

Agenda Item: AH24: High Speed Downlink Packet Transmission
Source: SONY Corporation
Title: Text proposal for associated downlink signaling on TR25.848
Document for: Approval

1. Introduction

It is shown that using TPC commands together with explicit C/I report to estimate channel condition and by allowing UTRAN to control the feedback rate depending on the handover state of DPCH, reporting rate for explicit downlink channel quality can be reduced without impacting the system capacity. This contribution is to reflect the contents presented in R1-01-0338 to the TR25.848.

2. Text proposal

6.6.2. Associated Downlink signaling

Associated downlink physical signalling may include, but may not be restricted to:

- identifying the UE(s) to which HSDPA data is transmitted in a given HSDPA TTI.
- identifying which HSDPA codes are assigned to a UE in a given HSDPA TTI (if sharing in the code domain, i.e. code multiplexing is to be supported for HSDPA transmission)
- identifying modulation and coding scheme used for HSDPA transmission in a given HSDPA TTI.
- identifying relative CPICH to DSCH power ratio for a HSDPA transmission in a given HSDPA TTI (specifically for QAM modulation).
- identifying or setting current states of fast Hybrid ARQ
- Signaling related to fast cell selection
- [Setting or adjusting the feedback rate for C/I measurement report](#)

Two alternatives have been proposed for the downlink physical signalling associated with HSDPA transmission:

- The entire set of associated downlink signaling is carried on associated downlink dedicated physical channels
- Part of the associated downlink signaling is carried on an associated downlink shared signaling/control channel.

The selection between these alternatives should be based on an evaluation differences in terms of

- Complexity
- Capacity (interference-limited capacity as well as code-limited capacity)