Source: Ericsson
Title: Work Item Description for GERAN user/control plane
Document for: Decision

Work Item Description

Title

Work Item Description for GERAN user/control plane

1   3GPP Work Area

X	Radio Access
	Core Network
	Services

2   Linked work items

- GERAN overall description
- GERAN header adaptation
- GERAN radio access bearer design
- GERAN RR
- Iu rg
- Voice over GERAN PS and CS concept
- Narrowband speech realization
- GERAN security
- MS Conformance test for GERAN interface evolution
- BTS Conformance test for GERAN interface evolution

3   Justification

The GERAN work item will provide a platform to provide the four UMTS bearer classes: conversational, streaming, interactive and background. This includes IP end to end voice and multimedia services and provides the possibility to connect the 200kHz radio access to a 3G core network.

4   Objective

The GERAN work item will provide:

- IP Multimedia (real-time end-to-end IP)
- Alignment with UMTS/UTRAN architecture, bearer services and QoS handling
- Spectrum efficiency and performance improvements (multiplexing scenario 1-2 as described in the system concept document)
- Specification flexibility for future enhancements

5   Proposed building blocks and work tasks:

Building Block	Work Task
GERAN user / control plane	PDCP protocol design • Adoption of the UTRAN PDCP • Inclusion of header adaptation
	• RLC / MAC Specification
	Physical layer • Use of stealing bits • Fast Access • Logical and physical channel realization (TCH, PDTCH, control channels) • Fast power control • Receiver performance

6   Service Aspects
Services provided to UTRAN will be provided by GERAN.

7   MMI-Aspects
None

8   Charging Aspects
None

9   Security Aspects
The same or at least similar security will be provided as for UTRAN.

10   Impacts

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

11   Expected Output and Time scale (to be updated at each plenary)
The time plan for this work item is documented in 50.099 (GERAN project plan)

12   Work item raporteurs

Ericsson – Frank Mueller

13   Work item leadership

TSG GERAN

14   Supporting Companies
Alcatel, AT&T, Ericsson, Lucent, Nokia, Motorola, Nortel, Siemens

15   Classification of the WI (if known)

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

15a   The WI is a Feature: List of building blocks under this feature

15b   The WI is a Building Block: parent Feature

GERAN radio interface evolution

15c   The WI is a Work Task: parent Building Block

(one Work Item identified as a building block)