# TSG-RAN Meeting #15 Jeju-do, Korea, 5 - 8 March 2002

RP-020012

Source: TSG-RAN

Title: Study Item sheets - history

This document contains Study Item sheets in TSG-RAN for all approved Study Items that have been finished. The WI sheets of the approved and finished WIs are provided in a separate document, RAN\_Work\_Items\_History. The SI sheets for current SIs can be found in RAN\_Study\_Items.

The finished Study Items at the end of TSG-RAN #14 are:

- 2. High speed downlink packet access
- 3. USTS
- 5. Feasibility Study of UE antenna efficiency test methods performance requirements
- 7. Improvement of Radio Resource Management across RNS and RNS/BSS
- 9. Re-introduction of the downlink SIR measurement

# 1 Radio link performance enhancements

# 2. High speed downlink packet access

Last distributed as: RAN\_Study\_Items\_after\_RAN\_9 (originally RP-000032)

# **Study Item Description**

### **Title**

High Speed Downlink Packet Access

### 1 3GPP Work Area

X	Radio Access
	Core Network
	Services

#### 2 Linked work items

None

### 3 Justification

This work item proposes to study enhancements that can be applied to UTRA in order to provide very high speed downlink packet access. It's aim is to identify a long term evolution path for the UTRA air interface.

### 4 Objective

It is proposed that the study should include, but not be restricted to, the following topics:

- Adaptive modulation and coding schemes
- Hybrid ARQ protocols
- Position of the scheduling function within UTRAN
- Other advanced techniques

[note: Technical details of one proposal can be found in TDoc 126]

### 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					

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

				New spe	ecifi	ications		
Spec No.	Title		Prime rsp. WG	rsp. WG(s)	info	sented for rmation at nary#	Approved at plenary#	Comments
TR	Evaluation of High Speed Downlink Packet Data Service		R2	R1, R3, R4	RA	N #10	RAN #11	New technical report
	1		Affe	cted existi	ing	specification	ns	
Spec No.	CR Subject				_	Approved at		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.

Work item raporteurs

Amitava Ghosh, Motorola

Work item leadership

TSG-RAN WG2

**Supporting Companies** 

### TSG-RAN

# 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)

# 3 USTS

Last distributed as: RP-010914 (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					

# **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
25.854	USTS		WG1		R/	N #12	RAN #14	
25.839	USTS		WG3		R/	N #12	RAN #14	
			Affe	cted exist	ing	specificatio	ns	
Spec No. 25.211	CR	Subject Physical chan transport char channels (FDI	nels on			Approved at p	olenary#   #14	Comments
25.213		,	and modulation			RAN	#14	
25.214		FDD : Phys procedures	ical lay	er		RAN	#14	
25.331		Radio Reso (RRC) Proto			on		#14	
25.413		ÙTRAN lu Inte Signalling	erface R	ANAP		RAN	#14	
25.423		UTRAN lur Int Signalling	erface F	RNSAP		RAN	#14	
25.433		UTRAN lub Signalling	Interfa	ice NBA	P	RAN	#14	

# Work item raporteurs

Duk Kyung Kim (kdk@sktelecom.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

(one Work Item identified as a building block)

# 4 Void (originally Feasibility Study for Improved Common DL Channel for Cell-FACH State)

Last distributed as: RAN\_Study\_Items\_after\_RAN\_13 (originally RP-000190)

This Study Item was deleted from the approved Study Items at TSG-RAN #14

# 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)

# **Study Item Description**

### **Title**

Feasibility study of UE antenna efficiency test methods performance requirements

### 1 3GPP Work Area

X	Radio Access
	Core Network
	Services

### 2 Linked work items

This is parented to the RAN improvement feature.

### 3 Justification

Antenna performance of the UE is very critical to the operation of the network. RAN WG4 had agreed that this should be performed in future releases of its specifications.

### 4 Objective

To perform a feasibility study on antenna test methods to be used for evaluating the efficiency of UE antenna. The feasibility study will also consider different requirements on different UE types.

5 Proposed	l building	blocks	s and	work	task	S:
------------	------------	--------	-------	------	------	----

6 Service Aspects

None

7 MMI-Aspects

None

8 Charging Aspects

None

9 Security Aspects

None

# 10 Impacts

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

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

Lype	cica Gaipai	and in	ne scare	to be up	uaicu ai c	acii piciiai y
			New specif	fications		
Title		Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at RAN#	Approved at RAN	Comments
TR on UE methods	antenna test				RAN #12	
		Affecte	d existing			
. CR	Subject			Approved	l at RAN#12	Comments
	Title TR on UE	Title TR on UE antenna test methods	Title Prime rsp. WG  TR on UE antenna test methods  Affecte	Title Prime rsp. WG rsp. WG(s)  TR on UE antenna test methods  Affected existing	Title Prime rsp. WG Presented for information at RAN#  TR on UE antenna test methods  Affected existing specifications  New specifications  Prime rsp. WG(s) Presented for information at RAN#  Affected existing specification	Title Prime rsp. WG Presented for information at RAN  TR on UE antenna test methods RAN#  Affected existing specifications

12 Work item rapporteur

Olle Edvardsson, Allgon

Work item leadership

TSG-RAN WG4

14 Supporting Companies

TSG-RAN

# 15 Classification of the WI (if known)

	Feature (go to 15a)
	Building Block (go to 15b)
Χ	Work Task (go to 15c)

15c The WI is a Work Task: parent Feature: Radio interface improvement feature

# 6 Fast Cell Selection (FCS) for HS-DSCH

# 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

#### 13GPP 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 <u>Multiradio support</u>. 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	Presented for information at plenary#	Approved at plenary#	Comments		
25.881	Impro RRM	Item iption for vement of across RNS NS/BSS	RAN3	RAN2		RAN #14			
	1		Affect	ed existing	specificatio	ns	l		
Spec No. CR Subject				1.		Comments			

# 11 Study item raporteurs

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

# 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					

# 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				
			Affe	cted exist	ing specificati	ions				
Spec No. 25.133 25.123 25.215 25.225 25.331 25.302		Subject			Approved a	t plenary#	Comments			

# Work item raporteurs

Torgny Palenius, Ericsson

# 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) This SI has not finished yet. See RAN_Study_Items.

# 11 SRNS Relocation Procedure Enhancement

12 This		of direct yet. See RA		between	SRNC an	d Node-B

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

14	Improvement of inter-frequency and inter-system measurements for
	1.28 Mcps TDD