

Agenda Item: 10
Source: Nokia
Title: Message contents for the RNSAP RL Reconfiguration and DL Code Reconfiguration procedures
Document for: Approval

1 Introduction

This contribution proposes the message content for the RNSAP procedures Unsynchronised Radio Link Reconfiguration, Synchronised Radio Link Reconfiguration and DL Code Reconfiguration.

The proposal is based on the current description of the procedure in [S3.23], and on the message contents proposed by TTC, reported in [S3.23] and marked as FFS.

Other parameters to be inserted in the messages are FFS.

2 Message contents

Note: The notation used to identify the 'information element type' is reported in [1].

2.1 Radio Link Reconfiguration

This message is sent from the serving RNC to the drift RNC via the relevant SCCP connection in order to request the unsynchronised reconfiguration of the radio links parameters.

Information element	Reference	Type
Message type		M
Transaction ID		M
DCHs to modify		O
DCH ID		M
DCH Type		O
Transport format set (DL)		O
Transport format set (UL)		O
DCHs to add		O
DCH ID		M
DCH Type		M
Transport format set (DL)		M
Transport format set (UL)		M
DCHs to delete		O
DCH ID		M
TFCS (DL)		O
TFCS (UL)		O
Uplink Eb/No Setpoint		O
Uplink Eb/No Adjustment parameters		O
Uplink Maximum Eb/No		O
Uplink Minimum Eb/No		O
DL reference power		O

2.2 RL Reconfiguration Response

The message is sent from DRNC to SRNC, in unsynchronised RL reconfiguration procedure.

Information element	Reference	Type
Message type		M
Transaction ID		M
RLs to be reconfigured (unsynch)		O
RL ID		M
DCHs to be setup		M
DCH ID		M
Binding ID		M
AESA		O

2.3 Radio Link reconfiguration failure

This message is sent from the DRNC to the SRNC if the reconfiguration of at least one RL in the DRNS fails.

Information element	Reference	Type
Message type		M
Transaction ID		M
Cause1		M
RLs not reconfigured		O
RL ID		M
Cause2		M

2.4 Radio Link Reconfiguration request

The message is sent from SRNC to DRNC, in order to start a synchronised RL reconfiguration procedure.

Information element	Reference	Type
Message type		M
Transaction ID		M
DCHs to modify		O
DCH ID		M
DCH Type		O
Transport format set (DL)		O
Transport format set (UL)		O
DCHs to add		O
DCH ID		M
DCH Type		M
Transport format set (DL)		M
Transport format set (UL)		M
DCHs to delete		O
DCH ID		M
TFCS (DL)		M
TFCS (UL)		M
Uplink Scrambling code		O
UL Channelisation Codes		O
Channelisation code (UL)		M
DL Channelisation Codes		O
Channelisation code length (DL)		M
Uplink Eb/No Setpoint		M
Uplink Eb/No Adjustment parameters		M
Uplink Maximum Eb/No		M
Uplink Minimum Eb/No		M
DL reference power		M

2.5 RL Reconfiguration Ready

This message is sent from DRNC to SRNC in synchronised RL reconfiguration. Binding ID are specified only once for the combined RLs.

Information element	Reference	Type
Message type		M
Transaction ID		M
RLs to be reconfigured (synch)		O
RL ID		M
Channelisation Codes (DL)		O
Channelisation code (DL)		M
DCH to be setup		O
DCH ID		M
Binding ID		M
AESA		O

2.6 RL Reconfiguration Commit

This message is sent from the SRNC to the DRNC in order to complete the synchronised RL reconfiguration procedure.

Information element	Reference	Type
Message type		M
Transaction ID		M
CFN		M

2.7 RL Reconfiguration Cancel

This message is sent from the SRNC to the DRNC in order to abort the synchronised RL reconfiguration procedure.

Information element	Reference	Type
Message type		M
Transaction ID		M

2.8 DL Code Reconfiguration Request

This message is sent from the DRNC to SRNC, on dedicated SCCP connection, in order to request the reconfiguration of the DL codes in one RL.

Information element	Reference	Type
Message type		M
Transaction ID		M
RL ID		M
DL channelisation Codes		M
Channelisation code (DL)		M

2.9 DL Code Reconfiguration Command

The message is sent from SRNC to DRNC, on dedicated SCCP connection.

Information element	Reference	Type
Message type		M
Transaction ID		M
CFN		M

2.10 DL Code Reconfiguration Failure

The message is sent from SRNC to DRNC, in order to abort the DL Code Reconfiguration procedure.

Information element	Reference	Type
Message type		M
Transaction ID		M
Cause		M

3 Description of Information Elements

3.1 CFN

Connection Frame Number, included in the DCH FP frame. Node B maps the CFN with the cell FN via the Frame offset.

Other information elements are described in [1].

4 Proposals

- Sections 2.1 to 2.10 to replace sections 9.1.10...9.1.14 in [S3.23].
- The following sentence to be added in 8.1 and 8.2 of [S3.23]:
"The DRNC sends the RL RECONFIGURATION FAILURE if the requested reconfiguration fails in at least one of the RL."
- The contents of chapter 3 to be inserted in section 9.2 of [S3.23]. The 'reference' column in the message description need to be filled accordingly.

5 Reference

- [1] Tdoc R3-178: *Message contents for RNSAP procedures Radio Link setup / Addition / Deletion*, source Nokia
- [S3.23] 3GPP S3.23, *RNSAP Protocol*, v.0.0.2. Source Editor