

TSG-RAN Meeting #14
Kyoto, Japan, 11 - 15 December 2001

RP-010731

Source: TSG-RAN

Title: Study Item sheets - latest situation

This document contains Study Item sheets in TSG-RAN (latest situation) for all approved Study Items. Those of the approved WIs are provided in a separate document, RAN_Work_Items. The SI sheets for finished SIs can be found in RAN_Study_Items_History (this is mentioned under the header of all relevant SIs).

See RP-010724 (draft minutes of TSG-RAN #13 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-010724) should be considered endorsed.

For the approved Study Items in red, there is not yet a Study Item sheet.

Study Item sheets in blue are new or have changed since TSG-RAN #13 (other than because of comments at TSG-RAN #13) and need to be endorsed.

SI sheets without background colour are for SIs that are no longer current (because they are finished or stopped).

The approved Study Items at the end of TSG-RAN #13 were:

1. Radio link performance enhancements
2. High speed downlink packet access
3. USTS
4. Feasibility Study for Improved Common DL Channel for Cell-FACH State
5. Feasibility Study of UE antenna efficiency test methods performance requirements
6. Fast Cell Selection (FCS) for HS-DSCH
7. Improvement of Radio Resource Management across RNS and RNS/BSS
8. Mitigating the Effect of CPICH Interference at the UE
9. Re-introduction of the downlink SIR measurement
10. Feasibility Study on UTRA Wideband Distribution Subsystems (WDS)
11. SRNS Relocation Procedure Enhancement
12. Introduction of direct transport bearers between SRNC and Node-B
13. Feasibility Study considering the viable deployment of UTRA in additional and diverse spectrum arrangements

1 Radio link performance enhancements

Last distributed as: RP-000181rev4

Study Item Description

Title

Radio link performance enhancements

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

none

3 Justification

After completion of Release –99, possible topics have been identified that could improve the radio link performance. In order to improve the performance it is felt necessary to continue related studies after Release –99 completion and to include possible agreed improvements to the coming UTRA releases.

4 Objective

- The purpose of this study item is to study the radio link performance enhancements for both UTRA FDD and TDD. This is a permanent study item to be repeated for every UTRA Release.

5 Service Aspects

None

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

None

9 Impacts

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

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

New specifications						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
		WG1			RAN #14	

11 Work item raporteurs

Antti Toskala, Nokia Networks

12 Work item leadership

TSG-RAN WG1

13 Supporting Companies

TSG-RAN

14 Classification of the WI (if known)

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

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

(list of Work Items identified as building blocks)

14b The WI is a Building Block: parent Feature

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

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

(one Work Item identified as a building block)

2. High speed downlink packet access

Last distributed as: RAN_Study_Items_after_RAN_9 (originally RP-000032)

This SI was finished in TSG-RAN #11. The SI sheet can be found in RAN_Study_Items_History.

3 USTS

Last distributed as: RAN_Study_Items_after_RAN_9 (originally RP-000291)

Study Item Description

Uplink Synchronous Transmission Scheme (USTS)

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

none

3 Justification

USTS is expected to provide good capacity in the uplink with low overhead and minimal impact on hardware and software resources at UE and in the UTRAN.

4 Objective

The purpose of this work item is to increase the uplink capacity by means of making a cell receive orthogonalized signals from UEs.

5 Service Aspects

None

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

None

9 Impacts

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

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

New specifications						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
	USTS	WG1		RAN #12	RAN #12	
25.839	USTS	WG3		RAN #12	RAN #12	
Affected existing specifications						
Spec No.	CR	Subject		Approved at plenary#	Comments	
25.211		Physical channels and mapping of transport channels onto physical channels (FDD)		RAN #14		
25.213		Spreading and modulation (FDD)		RAN #14		
25.214		FDD : Physical layer procedures		RAN #14		
25.331		Radio Resource Control (RRC) Protocol Specification		RAN #14		
25.413		UTRAN Iu Interface RANAP Signalling		RAN #14		
25.423		UTRAN Iur Interface RNSAP Signalling		RAN #14		
25.433		UTRAN Iub Interface NBAP Signalling		RAN #14		

11 Work item rapporteurs

Duk Kyung Kim (kdk@sktelecom.com)

12 Work item leadership

TSG-RAN WG1

13 Supporting Companies

TSG-RAN

14 Classification of the WI (if known)

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

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

(list of Work Items identified as building blocks)

