs).

See RP-010497 (draft minutes of TSG-RAN #12 meeting) for comments on the sheets provided in yellow.

Sheets in green have been re-issued where necessary and (if indeed based on the comments in RP-010497) 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 #12 (other than because of comments at TSG-RAN #12) and also need to be endorsed.

WI sheets without background colour are for WIs that are no longer current (because they are finished or stopped).

The approved Work Items at the end of TSG-RAN #12 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. Void (originally 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. Void (originally 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. Transport bearer modification procedure on Iub, Iur and Iu (originally Migration to Modification procedure)

39. UMTS 1800

- 40. RAN work for Intra Domain Connection of RAN Nodes to Multiple CN Nodes
- 41. RAB Quality of Service Negotiation over Iu during relocation
- 42. Open interface between the SMLC and the SRNC within the UTRAN to support A-GPS Positioning
- 43. High Speed Downlink Packet Access (HSDPA)
- 44. High Speed Downlink Packet Access (HSDPA) Physical Layer
- 45. High Speed Downlink Packet Access (HSDPA) layer 2 and 3 aspects
- 46. High Speed Downlink Packet Access (HSDPA) Iub/Iur Protocol Aspects
- 47. High Speed Downlink Packet Access (HSDPA) RF Radio Transmission/ Reception, System Performance Requirements and Conformance Testing
- 48. Multiple Input Multiple Output antennas (MIMO)
- 49. Void (originally Gated DPCCH Transmission)
- 50. UMTS 1900
- 51. Enhancement on the DSCH hard split mode
- 52. NodeB Synchronisation for 1.28 Mcps TDD
- 53. RL Timing Adjustment
- 54. Separation of resource reservation and radio link activation
- 55. Re-arrangement of Iub Transport Bearers (originally Traffic Termination Point Swapping)
- 56. Open interface between the SMLC and the SRNC within the UTRAN to support Rel-4 positioning methods
- 57. UE positioning enhancements for 1.28 Mcps TDD
- 58. Base Station Classification for 1.28 Mcps TDD
- 59. Iur Common Transport Channel Efficiency Optimisation
- 60. Iur Neighbouring cell reporting Efficiency Optimisation

Relation between Work Items

Feature	Grp	Building Block	Grp	Work Task	Grp
22. RAN Improvement Feature	RP	14. RRM optimizations for lur and	R3	59. lur Common Transport	R3
		<u>lub</u>		Channel Efficiency Optimisation	
				60. lur Neighbouring cell reporting	R3
		8. NodeB Synchronisation for	R1	Efficiency Optimisation	
		TDD	17.1		
		52. NodeB Synchronisation for	R1		
		1.28 Mcps TDD			
		15. Radio access bearer support enhancement	R2		
		53. RL Timing	R3		
		Adjustment 53. RL Timing			
		Adjustment			
		54. Separation of resource	R3		
		reservation and radio link			
		activation 55. Re-arrangement of lub	R3		
		Transport Bearers (originally	KO		
		Traffic Termination Point			
		Swapping)			
21. Radio Interface Improvement Feature	RP	16. Improvement of inter- frequency and inter-system	R1		
improvement reature		measurements			
		2. Base station classification	R4	3. FDD Base station classification	R4
				4. TDD Base station classification	R4
				58. Base Station Classification for	R4
		7. Hybrid ARQ II/III	R2	1.28 Mcps TDD	
		17. Improved usage of downlink	R2		
		resource in FDD for CCTrCHs of			
		dedicated type			
		11. Terminal power saving features	R1		
		9. UTRA FDD Repeater	R4		
		Specification			
		37. DSCH power control	R1		
		improvement in soft handover 39. UMTS 1800	R4		
		50. UMTS 1900	R4		
		48. Multiple Input Multiple Output	R1		
		antennas (MIMO)			
		51. Enhancement on the DSCH	R1		
20. Evolution of the transport in	RP	hard split mode 18. IP transport in UTRAN	R3		
the UTRAN	IXI	10. QoS optimization for AAL type	R3		
		2 connections over lub and lur			
		interfaces	D0		
		38. Transport bearer modification procedure on lub, lur, and lu	R3		
		originally Migration to			
		Modification procedure)			
1. Low chip rate TDD option	R1	26. Low chip rate TDD physical laver	R1		
		27. Low chip rate TDD layer 2 and	R2		
		layer 3 protocol aspects			
		30. Low Chip Rate TDD UE radio	R2		
		access Capability 31. Low chip rate TDD UTRAN	R3		
		network lub/lur protocol aspects			
		28. Low Chip Rate TDD RF Radio	R4		
		Transmission/ Reception, System Performance Requirements and			
		Conformance Testing			
43. High Speed Downlink	R2	44. High Speed Downlink Packet	R1		
Packet Access (HSDPA)		Access (HSDPA) - Physical Layer	_		
		45. High Speed Downlink Packet Access (HSDPA) - layer 2 and 3	R2		
		aspects			
		46. High Speed Downlink Packet	R3		
		Access (HSDPA) - lub/lur			
		Protocol Aspects			

Feature	Grp	Building Block	Grp	Work Task	Grp
		47. High Speed Downlink Packet Access (HSDPA) - RF Radio Transmission/ Reception, System Performance Requirements and Conformance Testing	R4		
36. RAN Technical Small Enhancements and Improvements	RP				
Transcoder-Free Operation	N4	OoBTC solution	N4	19. Transcoder Free Operations in UTRAN	R3
Location Services enhancements	S2	23. UE Positioning	RP	34. lub/lur interfaces for UE positioning methods supported on the radio interface release 99	R3
				35. UE positioning enhancements 57. UE positioning enhancements for 1.28 Mcps TDD	R2 R2
				9. UTRA FDD Repeater Specification	R4
				42. Open interface between the SMLC and the SRNC within the UTRAN to support A-GPS Positioning	R2
				56. Open interface between the SMLC and the SRNC within the UTRAN to support Rel-4 positioning methods	R2
Ensure reliable QoS for PS domain	S2	13. RAB Quality of Service Negotiation/Renegotiation over Iu	R3	32. RAB Quality of Service Negotiation over lu	R3
				33. RAB Quality of Service Renegotiation over Iu	R3
				41. RAB Quality of Service Negotiation over lu during relocation	R3
		12. PS-Domain handover for real- time services	R3		
Intra Domain Connection of RAN Nodes to Multiple CN Nodes	S2	40. RAN work for Intra Domain Connection of RAN Nodes to Multiple CN Nodes	R3		

1. Low chip rate TDD option

Last distributed as: RAN_Work_Items_after_RAN_9 (originally RP-000191)

This WI was finished in TSG-RAN #11. The WI sheet can be found in RAN_Work_Items_History.

2. Base station classification

Last distributed as: RAN_Work_Items_after_RAN_11 (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

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

	New specifications							
Spec No.	Title		Prime rsp. WG	rsp. WG(s)	Presented for endorsement at plenary#	Approved at plenary#	Comments	
			R4		RAN #13	RAN #13		
			Affe	cted exist	ng specification		I	
Spec No.	CR	Subject			Approved at	plenary#	Comments	
	1							

Work item raporteurs

Antti Toskala, Nokia

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

Last distributed as: RAN_Work_Items_after_RAN_11 (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 S	ervice A	Aspects
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None

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

None

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

				New sp	ecifications		
Spec No.	Title		Prime rsp. WG	2ndary rsp. WG(s)	Presented for endorsement a plenary#	Approved at plenary#	Comments
25.951		Base station ification	R4		RAN #13	RAN #13	
			Affe	cted exist	l ing specificat	ions	<u> </u>
Spec No.	CR	Subject			Approved	at plenary#	Comments
25.104			UTRA (BS) FDD, Radio Transmission and Reception			3	
25.141			Base Station Conformance Testing (FDD)			3	
25.133			Requirements for Support of Radio Resource Management (FDD)			3	?
25.942		RF System S	Scenarios	3	RAN #13	3	

Work item raporteurs

Antti Toskala, Nokia Networks

Work item leadership

TSG-RAN WG4

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

Last distributed as: RAN_Work_Items_after_RAN_11 (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

