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.

See RP-010002 (draft minutes of TSG-RAN #10 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-010002) 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 #10 (other than because of comments at TSG-RAN #10) and need to be endorsed.

The approved Study Items at the end of TSG-RAN #10 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

1 Radio link performance enhancements

Distributed as: RP-000181rev4

Work 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 completition 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 completition and to include possible agreed improvements to the coming UTRA releases.

4 Objective

- The purpose of this study item is to 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

Distributed as: RAN_Study_Items_after_RAN_9 (originally RP-000032)

Work 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					

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 High Speed Downlink Packet Data Service	R2	R1, R3, R4	RAN #10	RAN #11	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

Amitava Ghosh, Motorola

12 Work item leadership

TSG-RAN WG2

13 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

Distributed as: RAN_Study_Items_after_RAN_9 (originally RP-000291)

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 raporteurs

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

Distributed as: RAN_Study_Items_after_RAN_9 (originally RP-000190)

Work 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

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#11. Any resulting new work items will be presented and discussed at RAN#10.

11 Work item raporteurs

Joe Kwak, GBT, will be the raporteur 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

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

Work 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 building blocks and work tasks:

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		X			
No	X		X	X	
Don't know					

11 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 RAN#	Approved at RAN	Comments
	TR on UE antenna test methods				RAN #12	

Affected existing specifications				
Spec No.	CR	Subject	Approved at RAN#12	Comments

12 Work item rapporteur

Olle Edvardsson, Allgon

13 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)
X	Work Task (go to 15c)

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