14b The WI is a Building Block: parent Feature

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

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

(one Work Item identified as a building block)

4 Feasibility Study for Improved Common DL Channel for Cell-FACH State

Last distributed as: RAN_Study_Items_after_RAN_13 (originally RP-000190)

Study Item Description

Title: Feasibility Study for Improved Common DL Channel for Cell-FACH State

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

none

3 Justification

This effort is motivated by the desire to provide an optimized wireless IP solution for interactive and real time applications. While the existing mechanisms are sufficient for non-real time uni-directional traffic, there is some need for optimization work for bi-directional real time or interactive traffic using Common Channels available in Cell-FACH state.

4 Objective

This work item will study the feasibility of approach, perceived benefits, and scope of work for affected specifications to provide an improved common DL channel for Cell-FACH state. The study may consider an optimized FACH in the CPCH/FACH sub-state, a new use of DSCH as CPCH/DSCH in Cell-FACH state, and a new DL-CPCH. The objective is to optimize the common channel mechanism for various IP traffic including VoIP and other IP applications.

If any of the proposed alternatives are judged to be feasible and provide system benefits, a Technical Report with a new work item sheet will be drafted to propose additional new work to generate CRs for affected specifications. The new work item sheet will identify the affected specifications and scope of effort.

5 Service Aspects

None

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

None

9 Impacts

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

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

New specifications						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
					RAN #14	
Affected existing specifications						
Spec No.	CR	Subject		Approved at plenary#	Comments	

This study item will produce a Technical Report which will summarise the results of the study and may propose a new work item which identifies specifications to be modified.

This study item will be completed at RAN#14. Any resulting new work items will be presented and discussed at RAN#14.

11 Work item rapporteurs

Joe Kwak, GBT, will be the rapporteur for this study item.

12 Work item leadership

TSG-RAN WG2

13 Supporting Companies

TSG-RAN

14 Classification of the WI (if known)

This work item is a study item.

	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

N/A

14b The WI is a Building Block: parent Feature

N/A

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

N/A

5 Feasibility Study of UE antenna efficiency test methods performance requirements

Last distributed as: RAN_Study_Items_after_RAN_9 (originally in RP-000468 as R4-000732)

This SI was finished in TSG-RAN #13. The SI sheet can be found in RAN_Study_Items_History.

6 Fast Cell Selection (FCS) for HS-DSCH

Last distributed as: RAN_Study_Items_after_RAN_13_rev (originally in RP-010227)

Study Item Description

Title

Fast Cell Selection (FCS) for HS-DSCH

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

None

3 Justification

In RAN#7 a study item on High Speed Downlink Packet Access was approved for consideration. FCS was one of the features for HS-DSCH. However, RAN1 recommended that both intra and inter Node-B FCS should be studied further during Release#5 HSDPA work so that it can be a part of Release-6 specification.

4 Objective

Initial simulation studies on HSDPA indicate that FCS provides some benefit in average throughput in certain cases. However, the results were not conclusive. As such, a FCS study item is proposed for Rel-5 so that its benefits w.r.t HSDPA can be fully evaluated. The following analysis should be part of the study item on FCS:

1. Investigate the benefits of FCS with full motion simulator instead of the quasi-motion simulator (users experience Rayleigh faded but do not move) as used in the previous study.
2. Model integrated voice and data, different traffic models (web browsing, WAP, video streaming etc.) and TCP/IP in the system simulator.
3. Model the handoff process in the system simulator.

5 Service Aspects

Probably none– better support of existing packet data services

6 MMI-Aspects

None

7 Charging Aspects

None– uses existing packet data charging schemes

8 Security Aspects

None

9 Impacts

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

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

New specifications						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
TR	Evaluation of FCS for HS-DSCH	R1	R2, R3, R4	RAN #11	RAN #16	New technical report
Affected existing specifications						
Spec No.	CR	Subject		Approved at plenary#	Comments	

The technical report should present the results of the study and make a recommendation for which techniques should be incorporated into future releases of the standard. The report should also detail the work items descriptions necessary to continue this work.