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

				New spe	ecif	ications		
Spec No.	Title		Prime rsp. WG	rsp. WG(s)	end	sented for lorsement at nary#	Approved at plenary#	Comments
25.952	5.952 TDD Base station classification		R4		RΑ	N #12	RAN #12	
			Affe	cted existi	ing	specificatio	ns	
Spec No.	CR	Subject				Approved a	t plenary#	Comments
25.105		UTRA (BS) TDD, Radio Transmission and Reception				RAN #12		
25.142		Base Station Conformance Testing (TDD)				RAN #12		
25.123		RF parameter (TDD)	ameters in support of RRM		RM	RAN #12		?
25.942		RF System So	enarios	1		RAN #12		

Work item raporteurs

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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

Last 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

Last 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

Last 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

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

				New spe	ecif	ications		
Spec No.	Title		Prime rsp. WG	2ndary rsp. WG(s)	end	esented for dorsement at nary#	Approved at plenary#	Comments
25.835	Hybrid	ARQ II/III	WG2			N #12	RAN #13	
25.837		ARQ II/III	WG3		RΑ	N #12	RAN #13	
			Affe	cted exist	ing	specification	ons	
Spec No.	CR	Subject				Approved at		Comments
25.211		Physical chan transport char channels (FDI	nels on	to physica	al			
25.212		Multiplexing a (FDD)	nd Char	nnel Codin	ıg	RAN #13		
25.214		Physical Laye	r Proced	dures (FD	D)	RAN #13		
25.221		Physical chan transport char channels (TDI	nels and	d mapping	of	RAN #13		
25.222		Multiplexing a (TDD)	nd Char	nnel Codin	ıg	RAN #13		
25.224		Physical Laye	r Proced	dures (TD	D)	RAN #13		
25.301		Radio Interfac Architecture	e Proto	col		RAN #13		
25.302		Services provi layer			al	RAN #13		
25.303		Interlayer proc connected mo		in		RAN #13		
25.304		UE Procedure Procedures fo Connected Mo	r Cell R			RAN #13		
25.321		MAC Protocol	Specific	cation		RAN #13		
25.322		RLC Protocol	Specific	ation		RAN #13		
25.331		RRC Protocol	Specific	cation		RAN #13		
25.401		UTRAN Overa				RAN #13		
25.420		UTRAN lur Int Aspects and F				RAN #13		
25.423		UTRAN lur Int Signalling	erface F	RNSAP		RAN #13		
25.425		UTRAN lur int protocols for C	CCH dat	a streams		RAN #13		
25.430		UTRAN lub In Aspects and F	rinciple	S		RAN #13		
25.433		UTRAN lub In Signalling				RAN #13		
25.435		UTRAN lub in protocols for C				RAN #13		

Work item raporteurs

Armin Sitte, Siemens AG

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

Last distributed as: RAN_Work_Items_after_RAN_9 (originally RP-000055)

This WI was finished in TSG-RAN #11. The WI sheet can be found in RAN_Work_Items_History.

9. UTRA FDD Repeater Specification

Last distributed as: RAN_Work_Items_after_RAN_9 (originally RP-000083)

This WI was finished in TSG-RAN #11. The WI sheet can be found in RAN_Work_Items_History.

10. QoS optimization for AAL type 2 connections over lub and lur interfaces

Last distributed as: Revised WI sheet (QoS) (originally RP-000188)

This WI was finished in TSG-RAN #11. The WI sheet can be found in RAN_Work_Items_History.

11. Terminal power saving features

Last distributed as: RP-010485 (originally RP-000189)

Work Item Description

Title: Terminal power saving

1. 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

None

3 Justification

The UE battery is an essential resource which has direct impact on standby and connected time and can be enhanced by new features defined for UTRA.

4 Objective

The objective of this Work Item is to define new features which can contribute to gains in terms of battery saving. This encompasses both enhancements on the radio interface or network interfaces which would allow a network to optimise battery utilisation.

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	×			×	

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

	New specifications						
Spec No.	Title			rsp. WG(s)		Approved at plenary#	Comments
			Affecte	ed existing	specifications	3	
Spec No.	Spec No. CR Subject Approved at plenary# Comments						
_			_			_	

11

Work item rapporteursDenis Fauconnier, Nortel Networks

Work item leadership 12

TSG-RAN WG2

13 **Supporting Companies**

TSG-RAN

Classification of the WI (if known) 14

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

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

12. PS-Domain handover for real-time services

Last distributed as: RAN_Work_Items_after_RAN_9 (originally RP-000127)

This WI was finished in TSG-RAN #11. The WI sheet can be found in RAN_Work_Items_History.

13. RAB Quality of Service Negotiation/Renegotiation over lu

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

This WI was finished in TSG-RAN #11. The WI sheet can be found in RAN_Work_Items_History.

14. RRM optimizations for lur and lub

Last distributed as: RP-010273 (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

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 optimizing the existing procedures and functions of Iub and Iur.

5 Service Aspects

None

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

None

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

	New specifications								
Spec No.	Title		Prime rsp. WG	WG(s)	Presented for endorsement at plenary#	Approved at plenary#	Comments		
	Affected existing specifications								
Spec No.	CR	Subject			Approved a	t plenary#	Comments		

The expected finalization date is RAN#14.

Work item raporteurs

Gert-Jan van Lieshout (Ericsson)

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

15. Radio access bearer support enhancement

Last distributed as: RAN_Work_Items_after_RAN_11 (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
- 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

Affects	USIM	ME	AN	CN	Others
:					

Yes		X	X		
No	X			X	X
Don't know					

				New spe	ecifications		
Spec No. Title				rsp. WG rsp. WG(s) e	Presented for endorsement at plenary#	Approved at plenary#	Comments
						RAN#14	
			Affe	cted exist	ing specification	ons	
Spec No.	CR	Subject			Approved at	plenary#	Comments

Work item raporteurs

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

Work item leadership

TSG-RAN WG2

Supporting Companies

TSG-RAN

14 Classification of the WI (if known)

		Feature (go to 14a)
7	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

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

Last 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.

None

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

None

:					
Yes		X	X		
No	X			X	
Don't know					

		Nev	v spec	cifications		
Spec No.	Title	Prime 2ndan rsp. WG rsp. W	G(s) e	Presented for Indorsement at Ilenary#	Approved at plenary#	Comments
		Affected 6	xistin	g specification	ons	
Spec No.	CR	Subject		Approved at	plenary#	Comments
25.212		Multiplexing and channel co	ding	RAN #14		
25.215		Physical layer – Measurem (FDD)	RAN #14			
25.331		RRC Protocol Specification		RAN #14		Parameter update
25.423		UTRAN lur Interface RNSA Signalling	RAN #14		Parameter update	
25.433		UTRAN lub Interface NBAF Signalling	RAN #14		Parameter update	

Work item raporteurs

Antti Toskala, Nokia Networks

Work item leadership

TSG-RAN WG1

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

Last distributed as: RAN Work Items after RAN 10 (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,

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			
			Affecte	d existing	g specification	S		
Spec No.	CR	Subject	71110010	a oxiotiii,	Approved		Comments	
25.331					RAN #13			
25.423					RAN #13			
25.433					RAN #13			
25.212					RAN #13		?	
25.214					RAN #13			
25.926					RAN #13			

11 Work item raporteurs

Claudiu Mihailescu (Nortel Networks)

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

Last 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

9 Impacts

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

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			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 s	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 lu Interface: General Aspects and Principles	RAN #11	Only text related to Transport Network Layer.
TS 25.411		UTRAN lu Interface Layer 1	RAN #11	
TS 25.412		UTRAN lu interface signalling transport	RAN #11	
TS 25.413		UTRAN Iu Interface RANAP Signalling	RAN #11	Only parameters and interface related to the Transport Network Layer.
TS 25.414		UTRAN lu interface data transport & transport signalling	RAN #11	
TS 25.415		UTRAN lu interface user plane protocols	RAN #11	Only parameters and interface related to the Transport Network Layer.
TS 25.420		UTRAN lur Interface: General Aspects and Principles	RAN #11	Only text related to Transport Network Layer.
TS 25.422		UTRAN lur interface signalling transport	RAN #11	•
TS 25.423		UTRAN lur Interface RNSAP Signalling	RAN #11	Only parameters and interface related to the Transport Network Layer.
TS 25.424		UTRAN lur interface data transport & transport signalling for CCH data streams	RAN #11	
TS 25.425		UTRAN lur 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 lub interface signalling transport	RAN #11	•
TS 25.433		UTRAN lub Interface NBAP Signalling	RAN #11	Only parameters and interface related to the Transport Network Layer.
TS 25.434		UTRAN lub interface data transport & transport signalling for CCH data streams	RAN #11	

¹ None of the TSG-CN specifications are impacted.

