3GPP, TSG RAN WG1#11
San Diego, CA,
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TSGR1(00)0350

Agenda Item:

Source:	**GBT**
To:	**WG1**
Title:	**Proposal for Release 2000 Work Task on DL CPCH**
Document for:	**Approval**

Work Task Description

Title **Downlink Common Packet Channel**

Intended Output

Modification of the specifications to include the downlink CPCH. The intent is to either optimise FACH in the CPCH/FACH sub-state or introduce CPCH/DSCH or introduce a new DL-CPCH The objective is to optimise the common channel mechanism for various IP traffic including VoIP and other IP applications.

TS	25.211	Physical channels and mapping of transport channels onto physical channels (FDD)
TS	25.213	Spreading and modulation (FDD)
TS	25.214	Physical layer procedures (FDD)
TS	25.302	Services provided by the Physical Layer
TS	25.303	Interlayer Procedures in Connected Mode
TS	25.321	MAC protocol specification
TS	25.331	RRC Protocol Specification
TS	25.435	UTRAN Iub interface user plane protocols for CCH data streams
TS	25.425	UTRAN Iur interface user plane protocols for CCH data streams
TS	25.433	UTRAN Iub Interface NBAP Signalling
TS	25.423	UTRAN Iur Interface RNSAP Signalling

Impact on Other Technical Specifications and Technical Reports

The other expected impact on technical specifications will be for:

TS		
TS		

Technical Scope

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 over Common Channels.

Currently the downlink packet transmission over the common transport can be sent over the FACH or DSCH. Use of FACH for higher rates might have some drawbacks due to non-existence of closed loop power control on FACH. While CPCH/FACH sub-state is a strong solution for wireless IP, the above-mentioned limitation needs to be addressed. An optmization work in the downlink direction is needed. While UL-PCPCH is the optimum uplink packet data transfer, we believe that some optimization work in the downlink direction is needed. It might be possible to introduce closed loop power control on FACH via CPCH and some scheduling on FACH.

DSCH is an efficient downlink packlet mechanism which is coupled with DCH. There is a need to either introduce CPCH/DSCH sub-state or a new downlink common packet mechanism coupled with UL-CPCH that retains the advantages of DSCH and yet operates with UL-CPCH.

Impact on Other 3GPP features

none

Schedule of Tasks to be Performed.

Task	Planned Start	Planned Finish
Work Task Creation	03/02/2000	
Work Task Approval	03/03/2000	
Drafting and discussion	06/2000	12/2000
Submission to TSG RAN for approval	03/13/2000	12/13/2000

Supporting Individual Members

OKI, LGIC, BellSouth, GBT, SAMSUNG

Rapporteur

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