11 Work item raporteurs

Robert Love, Motorola

12 Work item leadership

TSG-RAN WG1

13 Supporting Companies

Motorola, Nokia, T-Mobil, Ericsson

14 Classification of the WI (if known)

	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)

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)

7 Improvement of Radio Resource Management across RNS and RNS/BSS

Last distributed as: RP-010480

Study Item Description

Title: **Study Item Description for an Improvement of RRM across RNS and RNS/BSS**

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

None identified.

3 Justification

At the 3GPP UTRAN Evolution workshop, held in Helsinki, it was agreed to go forward with studies in the area of Multiradio support. To allow an easier load sharing and better quality of service management across RNS and RNS/BSS, a proper method should be studied.

4 Objective

The objective of this study item is to work out the functional grouping and the interface aspects in order to provide efficient resource management across RNS and RNS/BSS. The method which allows efficient resource management across RNS and RNS/BSS shall not affect UE/MS.

If there is a need to define new interface, then the possible interface shall be open.

The objective is also to look into the aspects between GERAN and UTRAN for this feature.

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 Study Item

New specifications						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
New 3GPP TR	Study Item Description for Improvement of RRM across RNS and RNS/BSS	RAN3	RAN2	RAN #13	RAN #14	
Affected existing specifications						
Spec No.	CR	Subject		Approved at plenary#	Comments	

11 Study item rapporteurs

Antti Toskala, Nokia, Helsinki, Finland

12 Study item leadership

RAN 3

13 Supporting Companies

Nokia, Orange PCS Ltd, 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)

14b The WI is a Building Block: Parent Feature: RAN Improvement

8 Mitigating the Effect of CPICH Interference at the UE

Last distributed as: RAN_Study_Items_after_RAN_13 (originally in RP-010431)

Study Item Description

Title:

Mitigating the Effect of CPICH Interference at the UE

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

None

3 Justification

Because the CPICH is typically allocated a significant portion of the total Node-B transmit power, the interference impact of the CPICH is particularly strong. On the other hand, the information content and structure of the CPICH channels are completely known a priori at the receiver, which can considerably simplify efforts to mitigate the CPICH interference effect. Mitigating the effect of CPICH interference at the UE may significantly improve UE performance requirements and increase radio network capacity.

4 Objective

The objectives of this study are the verification of the benefits of this feature through additional simulation studies, and further evaluation of complexity issues. Depending on the results of this study, recommendations will be made as to whether to establish a 3GPP Work Item in order to incorporate this feature into the 3GPP standard. This would ultimately involve the establishment of appropriate test scenarios and procedures, as well as the derivation of improved UE performance requirements through physical layer simulations.

5 Service Aspects

None

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

None

9 Impacts

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

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

New specifications						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
Affected existing specifications						
Spec No.	CR	Subject		Approved at plenary#	Comments	
25.101		UE Radio transmission and reception (FDD)		RAN #14		
34.121		Terminal Conformance Specification, Radio Transmission and Reception		T #14		

11 Work item raporteurs

Shimon Moshavi, Intel (Shimon.Moshavi@intel.com)

12 Work item leadership

TSG-RAN WG4

13 Supporting Companies

Cingular, T-Mobil, Telecom Italia, AWS, Omnitel/Vodafone, Lucent, Intel

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
Improvements of Radio Interface

14c The WI is a Work Task: parent Building Block
(one Work Item identified as a building block)

9 Re-introduction of the downlink SIR measurement

Last distributed as: RAN_Study_Items_after_RAN_13 (originally in RP-010434)

Study Item Description

Title

Introduction of SIR measurement

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

none

3 Justification

The SIR measurement is recognised to be a valuable tool to an operator, since it provides the ability to obtain an indication of intercell interference and hence coverage from subscriber UEs while in call within a network. This is a useful measure when trying to optimise the capacity and coverage of the cells.

4 Objective

The purpose of the study is to:

- elaborate the purposes of the SIR measurement,
- set performance requirements to meet those purposes,
- identify possible techniques to meet those requirements, including techniques that might already be used for other purposes,
- identify reporting procedures and signalling, and
- alignment with the O&M procedures.

