

Agenda Item: 8

Source: Ericsson

Document for: Decision

Work Item Description

Title

RRM optimizations

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

(list of linked WIs)

3 Justification

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

4 Objective

This work item focuses on optimising the existing procedures (mainly on Iur and Iub) and functions related to:

1) Congestion handling of DCH

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

2) Procedure parallelism on Iub/Iur

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

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

3) DPC Rate Reduction in soft handover

Currently R1 describes two DPC_modes in 25.214, however mode change signalling is not supported by R3.

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

4) Introduction of common measurements over Iur for neighbouring cell load measurements

It is proposed to study the usefulness of / possibilities for introducing common measurements on Iur regarding cell

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<i>Approved</i> ERA/T/BF Mikael Gudmundson	<i>Date</i> 1999-03-01	<i>Rev</i> PA1	SELECT & CUT FOOTER BEFORE SUBMITTING DOC TO 3GPP!

load information in neighbouring cells.

If the study indicates clear benefits of providing such load information to a neighbouring CRNC, e.g. a common measurement procedure as currently supported on Iub could be introduced in RNSAP.

5) Extension of Radio Interface Parameters updating in the user plane

Currently the Iub/Iur DCH FP supports a fast update of the TPC Power Offset in the DL RL via user plane signalling.

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

Note that this workitem might need to be extended if RRM related functionality currently listed as open issue in R99, is excluded from R99.

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 resp. WG	2 nd ary resp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
Affected existing specifications						
Spec No.	CR	Subject		Approved at plenary#	Comments	
25.420		Iur general aspects and principles				
25.430		Iub general aspects and principles				
25.423		RNSAP				
25.433		NBAP				
25.427		Iub/Iur dedicated transport channel user plane				
25.425		Iur common transport channel user plane				
25.435		Iub common transport channel user plane				

11 Work item rapporteurs

Gert-Jan van Lieshout, Ericsson

12 Work item leadership

WG3

13 Supporting Companies

Ericsson, Nokia, Nortel, Motorola, Siemens.

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)