3GPP, TSG RAN
Meeting #6, Nice, France, 13-15 December 1999

TSGRP#6(99)836

Source: **Alcatel**

To: **3GPP RAN, 3GPP SA**

Title: **Proposal for Release 2000 Work Task on IP in UTRAN**

Document for: **Approval**

Agenda Item:

The following Work Task description is proposed to TSG-SA for approval.

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Work Task Description

Title

IP-transport in UTRAN

Intended Output

Modification of the specifications concerning the transport on all internal interfaces within the UTRAN and interfaces to the core network.

TS	25.412	UTRAN Iu interface signalling transport
TS	25.414	UTRAN Iu interface data transport & transport signalling
TS	25.415	UTRAN Iu interface user plane protocols
TS	25.422	UTRAN Iur interface signalling transport
TS	25.424	UTRAN Iur interface data transport & transport signalling for CCH data streams
TS	25.425	UTRAN Iur interface user plane protocols for CCH data streams
TS	25.432	UTRAN Iub interface signalling transport
TS	25.434	UTRAN Iub interface data transport & transport signalling for CCH data streams
TS	25.435	UTRAN Iub interface user plane protocols for CCH data streams
TS	25.442	UTRAN Implementation Specific O&M Transport

Impact on Other Technical Specifications and Technical Reports

The other expect impact on technical specifications will be for:

TS	25.401	UTRAN Overall Description
TS	25.402	Synchronisation in UTRAN Stage 2

Technical Scope

Release 2000 workplan is including, as an option, an all-IP architecture aimed at allowing operators to deploy IP technology to deliver 3rd generation services. This described in the Technical Report TR 23.922 v1.0.0 (1999-10).

The purpose of this new work task is to enable the usage of IP technology for the transport of signalling and user data over Iu, Iur and Iub in the UTRAN.

The foreseen benefits of the introduction of IP inside the UTRA are:

- A substantial reduction of the cost of the transmission network.
- An easier easier management of the transmission network
  IP technology will simplify the process of RNS extension (e.g. introducing additional Node Bs and RNCs) by removing the complex O&M operations required for handling new VPs/VCs, as currently imposed by ATM technology. Using IP technology, network elements are able to ask the

IP network to reserve the necessary resources, without any action from the operator, besides the normal traffic engineering of the network.

- IP technology will simplify the establishment of VCs on Iur. Therefore, the Iur needs not be an option, because the use of the resources will be temporary without any need for prior reservation.
- A faster set up of calls and of new radio links in case of soft handover and hard handover since Q.AAL2 signalling is not necessary anymore.
- A consistent approach allowing for end-to-end IP solutions.

The first step of the work will consist in providing the necessary changes to the generic specifications (TS 25.401, TS 25.402). Then, the CRs to the other specs introducing the possibility to use IP as a transport mechanism will be generated.
The QOS aspects should be studied closely with IETF.

Impact on Other 3GPP features

none

Schedule of Tasks to be Performed.

Task	Planned Start	Planned Finish
Work task Creation	10/12/99	
Work Task approval	15/12/99	
Drafting and discussion	03/99	09/99
Submission to TSG RAN for approval	25/09/99	

Note: * These dates are a guess at present

Supporting Individual Members

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Rapporteur

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