5 Service Aspects

None

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

None

9 Impacts

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

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

New specifications						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
					RAN#14	
Affected existing specifications						
Spec No.	CR	Subject		Approved at plenary#	Comments	
25.133						
25.123						
25.215						
25.225						
25.331						
25.302						

11 Work item raporteurs

Torgny Palenius, Ericsson

12 Work item leadership

TSG-RAN WG4

13 Supporting Companies

Telecom Italia, Blu, Ericsson, Mobilkom Austria, One2One, Telefonica

14 Classification of the WI (if known)

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

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

(list of Work Items identified as building blocks)

14b The WI is a Building Block: parent Feature

RAN improvements

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

(one Work Item identified as a building block)

10 Feasibility Study on UTRA Wideband Distribution Subsystems (WDS)

Last distributed as: RAN_Study_Items_after_RAN_13 (originally in RP-010488)

Study Item Description

Title Feasibility Study on UTRA Wideband Distribution Subsystems (WDS)

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

none

3 Justification

This study item shall assess the feasibility for a new class of equipment that would allow for improved flexibility of radio access network solutions; this is here called *Wideband Distribution Subsystem, or WDS* – and includes a generic interface to the UTRA FDD Node B. TDD applicability is possible and will also be considered as part of the feasibility study.

WDS are a capable of flexible remoting of multiple Node B's RF interface, on a possible multi-operator, multi-vendor scenario, both for indoor and outdoor applications while granting substantially compliant Node B performance.

In many cases existing 2G WDS were accepted for network integration under Operator's direct responsibility, as existing specifications were not addressable for clearly and neatly defining equipment reference specification and network integration techniques, with even more severe issues in case of a multi-operator application scenario.

4 Objective

The feasibility study should identify the WDS' requirements for interfacing to Node B and demonstrate that WDS doesn't impact negatively into radio network performances on a multioperator environment. Therefore it shall include a study on WDS RF multicarrier performances, e.g.:

Linearity

Transparency

Inter-operator Power Control and RF transmit power behaviour

Transmit characteristics

Receive characteristics

These characteristics will be identified while considering WDS as ancillary equipment on a multi-vendor Node B scenario. TDD applicability shall also be investigated and clarified.

End-to-end system performance shall also be studied to identify the application scenario for WDS. Additionally the study shall identify the requirements and the impact for a communication interface (e.g. for O&M purposes) between WDS and other network elements. RAN WG3 and SA WG5 will be involved for evaluation of any impact in O&M aspects. Submission of initial results is planned for RAN4 #18.

5 Service Aspects

There could be service aspects to be considered, e.g. impact on LCS. The Feasibility Study should clarify this aspect.

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

None

9 Impacts

Affects :	USIM	ME	AN	CN	Others
Yes			X		O&M
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 resp. WG	2ndary resp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
T.b.d.		WG4			RAN14	TR on feasibility for WDS
Affected existing specifications						
Spec No.	CR	Subject		Approved at plenary#		Comments

11 **Work item rapporteurs**
t.b.d. (name of physical person)

12 **Work item leadership**
TSG-RAN WG4

Supporting Companies

Agilent
Marconi Wireless
Mitsubishi Electric Telecom
Ntl
Orange
Tekmar Sistemi
Telecom Italia
Telefonica
Telia Mobile

14 **Classification of the WI**

	Building Block (go to 14b)
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14b The WI is a Building Block: parent Feature is Radio Interface Improvement Feature

11 SRNS Relocation Procedure Enhancement

Last distributed as: RAN_Study_Items_after_RAN_13 (originally in RP-010490)

Study Item Description

Title

SRNS Relocation Procedure Enhancement

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

None

3 Justification

SRNS relocation is used to move the control of a UE connection from a source (old serving) RNC to a target (new serving) RNC. This means that both control and user plane are moved to the target (new serving) RNC.

The current SRNS relocation procedure requires that the Drift RNC maintains all the radio links prior to it becoming the target RNC. In addition it does not support the relocation of a UE to a Drift RNC when another Drift RNC is involved or when previous SRNC is involved. The Iu-r, while the relocation is taking place, is not allowed to establish connections from the new SRNC to the previously existing DRNCs or to the previous SRNC.

Both of these relocation scenarios are included in TR 25.832 Manifestations for Handover and SRNS Relocation (section 5.2.2), but are marked as unsupported by R99 procedures.

4 Objective

The purpose of this Study Item is to identify which enhancements could be made to the SRNS relocation procedure to remove some of the limitations applicable in release 99 and R4.

5 Service Aspects

None/Text

6 MMI-Aspects

None/Text

7 Charging Aspects

None/Text

8 Security Aspects

None/Text

9 Impacts

The Core Network part of Iu signalling (RANAP) is not affected by the changes implied in this Working Item.