-

TS 25.435	a transfer and promote	RAN #11	Only parameters and interface
	for CCH data streams		related to the Transport Network Layer.
			Network Layer.
TS 25.442	UTRAN Implementation Specific O&M	RAN #11	
	Transport		
TR 25.931	UTRAN Functions, Examples on Signalling	RAN #11	Only messages related to
	Procedures		transport bearers.
TR 25 932	Delay Budget within the Access Stratum	RAN #11	•

Work item rapporteurs

Nicolas Drevon, Alcatel

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

Last distributed as: RAN_Work_Items_after_RAN_10 (originally RP-000507)

This WI was finished in TSG-RAN #11. The WI sheet can be found in RAN_Work_Items_History.

20. Evolution of the transport in the UTRAN

Last 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.

None

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

None

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

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 sp	ecifications		
Spec No.	lo. Title		Prime rsp. WG		Presented for endorsement at plenary#	Approved at plenary#	Comments
			Affe	ected exist	ing specification	ons	
Spec No.	CR	Subject			Approved at		Comments
	1						

Work item raporteurs

Francois Courau (Alcatel)

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)
Γ		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

Last distributed as: WI-Radio-if-improve2

Work Item Description

Title: Radio Interface Improvement

This work item intends to introduce new mechanisms allowing improvements 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 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 mechanisms are provided to allow enhancement of the radio interface in a backward compatible manner.

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)

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

New specifications								
Spec No.	Title		Prime rsp. WG		Presented for information at plenary#	Approved at plenary#	Comments	
			Affe	cted exist	ing specificati	ons		
Spec No.	CR	Subject	-		Approved a		Comments	

Work item raporteurs

TSG-RAN

Work item leadership

TSG-RAN

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

Not Relevant

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

Not Relevant

22. RAN Improvement Feature

Last distributed as: WI-RAN-improve2

Work Item Description

Title: RAN Improvement

This work item intends to introduce new mechanisms allowing improvements on all aspects dealing with the RNS internal interfaces as well as the interface towards the core network. In addition this includes internal mechanisms to be introduced in the Technical Specification under responsibility of TSG RAN for the RNS part of the network, e.g., algorithms for QoS handling.

1 3GPP Work Area

X	Radio Access
X	Core Network
	Services

2 Linked work items

None

3 Justification

This work item has been created to collect all evolutions of the Radio Network System. This includes transport of user and signalling plane as well as protocols over all interfaces of the RNS. The Iu and Iur reference points are also covered by this Feature description.

4 Objective

The main objective of this Feature is to cover all evolution of the internal RNS architecture and protocol.

_	~ .	
5	Carvica	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					

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 sp	ecifications		
Spec No.	Title		Prime rsp. WG		Presented for information at plenary#	Approved at plenary#	Comments
			Affe	cted exist	ing specificati	ons	
Spec No.	CR	Subject	-		Approved a		Comments
	1						

11	Work item	raporteurs

TSG-RAN

Work item leadership

TSG-RAN

Supporting Companies

Alcatel, ...

14 Classification of the WI (if known)

2	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

Not Relevant

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

Not Relevant

23. UE Positioning

Last 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					

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.

Work item rapporteur

Denis Fauconnier, Nortel Networks

Work item leadership

TSG-RAN WG2

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)

Last distributed as: -

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

25. Void (Requirement on Equipment)

Last distributed as: -

This Work Item was deleted from the approved Work Items at TSG-RAN #10

26. Low chip rate TDD physical layer

Last distributed as: RAN_Work_Items_after_RAN_9 (originally RP-000311)

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

Last distributed as: RAN_Work_Items_after_RAN_9 (originally RP-000312)

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

Last distributed as: RAN_Work_Items_after_RAN_9 (originally RP-000313)

29. Void (Smart antenna)

Last distributed as: -(originally RP-000314)

This Work Item was deleted from the approved Work Items at TSG-RAN #10

30. Low Chip Rate TDD UE radio access Capability

Last distributed as: RAN_Work_Items_after_RAN_9 (originally RP-000315)

31. Low chip rate TDD UTRAN network lub/lur protocol aspects

Last distributed as: Revised WI sheet (LCRTDD-IubIur) (originally RP-000316)

32. RAB Quality of Service Negotiation over lu

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

33. RAB Quality of Service Renegotiation over lu

Last distributed as: RAN_Work_Items_after_RAN_9 (originally RP-000500)

34. lub/lur interfaces for UE positioning methods supported on the radio interface release 99

Last distributed as: RAN_Work_Items_after_RAN_9 (originally RP-000509)

35. UE positioning enhancements

Last 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

ce 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					

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

				New sp	ecif	ications		
Spec No.	Title		Prime rsp. WG	2ndary rsp. WG(s)	info	esented for ormation at nary#	Approved at plenary#	Comments
						161 41		<u> </u>
O N	CR	0.4.5.4	Affe	cted exist	ng	specification		0
Spec No. 25.305	<u>UK</u>	Stage 2 Fur Specificatio Services in	n of Lo	cation		Approved at RAN	l #11	Comments
25.123		Requirements Radio Resour (TDD)	for Sup ce Mana	port of agement			l #11	
25.224		Physical La (TDD)	-	ocedures	6		l #11	
25.225		Physical lay Measureme	er – ents (TI	DD)		RAN	l #11	
25.302		Services provided by the physical layer				RAN	l #11	
25.303		Interlayer p		res in		RAN	l #11	
25.304		UE Procedu and Proced Reselection Mode	ures fo	r Cell	de	RAN	l #11	
25.331		RRC Protoc	col Spe	cificatio	n	RAN	l #11	
25.420		UTRAN lur General As Principles	Interfa	ce:		RAN	l #11	
25.423		UTRAN lur RNSAP Sig		ce		RAN	l #11	
25.430		UTRAN lub General As Principles	pects a	ınd			l #11	
25.433		UTRAN lub Signalling	Interfa	ice NBA	Р	RAN	l #11	

Work item rapporteur

Mark Beckmann, Siemens AG

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

Last distributed as: - (originally in RP-000468 as R4-000729)

This WI was replaced by a general WI for all TSGs established during TSG-SA #10 in Bangkok. No WI sheet was needed.

37. DSCH power control improvement in soft handover

Last distributed as: RAN_Work_Items_after_RAN_9 (originally RP-000442)

38. Transport bearer modification procedure on lub, lur, and lu (originally Migration to Modification procedure)

Last distributed as: Revised WI sheet (Mod) (originally RP-000446)

39. UMTS 1800

Last distributed as: RAN_Work_Items_after_RAN_11 (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	6/2001
Submission of RAN WG4 specifications to		6/2001
TSG RAN for approval		
Possible remaining corrections, clarifications	12/2000	6/2001
and test specifications		

λ	In	n	o
/ N	,,,	•	r

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					

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

				New spe	ecif	ications		
Spec No.	Title		Prime rsp. WG	2ndary rsp. WG(s)	info	sented for ormation at nary#	Approved at plenary#	Comments
			Affe	cted exist	ing	specificatio	ns	
Spec No.	CR	Subject	•	•		Approved at p	olenary#	Comments
25.101		UE Radio trans (FDD)	smission a	and recepti	on	RAN	l #13	
25.104		UTRA (BS) transmission				RAN	l #13	
25.141		Base station testing (FDD		nance		RAN	l #13	
34.121		Terminal Co Specification Transmission	nforma n, Radio)		T #	‡ 13	

Work item raporteurs

Howard Benn (howard.benn@motorola.com)

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

40. RAN work for Intra Domain Connection of RAN Nodes to Multiple CN Nodes

Last distributed as: RP-000689

Work Item Description

Title

RAN work for Intra Domain Connection of RAN Nodes to Multiple CN Nodes

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

F1 Intra Domain Connection of RAN Nodes to Multiple CN Nodes: Overall System Architecture

SA 2 is responsible for this.

