

Source: Ericsson
Title: Work Item Description for GERAN improvements 1
Document for: Decision

Work Item Description

Title

Work Item Descriptions for GERAN improvements 1

1 3GPP Work Area

X	Radio Access
X	Core Network
	Services

2 Linked work items

Independent feature.

3 Justification

The current evolution in data communication services has lead to increased support for IP-based end-user services. The fixed infrastructure is in place to support the services via IP-based terrestrial networks. IP architecture and protocols has the ambition to support IP multimedia domain users.

In UMTS the 3G Core Network will be based on different transport networks. One of the alternatives is IP based and also the Iu interface between 3G Core Network and Radio Access Networks is IP based.

By accepting this new Work Item the Gb-interface can be configured to include IP based sub-network in addition to existing Frame Relay sub-network. The IP sub-network will be the common sub-network between 2 / 3 G Core Networks and GSM/EDGE Radio Access Network (GERAN).

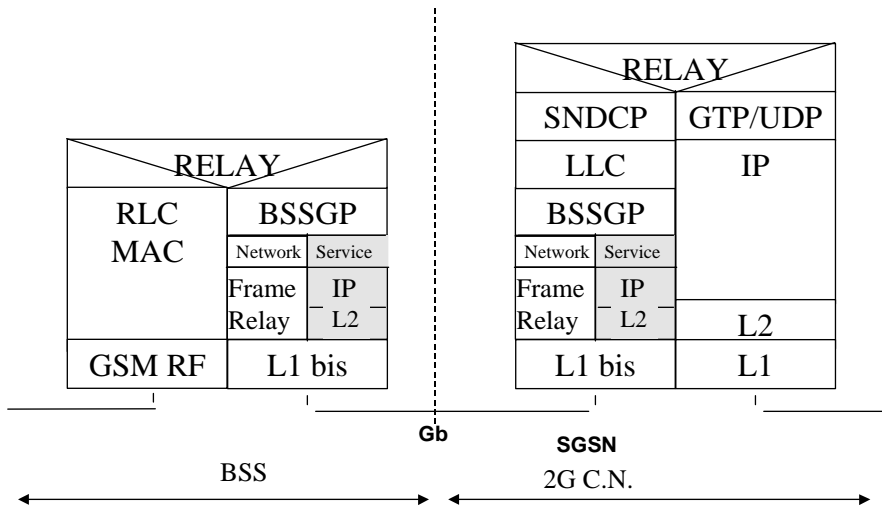
4 Objective

The present architecture in 08.16 which provides the Network Service is based on sub-layered structure. The upper sub-layer provides a globally harmonised service to network service users.

The lower sub-layer includes specific sub-layer protocols as Frame Relay in existing specifications of 08.16.

This Work Item proposes to introduce the Internet Protocol as an alternative sub-layer to Frame Relay. The user of the Network Service will experience one common Network Service independent of the utilised sub-network, see figure below.

Gb interface - IP position



5 Proposed building blocks and work tasks:

Building block	Work tasks
Gb over IP	Changes to 08.16, 08.18

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	X	
No	X	X			
Don't know					

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

New specifications						
Spec No.	Title	Prime rsp. STC	2ndary rsp. STC(s)	Presented for information at SMG#	Approved at SMG#	Comments
Affected existing specifications						
Spec No.	CR	Subject		Approved at SMG#	Comments	
08.18		Possibly minor changes			Part of Release 00	
08.16		Addition of Internet Protocol (IP) as Sub-Network Service Protocol.			Part of Release 00	
08.14		Addition of new references			Part of Release 00	

12 Work item raporteurs

Nortel – Marvin Bienn

13 Work item leadership

TSG GERAN

14 Supporting Companies

Ericsson, AT&T, Nortel Networks, Lucent, Nokia and Motorola.

15 Classification of the WI (if known)

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

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

- Gb over IP

15b The WI is a Building Block: parent Feature

(one Work Item identified as a feature)

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

(one Work Item identified as a building block)