Affects:	USIM	ME	AN	CN	Others
Yes			X		
No	X	X			X

Don't know				X	
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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
TR		R3			RAN#14	
Affected existing specifications						
Spec No.	CR	Subject		Approved at plenary#		Comments

11 Work item rapporteurs

Olivier Guyot, Nokia.

12 Work item leadership

TSG-RAN WG3

13 Supporting Companies

Hutchison3g, Mannesmann Mobilfunk, Nokia, Omnitel-Vodafone, Sonera,

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

12 Introduction of direct transport bearers between SRNC and Node-B

Last distributed as: RAN_Study_Items_after_RAN_13 (originally in RP-010492)

Study Item Description

Title

Introduction of direct transport bearers between SRNC and Node-B; removing the artificial limitation present in the Rel99/Rel4 specifications.

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

SRNS relocation enhancement

3 Justification

Increased efficiency of the UTRAN and the quality of service to the end user.

4 Objective

In Rel99/Rel4, all Iub/Iur transport bearers used for the transport of Dedicated Transport Channels need to be terminated at the DRNC. However when accepting certain limitations, there is no reason why these transport bearers should not go directly from SRNC to Node-B.

Going directly from SRNC to Node-B has some obvious benefits like decreasing the processing required by the DRNC and decreasing the delay of UTRAN internal transport.

This objective with this study is to identify consequences resulting from removal of the artificial limitation which currently requires transport bearers to be terminated at the DRNC.

5 Service Aspects

None

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

None

9 Impacts

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

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

New specifications						
Spec No.	Title	Prime rsp. WG	2 nd ary rsp. WG(s)	Presented for endorsement at plenary#	Approved at plenary#	Comments
		WG3			RAN #14	
Affected existing specifications						
Spec No.	CR	Subject		Approved at plenary#	Comments	

11 Work item rapporteurs

Risto Sepponen (Ericsson)

12 Work item leadership

TSG-RAN WG3

13 Supporting Companies

CATT, Ericsson, Hutchison, Siemens

14 Classification of the WI (if known)

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

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

RRM optimizations for Iur and Iub

13 Feasibility Study considering the viable deployment of UTRA in additional and diverse spectrum arrangements

Last distributed as: RP-010718

Study Item Description

Title

Feasibility Study considering the viable deployment of UTRA in additional and diverse spectrum arrangements

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

None

3 Justification

The present 3GPP specifications cover the IMT-2000 2 GHz band (Band I and II), in accordance with ITU-R Radio Regulations Article S5 Footnote S5.388, in R99 and Rel4 and the work is continuing with the UMTS1900 Band II improvements and UMTS 1800 Band III.

ITU-R WRC-2000 identified additional extension bands for IMT-2000 that requires further studies for the subsequent future deployment of UTRA in the whole or parts of the bands as indicated below:

- 806 – 960 MHz (The whole band 806 – 960 MHz is not identified on a global basis for IMT-2000 due to variation in the primary Mobile Service allocation across the three ITU Regions)
- 1710 – 1885 MHz, where the work is progressing under UMTS1800 WI.
- 2500 – 2690 MHz (In ITU Region 1 the bands 2500 – 2520 MHz and 2670 – 2690 MHz is also allocated on a co-primary basis to the Mobile Satellite Service subject to market demand)

4 Objective

The viable deployment of UTRA in additional and diverse spectrum arrangements should be assessed, including

- Duplex spacing arrangements other than for Bands I, II and III.
- Arbitrary selectable or variable duplex spacing methods
- Use of asymmetric spectrum arrangements considering the need for additional downlink traffic capacity
- Terminal capabilities and signalling
- Possible interface impacts

The work will result in a technical report.

5 Service Aspects

None

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

None

9 Impacts

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

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

New specifications						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
TBD	Feasability study: UTRA operating in new frequency bands	RAN4	RAN2 RAN3	RAN #16	RAN #17	
Affected existing specifications						
Spec No.	CR	Subject		Approved at plenary#	Comments	

11 Work item raporteurs

Peter Ståhlhjäll, Ericsson

12 Work item leadership

TSG-RAN WG4

13 Supporting Companies

Ericsson, Nokia, Telia, Sonera

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)