- BB3 GERAN work for Intra Domain Connection of RAN Nodes to Multiple CN Nodes [GERAN 2 is predicted to lead the work in GERAN]
- BB4 CN work for Intra Domain Connection of RAN Nodes to Multiple CN Nodes [CN 1 is predicted to lead the work in CN]

3 Justification

In the current network architecture, an RNC can only be connected to one MSC and/or one SGSN. The same restriction applies to BSCs. This has the following consequences:

- a) when a BSC (or RNC) has a relatively large capacity compared to that of an MSC/SGSN there are frequently significant wastages of hardware. (For example, if a BSC has 40% of the capacity of an MSC, do you connect 2 or 3 BSCs to that MSC?)
- b) as networks carry more traffic, the geographic area covered by one MSC or SGSN (of a given capacity) decreases. However, subscribers still tend to travel the same physical distances and therefore there are more inter-MSC/SGSN registration updates. The signalling associated with these inter MSC/SGSN updates causes additional load on MSCs, SGSNs, HLRs, the core network signalling networks and on the radio interface signalling channels.

The ability to connect RNCs and BSCs to more than one MSC and to more than one SGSN could reduce the above problems. In addition, the ability to provide load sharing between MSCs (SGSNs) would further improve the efficiency of hardware utilisation.

This work will focus on a solution where a routeing function is placed in the RNC (or BSC). This avoids most of the problems of a standalone node (TR 23.913 called it the Turbo Routeing Function), while retaining the other advantages of described in R'99, TR 23.913.

This Work Item (which is a Feature) proposes to provide a standardised mechanism for the connection of multiple MSCs (and SGSNs) to an RNC or a BSC (both A/Gb mode and Iu mode) which reduces mobility management signalling and permits improved efficiency in hardware utilisation.

It is intended that this new concept is an architectural option for any PLMN. Its deployment, or non-deployment, by one network operator should not place requirements on other network operators.

4 Objective

The objective of this Work Item is to produce the necessary updates to the RAN TSs.

The list of affected existing specifications is given in section 10.

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 spe	ecif	ications		
Spec No.	Title	Prim rsp.		(-)	info	esented for ormation at nary#	Approved at plenary#	Comments
			Affe	cted existi	na	specification	ons	
Spec No.	CR	Subject				Approved at		Comments
25.331		Inclusion of NAS parameter in Initia message.		_	fer			
25.401		RAN architecture	desc	cription				
25.413		Addition of "currer load" message to						

Work item raporteurs

Work item leadership

RAN 3

Supporting Companies

Vodafone, Nokia, Ericsson, Nortel, Mannesmann

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: F1: Intra Domain Connection of RAN Nodes to Multiple CN Nodes: Overall

System Architecture

SA 2 is responsible for this.

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

(one Work Item identified as a building block)

41. RAB Quality of Service Negotiation over lu during relocation

Last distributed as: RP-010168

Work Item Description

Title

RAB Quality of Service Negotiation over Iu during relocation

1 3GPP Work Area

X	Radio Access
X	Core Network
	Services

2 Linked work items

None

3 Justification

In release 99, for services that could accept looser QoS requirements than those requested by the CN in the relocation request, there exist no means for UTRAN to propose alternative (looser) QoS. For such services the relocation will fail.

4 Objective

This work item should enhance the relocation so that QoS parameters can be negotiated by the UTRAN during relocation. However, it should be as simple as possible.

5 Service Aspects

The intention of the work item is to allow continuation of service during relocation

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					

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

	New specifications									
Spec No.	Title		Prime rsp. WG	2ndary	Presented for information at plenary#	Approved at plenary#	Comments			
			Affe	cted exist	ing specificati	ions				
Spec No.	CR	Subject					Comments			
25.413					RAN #11					
23.060										
24.008										

Work item raporteurs

Chenghock Ng, NEC

Work item leadership

TSG-RAN WG3

Supporting Companies

NEC, Siemens, Motorola, Telecom Italia, Alcatel

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

42. Open interface between the SMLC and the SRNC within the UTRAN to support A-GPS Positioning

Last distributed as: RP-010414

Work Item Description

Title: Open interface between the SMLC and the SRNC within the UTRAN to support A-GPS Positioning

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

None identified.

3 Justification

At the 3GPP LCS Work Shop held in London on 1/11/01 and 1/12/01 it was agreed that for A-GPS positioning, sufficient functional separation existed with RNC functions to justify the opening the interface towards a standalone SMLC.

4 Objective

The objective of this work item is to provide for support of an open interface between the SMLC and the SRNC within the UTRAN for the support of A-GPS positioning. This new interface would be analogous to the Lb interface defined in the GSM LCS specifications with the exceptions that the positioning messages are terminated at the SRNC and mapped to release 99 RRC messages and that the positioning messages also support broadcast of LCS assistance data in support of the RRC broadcast messages.

The addition of the interface should be compatible the release 99 Iu, Iur and Iub and radio interfaces. The addition of this interface does not preclude the A-GPS to be supported in the SRNC.

5 5	ervi	e As	spects
-----	------	------	--------

None identified.

6 MMI-Aspects

None identified.

7 Charging Aspects

None identified.

8 Security Aspects

None identified.

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
3GPP TS 25.453		oning Calculation ation Part (PCAP)	RAN 2	RAN 3		RAN #12	
3GPP TS 25.452	UTRAN I _{upc} Interface: Signalling Transport		RAN 2	RAN 3	RAN #13	RAN #13	
3GPP TS 25.451	UTRAI Layer	N I _{upc} Interface: 1	RAN 2	RAN 3	RAN #12	RAN #12	
3GPP TS 25.450	UTRAN I _{upc} Interface: General Aspects and Principles		RAN 2	RAN 3	RAN #12	RAN #12	
	Affected existing specifications						
Spec No.							Comments
25.401	UTRAN architecture description; Stage 2			otion;	RAN #12	,	Add new lupc interface and new stand alone A-GPS SMLC network entity.
25.305		UTRAN Stage 2			RAN #11		Modify Network Reference Model to show stand alone A-GPS SMLC and add stage 2 call flows for A-GPS positioning.

11 Work item raporteurs

Ie-Hong Lin (Qualcomm) Vince Jolley (Qualcomm)

12 Work item leadership

RAN 2

13 Supporting Companies

Qualcomm, SBC, Cingular Wireless, Samsung Electronics Research Institute, Hutchison 3G, NEC, Orange PCS, and Vodafone Group

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

xxx1 Provision of SRNC - SMLC Open Interface

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

43. High Speed Downlink Packet Access (HSDPA)

Last distributed as: RP-010262

Work Item Description

Title

High Speed Downlink Packet Access

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

HSDPA Physical Layer HSDPA Layer 2 and 3 Protocol Aspects

HSDPA UTRAN Iub/Iur Protocol Aspects

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

3 Justification

In RAN#7 a study item on High Speed Downlink Packet Access was approved. The aim of the study was to look at the feasibility and potential of various techniques such as Adaptive Modulation and Coding and Hybrid ARQ for increasing throughput and peak data rates with reduction in concomitant delay. Since RAN#7, RAN WG1 and RAN WG2 have considered many contributions on this subject and have concluded on the feasibility and potential of various techniques and provided recommendations on the inclusion of these techniques for Rel-5. This work item is in line with the recommendations from WG2 and WG1.

4 Objective

The technical objective of this work item is the integration of HSDPA functionality in UTRA, in line with recommendations from WG1 and WG2, to increase the throughput and peak data rates while reducing the overall delay. The works tasks include support for both FDD and TDD. In those cases where differences between FDD and TDD are identified, they should be considered as separate work tasks.

