

**Agenda Item:** 14.1  
**Source:** Alcatel  
**Title:** Proposal for a new DCH downlink control frame for DSCH signalling  
**Document for:** Decision

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## 1 Introduction

This document proposes a new downlink DCH control frame, in order to handle the signalling for the DSCH.

## 2 Discussion

According to the data transmission for the DSCH described in TS 25.303 (RAN WG2), the MAC-d shall send a unique TFI indicating the transport format of the DSCH, to all Node B involved in the UE active set. This TFI field needs to be sent in a DCH downlink control frame. It is not proposed to include it into a DCH data frame, because the TFI would not be directly related to the data sent in the data frame, and also because the MAC-d may not always need to send a DCH data frame, if no other traffic channel is active at the same time.

It is also assumed that each Node B of the UE active set has been indicated through a Radio Link Setup or Radio Link Reconfiguration procedure, the mapping rules of DSCH TFI bits onto TFCI bits, and the DSCH TTI. This information has been identified in the latest description of NBAP procedures in TS 25.433, and relevant parameters are proposed in another contribution (Tdoc R3 966/99), for inclusion in NBAP specifications.

## 3 Change proposal in TS 25.427

Changes are proposed in section 7.2.2 of TS 25.427, in order to propose a new downlink control frame.

DL signalling for DSCH: This downlink control frame is used to indicate the TFI used on the DSCH to each Node B involved in the UE active set. The Node B takes into account those TFI bits during the DSCH TTI period.

Table below shows the structure of the payload when the control frame is used for signalling TFI bits used on the DSCH. This control information is sent in DL only

<u>NAME</u>	<u>DL signalling for DSCH</u>
<u>Parameters</u>	<u>CFN : indicates the first frame number when the TFI needs to be taken into account for TFCI building in Node B</u>
	<u>TFI : indicates the TFI of the DSCH</u>

## 4 Conclusion

It is proposed to include changes proposed in section 3 of this document into TS 25.427.

## 5 References

- [1] TS 25.427 version 0.3.1, July 1999