

**Agenda Item:** 16.2  
**Source:** Alcatel  
**Title:** Proposal for additional parameters in RNSAP Radio Link Setup Request and Radio Link Reconfiguration messages in TS 25.423  
**Document for:** Decision

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## 1 Introduction

This document proposes to add some parameters in the RNSAP Radio Link Setup Request and Radio Link Reconfiguration messages in order to help the DRNC to perform admission control. Changes are proposed to TS 25.423.

## 2 Discussion

The RNSAP Radio Link Setup Request message is used by a SRNC to set up a new radio link in a remote DRNC. When receiving such message, the DRNC shall decide whether to accept or not the new Radio Link, using some admission control procedure. The current message structure contains parameters related to the TFCS, indicating the maximum bit rate that has to be supported, but do not provide any indication on the mean bit rate (or guaranteed bit rate) to be supported. Such parameters are useful to perform admission control on averaged load, and are used when a RAB is directly set up in a RNC. Without any indication on these parameters, the DRNC can only perform admission control based on the maximum bit rate, which may be very pessimistic in some cases. It is therefore proposed to add a new parameter indicating the mean bit rate in both directions.

The determination of this parameter is left to the SRNC, and may be done based on the RAB parameters that have been provided by the CN. In case several RAB have been set up, the SRNC shall of course take all RAB multiplexed onto the Radio Link in the evaluation of the mean bit rate.

Also a RRC function has been specified in RAN2, in order to control the allocation of resources on uplink for DCH. This function is called DRAC, and is specified in TS 25.333. The DRNC needs to know whether the DCH that are set up are controlled by DRAC or not. A parameter is proposed to be added in the RL Setup and RL Reconfiguration messages for that purpose.

## 3 Change proposal in TS 25.423

Changes are proposed in section 9.1.2, 9.1.10 and 9.1.15 of TS 25.433.

### 9.1.2 RADIO LINK SETUP REQUEST

Information element	Reference	Type
Message type		M
Transaction ID		M
S-RNTI		M
<b>DCH information</b>		M
DCH ID		M
DCH Combination Indicator		O
DCH Priority		M
Transport format set (DL)		M

Transport format set (UL)		M
<u>Dynamic Control</u>		<u>O</u>
<u>Mean Bit Rate (UL)</u>		<u>M</u>
<u>Mean Bit Rate (DL)</u>		<u>M</u>
TFCS (UL)		M
TFCS (DL)		M
Uplink scrambling code		M
<b>UL Channelisation Codes</b>		<b>M</b>
Channelisation code length (UL)		M
<b>DL Channelisation Codes</b>		<b>M</b>
Channelisation code length (DL)		M
<b>RL information</b>		<b>M</b>
RL-ID		M
UTRAN Cell Identifier (UC-Id)		M
OFF		M
Chip offset		M
Diversity control field		C2
Primary CCPCH Ec/Io		M
Uplink Eb/No Target		M
Maximum Uplink Eb/No		FFS
Minimum Uplink Eb/No		FFS
DL reference power		M
<b>DSCH Information</b>		<b>O</b>
RL ID		M
MACd-MACsh Transport Format Set		M

C2=present only if # of RL >1

#### 9.1.10 RADIO LINK RECONFIGURATION PREPARE

Information element	Reference	Type
Message type		M
Transaction ID		M
<b>DCHs to modify</b>		<b>O</b>
DCH ID		M
DCH Priority		O
Transport format set (DL)		O
Transport format set (UL)		O
<u>Dynamic Control</u>		<u>O</u>
<b>DCHs to add</b>		<b>O</b>
DCH ID		M
DCH Combination Indicator		O
DCH Priority		M
Transport format set (DL)		M

Transport format set (UL)		M
<u>Dynamic Control</u>		<u>O</u>
<b>DCHs to delete</b>		<b>O</b>
DCH ID		M
<u>Mean Bit Rate (UL)</u>		<u>M</u>
<u>Mean Bit Rate (DL)</u>		<u>M</u>
TFCS (DL)		M
TFCS (UL)		M
Uplink Scrambling code		O
<b>UL Channelisation Codes</b>		<b>O</b>
Channelisation code (UL)		M
<b>DL Channelisation Codes</b>		<b>O</b>
Channelisation code length (DL)		M
Uplink Maximum Eb/No		FFS
Uplink Minimum Eb/No		FFS
DL reference power		FFS
<b>DSCH Information</b>		<b>O</b>
RL ID		M
MACd-MACsh Transport Format Set		M

#### 9.1.15 RADIO LINK RECONFIGURATION

Information element	Reference	Type
Message type		M
Transaction ID		M
<b>DCHs to modify</b>		<b>O</b>
DCH ID		M
DCH Priority		O
Transport format set (DL)		O
Transport format set (UL)		O
<u>Dynamic Control</u>		<u>O</u>
<b>DCHs to add</b>		<b>O</b>
DCH ID		M
DCH Combination Indicator		O
DCH Priority		M
Transport format set (DL)		M
Transport format set (UL)		M
<u>Dynamic Control</u>		<u>O</u>
<b>DCHs to delete</b>		<b>O</b>
DCH ID		M
<u>Mean Bit Rate (UL)</u>		<u>M</u>
<u>Mean Bit Rate (DL)</u>		<u>M</u>
TFCS (DL)		O

TFCS (UL)		O
Uplink Maximum Eb/No		FFS
Uplink Minimum Eb/No		FFS
DL reference power		O
<b>DSCH Information</b>		<b>O</b>
RL ID		M
MACd-MACsh Transport Format Set		M

#### 4 Conclusion

It is proposed to include changes proposed in section 3 of this document into TS 25.423.

#### 5 References

- [1] TS 25.423 'RNSAP Specifications' version 1.x.x, September 1999