- For physical layer, the features include:
 - Physical and Transport Channels mapping
 - Higher Order Modulation
 - Multiplexing and Hybrid ARQ Channel Coding
 - Physical Layer procedures
- For higher layers:
 - Architecture aspects
 - MAC entity (Scheduling and Hybrid ARQ protocol)
 - Interlayer procedures in connected mode
 - Control plane aspects

- UE capabilities
- For Iur/Iub interface:

For the adoption of HSDPA some modifications to the present Iub and Iur signalling and user data streams will need to be included.

- For radio transmission and reception:
 - UE radio transmission and reception
 - BTS radio transmission and reception
 - BTS Conformance testing
 - 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					

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

			Nev	w specification	S		
Spec No.	Title		rsp. WG(s)	Presented for endorsement at plenary#	Approved at plenary#		Comments
			Affected of	existing specifi	cation	S	
Spec No.	CR	Subject				Approved at plenary#	Comments

The expected finalisation date is TSG-RAN #14

Work item raporteurs

Ravi Kuchibhotla (Motorola)

Work item leadership

TSG-RAN WG2

Supporting Companies

Motorola, Nokia, Ericsson, Vodafone Group, Mannesmann Mobilfunk

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)

HSDPA Physical Layer

HSDPA Layer 2 and 3 Protocol Aspects

HSDPA UTRAN Iub/Iur Protocol Aspects

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

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)

44. High Speed Downlink Packet Access (HSDPA) - Physical Layer

Last distributed as: RP-010262

Work Item Description

Title

High Speed Downlink Packet Access - Physical Layer

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

HSDPA Layer 2 and 3 Protocol Aspects
HSDPA UTRAN Iub/Iur Protocol Aspects
HSDPA RF Radio Transmission/ Reception, System Performance Requirements and
Conformance Testing

3 Justification

The study item on HSDPA was concluded in RAN WG#11with recommendations on the techniques to be included in Rel-5. This work item enables the inclusion of the identified techniques at the physical layer.

4 Objective

The technical objective of this work item is the integration of HSDPA physical layer functionality in UTRA, while maintaining commonality with the R99 general physical layer aspects to the maximum extent possible.

- For physical layer, the features include:
 - Physical and Transport Channels mapping
 - Higher Order Modulation
 - Multiplexing and Hybrid ARQ Channel Coding
 - Physical Layer procedures

The work task for physical layer procedures will also consider additional physical layer measurements that may be required.

5 Service Aspects

None

6 MMI-Aspects

None

7 Charging Aspects

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)

				Ne	w specification	s		
Spec No.	Title		Prime rsp. WG	2ndary rsp. WG(s)	Presented for endorsement at plenary#	Approv	ed at plenary#	Comments
				Affected	existing specifi	cations	S	
Spec No.	CR	Subject					Approved at plenary#	Comments
25.201		Physica	l layer -	– Genera	al description		RAN#14	
25.211		-			mapping of physical cha	nnels	RAN#14	
25.212		Multiple	xing an	d channe	el coding (FD	DD)	RAN#14	
25.213		Spreadi	ng and	modulat	ion (FDD)		RAN#14	
25.214		Physica	l layer	procedur	es(FDD)		RAN#14	
25.221		_			mapping of physical cha	nnels	RAN#14	
25.222		Multiple	xing an	d channe	el coding (TE	DD)	RAN#14	
25.223		Spreadi	ng and	modulat	ion (TDD)		RAN#14	
25.224		Physica	l layer	procedur	es(TDD)		RAN#14	

The expected finalisation date is TSG-RAN #14

Work item raporteurs

Amitava Ghosh (Motorola)

Work item leadership

TSG-RAN WG1

13 Supporting Companies

Motorola, Nokia, Ericsson, Vodafone Group, Mannesmann Mobilfunk

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

High Speed Downlink Packet Access (HSDPA)

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

45. High Speed Downlink Packet Access (HSDPA) - layer 2 and 3 aspects

Last distributed as: RP-010262

Work Item Description

Title

High Speed Downlink Packet Access - layer 2 and 3 aspects

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

HSDPA Physical Layer
HSDPA UTRAN Iub/Iur Protocol Aspects
HSDPA RF Radio Transmission/ Reception, System Performance Requirements and
Conformance Testing

3 Justification

The study item on HSDPA was concluded in RAN WG#11with recommendations on the techniques to be included in Rel-5. This work item enables the inclusion of the identified techniques at layers 2 and 3.

4 Objective

The technical objective of this work item is the integration of HSDPA physical layer functionality in UTRA, while maintaining commonality with the R99 general layer 2 and 3 aspects to the maximum extent possible. While most of the control aspects will be identical to those for R99, some additional signaling for the configuration of HSDPA channels will need to be defined. Also, in order to enable the support of fast scheduling, support for a new MAC-HSDSCH entity shall be included. This new entity at the Node B will handle all the scheduling and HARQ (non-physical layer aspects) of the HSDPA feature. UE capabilities will need to be updated to indicate support of HSDPA. Physical Layer aspects of UE capabilities will be handled by WG1.

- For layers 2 and 3, the features include:
 - Architecture aspects
 - MAC entity (Scheduling and Hybrid ARQ protocol)
 - Interlayer procedures in connected mode
 - Control plane aspects
 - UE capabilities

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					

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

				Ne	w specification	s		-
Spec No.	Title		Prime rsp. WG		Presented for endorsement at plenary#	Approv	ed at plenary#	Comments
				Affected (existing specifi	cations	5	
Spec No.	CR	Subject					Approved at plenary#	Comments
25.301		Radio ir	nterface	protoco	l architecture		RAN#14	
25.302		Service provided by the physical Layer RAN#14					RAN#14	
25.303		UE functions and Inter-layer procedures in RAN#14 connected mode						
25.306		UE Rad	lio Acce	ess Capa	bilites		RAN#14	
25.321		Medium specific		s control	(MAC) protoc	col	RAN#14	
25.331		Radio re		control	(RRC) protoc	ol	RAN#14	

The expected finalisation date is TSG-RAN #14

Work item raporteurs

Ravi Kuchibhotla (Motorola)

Work item leadership

TSG-RAN WG2

Supporting Companies

Motorola, Nokia, Ericsson, Vodafone Group, Mannesmann Mobilfunk

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

High Speed Downlink Packet Access (HSDPA)

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

46. High Speed Downlink Packet Access (HSDPA) - *lub/lur Protocol* Aspects

Last distributed as: RP-010262

Work Item Description

Title

High Speed Downlink Packet Access - Iub/Iur Protocol Aspects

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

HSDPA Physical Layer
HSDPA Layer 2 and 3 Protocol Aspects
HSDPA RF Radio Transmission/ Reception, System Performance Requirements and
Conformance Testing

3 Justification

The study item on HSDPA was concluded in RAN WG#11with recommendations on the techniques to be included in Rel-5. This work item enables support of the identified techniques over the Iub and Iur.

4 Objective

The technical objective of this work item is the integration of HSDPA physical layer functionality in UTRA, while maintaining commonality with the R99 general lub and Iur aspects to the maximum extent possible. While most of the control aspects will be identical to those for R99, some additional signaling for the configuration of HSDPA shared channels will need to be defined. Also frame protocol for the user data stream will need to be defined for the HSDPA shared channels. Flow control for the HSDPA channels on the Iub will need to be supported.

