

**Agenda Item:** 14.2

**Source:** Ericsson

**Title:** Commonalities between dedicated and common User Plane Protocols

**Document for:** Decision

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## 1. INTRODUCTION

During TSG-RAN WG3 #6, large progress was made on specifying the frame handling for the user plane protocol for DCH Data Streams.

In this contribution, it is proposed to re-use several parts of the latest DCH FP description in ref [2] in the common channel FP described in ref [1]. This because the same functionality is required and similar handling will facilitate a consistent implementation.

In the proposed text in this contribution, change bars indicate the changes proposed to the DCH FP for the common channel FP.

## 2. UNKNOWN TFI COMBINATIONS FOR SECONDARY-CCPCH

During R3#6 a handling of unknown TFI combination in the node-B was agreed for the DCH FP. A similar handling is proposed for the secondary-CCPCH:

*At each frame, the Node B shall build the TFCI value of each ~~secondary-CCPCH CCTrCH~~, according to the TFI<sub>s</sub> of the ~~transport channels DCH data frames~~ multiplexed on this ~~CCTrCHsecondary-CCPCH~~ and scheduled for that frame. In case the Node receives an unknown ~~TFI combination of DCH data frames~~, it shall ~~only transmit the pilot bits of the secondary-CCPCH~~~~only the DPCCCH~~ ~~without TFCI bits or Data bits~~.*

## 3. SILENCE MODE FOR SECONDARY-CCPCH

During R3#6 it was agreed to have the silence mode active always in both UL and DL. The same behaviour is proposed for the DL Secondary-CCPCH:

*If the Node B does not receive a valid FP frame in a TTI, it assumes that there is no data to be transmitted in that TTI for this transport channel.*

*If the node B is aware of a TFI value corresponding to zero bits for this transport channel, this TFI is assumed. When combining the TFI's of the different transport channels, a valid TFCI might result and in this case data shall be transmitted on the Uu.*

*If the node B is not aware of a TFI value corresponding to zero bits for this transport channel or if combining the TFI corresponding to zero bits with other TFI's results in an unknown TFI combination, the handling as described in the following paragraph shall be applied. (as included in chapter 2 of this contribution)*

## 4. SILENCE MODE FOR PICH

During R3#6 it was agreed to have the silence mode active always in both UL and DL. A similar behaviour is proposed for the DL PICH:

*If the Node B does not receive a valid FP frame in a TTI or a frame without paging indication information, it assumes that no UE's have to be paged on the Uu in this TTI, there is no data to be transmitted in that TTI for this transport channel. In this case the default PICH bit pattern of all zeros shall be transmitted.*

## 5. PROPOSAL

It is proposed to update [1] with the italic text provided in chapters 2,3, and 4. The indicated paragraphs should be inserted in the procedure chapters.

## 6. REFERENCES

- [1] TS 25.435 V0.4.1. 3GPP TSG RAN: "UTRAN Iub user plane protocols for common transport channel data streams"
- [2] TS 25.427 V0.4.1. 3GPP TSG RAN: "UTRAN Iub/Iur Interface User Plane Protocol for DCH Data Streams."