- For Iub and Iur, the features include:
 - Iub and Iur architecture aspects
 - Iub and Iur control plane aspects
 - Iub and Iur user plane 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					

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

				Nev	w spe	cification	ıs		
Spec No.	Title		Prime rsp. WG	2ndary rsp. WG(s)	endo plena	rsement at		ved at plenary#	Comments
				Affected 6	existi	ng specif	ication	ıs	
Spec No.	CR	Subject						Approved at plenary#	Comments
TS 25.401		UTRAN O	verall Des	cription		RAN #14			
TS 25.420		and Princip	oles	: General As	spects	RAN #14			
TS 25.422		UTRAN lui transport				RAN #14			
TS 25.423		UTRAN lui Signalling	r Interface	RNSAP		RAN #14			
TS 25.424				data transport CCH data		RAN #14			
TS 25.425				user plane ata streams		RAN #14			
TS 25.426			& Transpo	erface Data rt Signalling		RAN #14			
TS 25.430		UTRAN Iub and Princip		General Asp	oects	RAN #14			
TS 25.432		UTRAN lul transport	b interface	signalling		RAN #14			
TS 25.433		UTRAN lul	b Interface	NBAP Sign	alling	RAN #14			
TS 25.434				data transp or CCH data		RAN #14			
TS 25.435				user plane ata streams		RAN #14			
TS 25.442		UTRAN Im Transport	plementat	tion Specific	O&M	RAN #14			

The expected finalisation date is TSG-RAN #14

Work item raporteurs

Mike Diesen, Motorola

Work item leadership

TSG-RAN WG3

13 Supporting Companies

Motorola, Nokia, Ericsson, Vodafone Group, Mannesmann Mobilfunk

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

High Speed Downlink Packet Access (HSDPA)

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

47. High Speed Downlink Packet Access (HSDPA) - RF Radio Transmission/Reception, System Performance Requirements and Conformance Testing

Last distributed as: RP-010262

Work Item Description

Title

High Speed Downlink Packet Access - RF Radio Transmission/ Reception, System Performance Requirements and Conformance Testing

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

HSDPA Physical Layer HSDPA Layer 2 and 3 Protocol Aspects HSDPA UTRAN Iub/Iur Protocol Aspects

3 Justification

The study item on HSDPA was concluded in RAN WG#11with recommendations on the techniques to be included in Rel-5. This work item supports the specifications of the various RF characteristics of the HSDPA feature as they impact the base station and mobile station performance and the radio resource management aspects.

4 Objective

The technical objective of this work item is the description of the HSDPA characteristics, the system performance requirements and conformance testing.

- For radio transmission and reception:
 - UE radio transmission and reception
 - BTS radio transmission and reception
 - BTS Conformance testing
 - Requirements for support of Radio Resource Management

5	Service	Aspects
9	DCI VICC	Lispecus

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					

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

				Ne	w specification	s			
Spec No.	Title		Prime rsp. WG rsp. WG(s) Presented for endorsement a plenary#		endorsement at	Approv	red at plenary#	Comments	
				Affected of	existing specifi	cation	S		
Spec No.	CR	Subject					Approved at plenary#	Comments	
25.101		UE Rad (FDD)	lio Tran	smission	and Recepti	on	RAN#14		
25.102		UE Rad (TDD)	lio Tran	smission	on	RAN#14			
25.104		UTRA (Recepti	,	D; Radio	and	RAN#14			
25.105		UTRÁ (Recepti	•	RAN#14					
25.123				for suppo	RAN#14				
25.133		Require Resour		RAN#14					
25.141		Base st	ation co	onforman	RAN#14				
25.142		Base st	ation co	onforman	ce testing(TD	DD)	RAN#14		

The expected finalisation date is TSG-RAN #14

Work item raporteurs

Howard Benn (Motorola)

Work item leadership

TSG-RAN WG4

13 Supporting Companies

Motorola, Nokia, Ericsson, Vodafone Group, Mannesmann Mobilfunk

14 Classification of the WI (if known)

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

14b The WI is a Building Block: parent Feature High Speed Downlink Packet Access (HSDPA)

48. Multiple Input Multiple Output antennas (MIMO)

Last distributed as: RP-010267

Work Item Description

Title

Multiple Input Multiple Output antennas (MIMO)

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

High Speed Downlink Packet Access

3 Justification

Within the HSDPA study item, it has been agreed that MIMO offers significant performance gains with acceptable impact to both UE and UTRAN. MIMO shall be optional at the UE.

4 Objective

The purpose of this work item is to improve the downlink performance by means of multiple antennas at both UE and UTRAN.

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					

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

				New spe	ecif	ications		
Spec No.	Title		Prime rsp. WG	2ndary rsp. WG(s)	info	sented for rmation at nary#	Approved at plenary#	Comments
			WG1			•	RAN#15	
			Affe	cted existi	ing	specificatio	ns	
Spec No.	CR	Subject				Approved at p	•	Comments
25.211		Physical chan transport char channels (FDI	nels on			RAN	#15	
25.212		Multiplexing a (FDD)	nd chan	nel coding)	RAN	#15	
25.213		Spreading and	d modula	ation (FDD))	RAN	#15	
25.214		FDD : Physica	al layer p	rocedure	s	RAN	#15	
25.215		Physical layer (FDD)	measur	rements		RAN	#15	
25.331		Radio Resour Protocol Spec				RAN	#15	

Work item raporteurs

Howard Huang (hchuang@lucent.com)

Work item leadership

TSG RAN WG1

13 Supporting Companies

Lucent Technologies, Panasonic, Golden Bridge Technologies, NTT DoCoMo.

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

This is a work task - part of the HSDPA building block.

49. Void (originally Gated DPCCH Transmission)

Last distributed as: RP-010266

This Work Item was deleted from the approved Work Items at TSG-RAN #12

50. UMTS 1900

Last distributed as: RP-010234

Work Item Description

Title:

UMTS 1900

For consideration under agenda item 6.11.

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 bands currently occupied by PCS-1900. It is noted that Release 99 does not provide complete support for these bands. In addition, coexistence with other technologies has not been evaluated.

4 Objective

The purpose of this work item is to generate a report summarizing a study of co-existence of UTRA FDD and PCS1900, TIA/EIA-136, TIA/EIA/IS-95 in the following bands:

1850 – 1910 MHz: Up-link (UE transmit, Node B receive) 1930 – 1990 MHz: Down-link (Node B transmit, UE receive)

Based on the report the RF characteristics for both UE and BTS supporting this band will need to be added/corrected compared to Release 99.

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

5 Service Aspects

None

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

None

9 Impacts

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

16 Expected Output and Time scale

				New spe	ecif	ications		
Spec No.	Title		Prime rsp. WG	2ndary rsp. WG(s)	for		Approve d at plenary#	Comments
			Affect	ted exist	ing	specificat	tions	
Spec No. 25.101	CR	Subject UE Radio tran				Approved plenary# RAN#13		Comments
23.101		reception (FD)		ion and		ICA1\π13		
25.104		UTRA (BS) F transmission a				RAN#13		
25.113		Requirements Radio Resourc (FDD)				RAN#13		
25.133		Base Station E compatibility		_	2	RAN#13		
25.141		Base station cotesting (FDD)		nance		RAN#13		
25.331		RRC Protocol				RAN#13		
25.942		RF System Sc	enario	s		RAN#13		
25.306		Radio UE cap	ability	,		RAN#13		
34.121		Terminal Con Specification, Transmission	Radio)		T#13		

Work item raporteurs

Howard Benn

Work item leadership

RAN WG 4

13 Supporting Companies

Cingular, AWS, Motorola, Nortel Networks, Nokia, Ericsson, VoiceStream Wireless

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

51. Enhancement on the DSCH hard split mode

Last distributed as: RP-010469

Work Item Description

Title

Enhancement on the DSCH hard split mode

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

none

3 Justification

- 1) It was identified by RAN WG's (WG1, WG2 and WG3) that in the current Rel99 specification, logical split cannot be supported over Iur during the DSCH soft handover if DSCH scheduling should be done in DRNC. Furthermore, hard split has advantage over logical split in the sense that it can be supported over Iur. However, it was also identifed that hard split has some limitation and therefore there is some need to study the enhancement for TFCI coding in the DSCH hard split mode
- 2) And also, it was identified by RAN WG1, that in the current Rel99 specification, TFCI2 (TFCI for DSCH) is not transmitted from all the cells in the active set when the UE is in soft handover. Furthermore, in the current specification, the power offset should be set high enough to always detect TFCI bits reliably even if UE is not in soft handover.

4 Objective

The purpose of this work item is to specify the enhancements of TFCI coding and power control in DSCH hard split mode for UTRA FDD. This work item is composed of two work tasks.

1)TFCI coding in DSCH hard split mode

Currently DSCH hard split mode can support only 5 bit long DSCH and DCH TFCIs. As a result, the number of TFCI is limited upto 32 for DCH and DSCH in DSCH hard split mode. A new TFCI coding scheme to support the variable bit length can enhance the DSCH hard split mode.

2) TFCI power control in DSCH hard split mode

Currently the reliability of TFCI cannot be guaranteed when the UE is in soft handover. As well, in the current specification, the power offset should be set high enough to always detect TFCI bits reliably even if UE is not in soft handover. New power control scheme for TFCI can enhance the DSCH hard split mode.

5 Service Aspects

None

6 MMI-Aspects

None

7 Charging Aspects

8 Security Aspects

None

9 Impacts

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

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

			New spe	ecific	cations		
Spec No.	Title	Prime rsp. WG	rsp. WG(s)			Approved at plenary#	Comments
TR 25.870				RAN	l # 13	RAN # 14	
		Aff	ected existi	ing s	specification	ns	
Spec No. 25.212	CR	Subject Multiplexing and cha (FDD)	nnel coding		Approved at RAN	plenary# I #14	Comments
25.214	,				RAN	N #14	
25.331	25.331 RRC Protocol Specification				RAN	l #14	
25.423		UTRAN lur Interface Signalling			RAN	I #14	
25.433		UTRAN lub Interface NBAP Signalling			RAN	I #14	

Work item raporteurs

Jaeyoel KIM, SAMSUNG Electronics. kimjy@samsung.com

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

Work Task 1:TFCI coding in DSCH hard split mode

Work Task 2:TFCI power control in DSCH hard split mode

52. NodeB Synchronisation for 1.28 Mcps TDD

Last distributed as: RP-010216

Work Item Description

Title

NodeB Synchronisation for 1.28 Mcps TDD

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, for the 1.28 Mcps TDD option no method has been specified how NodeB synchronisation can be achieved with UTRAN's and UE's internal means such as signalling via the air interface.

The following benefits of the introduction of NodeB synchronisation by internal means 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 for the 1.28 Mcps option by UTRAN's and UE's internal means such as air interface signals and NodeB cross measurements. NodeB synchronisation involves

- radio frame and 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

9 Impacts

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

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

				New spe	ecifications		
Spec No.			Prime rsp. WG	2ndary rsp. WG(s)	Presented for endorsement at plenary#	Approved at plenary#	Comments
25.xxx	NodeB synchronisation for 1.28 Mcps TDD		WG1		RAN # 13	RAN # 14	TR to be created
			Affe	cted exist	ing specification	ons	
Spec No. 25.123	No. CR Subject		Approved at RAN # 14		Comments		
25.221	\ /		nels on				
25.223		Spreading and	modula	ation (TDI	D) RAN # 14		
25.224		Physical Laye	r Proced	dures (TD	D) RAN # 14		
25.225		Physical layer (TDD)	– Meas	urements	RAN # 14		
25.302	, ,		al RAN # 14				
25.331		RRC Protocol	Specific	ation	RAN # 14		
25.402		Synchronisation 2	on in UT	RAN Sta	ge RAN # 14		
25.433		UTRAN lub In Signalling	terface	NBAP	RAN # 14		
25.423		UTRAN lur Int Signalling	terface F	RNSAP	RAN # 14		

Work item raporteurs

Ms. Jinling HU (CWTS/CATT)

Work item leadership

TSG-RAN WG1

13 Supporting Companies

CATT, China Mobile, Huawei, Motorola, Nortel Networks, Samsung, Siemens

14 Classification of the WI (if known)

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

53. RL Timing Adjustment

Last distributed as: RP-010261

Work Item Description

Title

RL Timing Adjustment

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

WG1 has already expressed (outgoing liaison R1-010135) that in the event of RL adjustment being required, the Rel99/Rel4 process of deleting and re-establishing a RL temporarily causes additional DL interference in one or more cells due to loss of macro-diversity gain. In addition it slightly increases the risk of dropped calls. Therefore RAN WG1 asked RAN WG3 to consider implementing a RL adjustment procedure for a future release.

This work task aims at introducing this possibility to execute a timing adjustment of one individual RL, typically one of several RLs in the active set.

5 Service Aspects

None

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

None

9 Impacts

Affects	USIM	ME	AN	CN	Others
1:					

Yes		X	X		
No	X			X	X
Don't know					

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

				New sp	ecifica	ations		
Spec No.	Title		Prime rsp. WG	2 nd ary rsp. WG(s)		nted for sement at ry#	Approved at plenary#	Comments
25.xxx			WG3	WG2	RAN	#14	RAN #14	
			Affe	cted exist	ing sp	ecificatio	ons	
Spec No.	CR	Subject				Approved a	t plenary#	Comments
25.423		RNSAP				RAN #14		
25.433		NBAP				RAN #14		
25.331		RRC				RAN #14		

Work item raporteurs

Elena Voltolina (Ericsson)

Work item leadership

TSG-RAN WG3

Supporting Companies

Ericsson, Nokia, Philips, Qualcomm

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

RRM optimizations for Iur and Iub

54. Separation of resource reservation and radio link activation

Last distributed as: RP-010487

Work Item Description

Title

Separation of resource reservation and radio link activation

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 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 study of this mechanism shall also consider the possibility to reserve resources without allocating them to a particular UE. In this case, the actual allocation of the reserved resources to a particular UE would be delayed until the activation of the radio transmission.

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;
- benefit from statistical multiplexing at RRM level (by reserving resources on a given cell based on HO probability laws, Busy Hour Call Attempts statistics,...).

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					

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

				New sp	ecific	ations		
Spec No.	Title	Prir rsp		2 nd ary rsp. WG(s)		rsement at	Approved at plenary#	Comments
25.xxx		WG3		RA		V #14	RAN #14	
			Affe	cted exist	ing s	pecificatio	ns	
Spec No.	CR	Subject				Approved a	t plenary#	Comments
25.420		lur general aspec	cts ar	nd principl	es	RAN #14		
25.423		RNSAP				RAN #14		
25.430		lub general aspe	cts a	nd princip	les	RAN #14		
25.433	.433 NBAP				RAN #14			

Work item raporteurs

Gert-Jan van Lieshout (Ericsson)

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

RRM optimizations for Iur and Iub

55. Re-arrangement of lub Transport Bearers (originally Traffic Termination Point Swapping)

Last distributed as: RP-010465

Work Item Description

Title: Work Item Description for the Re-arrangement of lub Transport Bearers

1 3GPP Work Area

X	(Radio Access
		Core Network
		Services

2 Linked work items

None identified.

3 Justification

In the current NBAP specification (TS25.433) there is no mechanism to change the D-NBAP link for the given Node B Communication Context and secondly there is no mechanism to switch the existing transport bearers from one physical termination point to another. Fixing of the transport resources may cause the transport resource fragmentation problem in the implementation where the physical resources are distributed. In the worst case the transport resource fragmentation may cause the rejection of some large capacity call. To solve this problem there is a need for a new procedure allowing the Node B to initiate transport resource reallocation. This new procedure allows the use of distributed physical resources more efficiently by allowing a defragmentation of the resources and it may be used also due the O&M reasons.

4 Objective

5 Service Aspects

The objective of this work item is to introduce a new procedure in the NBAP enabling Node B to initiate switching of the transport bearers and a Communication Control Port from one physical termination point to another.

None identified.
6 MMI-Aspects
None identified.
_ ~-

7 Charging Aspects

None identified.

8 Security Aspects

None identified.

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)

This is a Release 5 Work Item

New specifications							
Spec No.	Title	Prime rsp WG		Presented for information at plenary#		Comments	
		Affe	cted existing	specificatio	ns		
Spec No.	CR	Subject		Approved at p	olenary#	Comments	
25.433		UTRAN lub Interface N Signalling	Interface NBAP				

11 Work item raporteurs

Antti Toskala, Nokia, Helsinki, Finland

12 Work item leadership

RAN 3

13 Supporting Companies

Nokia, Nortel Networks, InterDigital, Siemens

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:

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

56. Open interface between the SMLC and the SRNC within the UTRAN to support Rel-4 positioning methods

Last distributed as: RP-010210

Work Item Description

Title: Open interface between the SMLC and the SRNC within the UTRAN to support Rel-4 positioning methods

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

None identified.

3 Justification

At the 3GPP LCS Work Shop held in London on 1/11/01 and 1/12/01 it was agreed standalone SMLC could be specified for A-GPS method and other positioning methods should be also considered for standalone SMLC.

4 Objective

The objective of this work item is to provide for support of an open interface between the SMLC and the SRNC within the UTRAN for the support of Rel'4 positioning methods positioning, i.e. Cell ID based, OTDOA based and A-GPS

Whether standalone SMLC is used or not needs to be transparent for the UE and will only impact the SRNC which supports standalone SMLC.

In UTRAN is shall be also transparent to other network elements besides SRNC, whether standalone SMLC or integrated SMLC is supported.

5 Service Aspects

None identified.

6 MMI-Aspects

None identified.

7 Charging Aspects

None identified.

8 Security Aspects

None identified.

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)

This is a Release 5 Work Item

				New speci	fications		
Spec No.	Title		Prime rsp. WG		Presented for information at plenary#		Comments
New TR		- SMLC on Protocol	RAN 2	RAN 3		RAN #13	See Note 1.
			Affect	ed existing	specificatio	ns	
Spec No.	CR	Subject			Approved at plenary#		Comments
25.401		UTRAN architecture description; Stage 2			RAN #14		Add new lux interface and new SMLC network entity.
25.305		UTRAN Stage 2			RAN #14		Modify Network Reference Model add stage 2 call flows for Cell ID based, OTDOA and A-GPS positioning methods.

Note 1: There exists (not yet RAN approved) a WI for A-GPS only, and in this case intention is to use the defined A-GPS call flows/messages/protocols when applicable assuming the interface is done with consideration for extending to other methods. Whether the same specification can be extended or whether a new one needs to be created is to be evaluated once the needed signalling elements are concluded.

To allow for a stand alone SMLC, a new interface is required between the SMLC and the SRNC. The SMLC principle will be such that the SRNC without intergrated SMLC can query the standalone SMLC for the position of the UE.

The measurement in support for LCS defined in Rel'99/Rel'4 for UE/LMU are usable for the SMLC and can be relayed by the SRNC to the standalone SMLC for UE location calculation purposes.

11 Work item raporteurs

Antti Toskala, Nokia, Finland

12 Work item leadership

RAN 2

13 Supporting Companies

Hutchison3g, Nokia, Siemens, Vodafone Group 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

57. UE positioning enhancements for 1.28 Mcps TDD

Last distributed as: RP-010215

Work Item Description

Title

UE positioning enhancements for 1.28 Mcps TDD

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 are refinement and adoption of methods that are defined for release 5.

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			

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

			New spe	ecif	ications		
Spec No.	Title		2ndary rsp. WG(s)	info ple	nary#	Approved at plenary#	
25.xxx	UE positioning enhancements for 1.28 Mcps TDD	WG2			RAN # 13	RAN # 14	TR to be created
		Affe	cted exist	ing	specificatio		
Spec No.	CR Subject				Approved at p		Comments
25.305	Stage 2 Fui Specificatio Services in	n of Lo	cation		RAN	# 14	
25.123	Requirements Radio Resour (TDD)				RAN		
25.224	Physical La (TDD)	yer Pro	ocedures	3	RAN	# 14	
25.225	Physical lay Measureme		DD)		RAN	# 14	
25.302	Services prophysical lay		by the		RAN	# 14	
25.303	Interlayer p		res in		RAN	# 14	
25.304	and Proced	UE Procedures in Idle Mode and Procedures for Cell Reselection in Connected			RAN	# 14	
25.331	RRC Protoc	ol Spe	cificatio	n	RAN	# 14	
25.420	UTRAN lur General As Principles	Interfa	ce:			# 14	
25.423	UTRAN lur RNSAP Sig				RAN	# 14	
25.430	UTRAN lub General As Principles	pects a	ind		RAN		
25.433	UTRAN lub Signalling	Interfa	ice NBĀ	Р	RAN	# 14	

Work item rapporteur

Ms. Xiaohua MEI (CWTS/CATT)

Work item leadership

TSG-RAN WG2

13 Supporting Companies

CATT, China Mobile, Huawei, Motorola, Nortel Networks, Samsung, Siemens

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

58. Base Station Classification for 1.28 Mcps TDD

Last distributed as: RP-010450

Work Item Description

Title

Base Station Classification for 1.28 Mcps TDD option

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 general purpose base station (Node B). For the UTRA evolution requirements specific for other type of base stations are needed as well (e.g. local area base station).

4 Objective

- definition of base station classes according to deployment scenarios (e.g. indoor, outdoor)
- 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 received signal level at the base station 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					

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

				New sp	ecifications		
Spec No.	Title		Prime rsp. WG	2ndary	Presented for endorsement at plenary#	Approved at plenary#	Comments
	classif	station ication for Icps TDD	R4		RAN #14	RAN #14	
	•		Affe	cted exist	ing specification	ons	•
Spec No.	CR	Subject			Approved a	at plenary#	Comments
25.105		UTRA (BS) T Transmission			RAN #14		
25.142		Base Station Testing (TDD	Conform		RAN #14		
25.123		Requirements	s for Support of rces Management		RAN #14		
25.942	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		RAN #14				

Work item raporteurs

Meik Kottkamp, Siemens

Work item leadership

TSG-RAN WG4

Supporting Companies

Siemens, CATT, Mannesmann Mobilfunk GmbH, Motorola

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

59. lur Common Transport Channel Efficiency Optimisation

Last distributed as: RP-010473

Work Item Description

Title

Iur Common Transport Channel Efficiency Optimisation

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

Currently in RACH/FACH state, the SRNC will have to execute the RNSAP Common Transport Channel Resources Initialisation procedure every time the UE moves from one cell to another cell in the DRNS. This procedure is required to provide the SRNC with:

A) Information on supported MAC-C lengths;

B) Flow control information;

C) Possibility to request another bearer;

In many cases, many (all) S-CCPCH's in a DRNS will be configured with the same TB sizes. If in such a situation a UE moves from one cell to another cell under the same DRNS, there is no reason to update A).

If the DRNS can continue to use the same flow-control situation, there is no reason to update B).

If, in the case A) and B) are not required and the SRNC does not require the UE to start using a new transport bearer, there is no need to execute the CommonTransport Resource Initialisation procedure.

A mechanism shall be introduced which reduces the need for a Common Transport Resources Initialisation procedure where possible.

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					

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

	New specifications									
Spec No.	Title		Prime rsp. WG	, ,		sement at	Approved at plenary#	Comments		
25.xxx			WG3		RAN	#14	RAN #14			
	Affected existing specifications									
Spec No.	CR	Subject				Approved at plenary#		Comments		
25.423		RNSAP				RAN #14				

Work item raporteurs

Shahrokh Amirijoo (Ericsson)

Work item leadership

TSG-RAN WG3

Supporting Companies

Ericsson, NEC, Nortel, Vodafone

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

RRM optimizations for Iur and Iub

60. lur Neighbouring cell reporting Efficiency Optimisation

Last distributed as: RP-010474

Work Item Description

Title

Iur Neighbouring cell reporting Efficiency Optimisation

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

In Rel99/Rel4, everytime a RL is established in a certain cell, the SRNC will get information about certain characteristics of cells neighbouring the cell in which the RL is established. This information is provided regardless of whether the SRNC already has received this information before e.g. as neighbouring cell information for a previous RL establishment.

A mechanism shall be studied and if it is considered beneficial introduced, which increases the efficiency of the neighbouring cell information reporting by avoiding the transport of information the SRNC is already aware of.

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				

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

New specifications								
Spec No.	Title		Prime rsp. WG		Presented for endorsement at plenary#	Approved at plenary#	Comments	
25.xxx			WG3		RAN #14	RAN #14		
			Affe	cted exist	ing specification	ons		
Spec No.	CR	Subject	ect			t plenary#	Comments	
25.423		RNSAP			RAN #14			

Work item raporteurs

Shahrokh Amirijoo (Ericsson)

Work item leadership

TSG-RAN WG3

Supporting Companies

Ericsson, IDC, Nortel, Siemens, Vodafone

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

RRM optimizations for Iur and Iub