Agenda Item: **15.1**   **Replaces TSGR3#6(99)927**

Source: **Ericsson**

Title: **Proposed NBAP Procedure for Cell Configuration Management: Cell Reconfiguration**

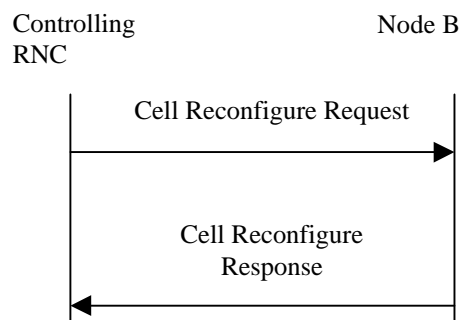**Document for:**   **Decision**

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1. INTRODUCTION

This contribution presents the NBAP procedure for reconfiguration of cell data in the Node B. The data that can be reconfigured is only data that does not affect ongoing traffic. When cell data that affects ongoing traffic is to be reconfigured, that is done with the Cell Delete and Cell Setup procedures.

The Cell Reconfiguration procedure informs Node B what cell data should be in Node B. Node B configure it's equipment to support the request and informs the RNC about the result.
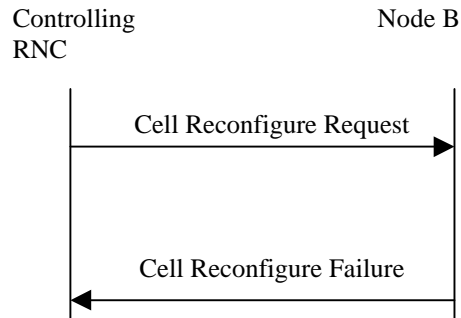
2. DESCRIPTION

2.1 Cell Reconfiguration

This NBAP common procedure is used by the Controlling RNC, to request Node B to change it's configuration for a cell. This procedure is initiated by CRNC. Node B tries to reconfigure the cell. If the reconfiguration is successful, Node B returns the message Cell Reconfigure Response. If any of the changes can not be done, Node B keeps the old configuration and returns the message Cell Reconfiguration Failure, indication what was unsuccessful.

Controlling RNC   Node B

Cell Reconfigure Request →

Cell Reconfigure Response ←

a) Successful case

```
     Controlling                    Node B
     RNC
                  |                     |
                  |  Cell Reconfigure Request  |
                  |------------------------->|
                  |                     |
                  |                     |
                  |  Cell Reconfigure Failure  |
                  |<-------------------------|
                  |                     |
```

b) Unsuccessful case

The CELL RECONFIGURE REQUEST message contains the following information:

- Cell Identity
- Primary SCH Power
- Secondary SCH Power
- CPICH Power
- Maximum Transmission Power

The CELL RECONFIGURE FAILURE message contains the following mandatory information:

- Cause

2.2   *Cell Reconfigure Request*

This message is sent to inform the Node B about what cell configuration, that the RNC want Node B to change.

Information Element	Reference	Type
Message Discriminator		M
Message Type		M
Transaction ID		M
Cell ID		M
Primary SCH Power		O
Secondary SCH Power		O
CPICH Power		O
Max Transmission Power		O

2.3   *Cell Reconfigure Response*

This message is sent to inform the RNC about a successful reconfiguration in Node B.

Information Element	Reference	Type

Message Discriminator		M
Message Type		M
Transaction ID		M

2.4 Cell Reconfigure Failure

This message is sent to inform the RNC that the attempt to reconfigure the cell has failed.

Information Element	Reference	Type
Message Discriminator		M
Message Type		M
Transaction ID		M
Cause		M

2.5 Primary SCH Power

Primary SCH power is the power that should be used for transmitting the primary SCH in a cell.

2.6 Secondary SCH Power

Secondary SCH power is the power that should be used for transmitting the secondary SCH in a cell.

2.7 CPICH Power

CPICH power is the power that should be used for transmitting the CPICH in a cell.

2.8 Max Transmission Power

Max Transmission Power is maximum power for all downlink channels added together, that is allowed to be used simultaneously in a cell.

3. PROPOSAL

Proposal 1

Add the contents of chapter 2.1 in this contribution in chapter 8.1.5.x Cell Reconfigure in 25.433 v1.2.0 NBAP Specification.

Proposal 2

Add the contents of chapter 2.2 in this contribution to chapter 9.1.x Cell Reconfigure Request in 25.433 v1.2.0 NBAP Specification.

Proposal 3

Add the contents of chapter 2.3 in this contribution to chapter 9.1.x+1 Cell Reconfigure Response in 25.433 v1.2.0 NBAP Specification.

Proposal 4

Add the contents of chapter 2.4 in this contribution to chapter 9.1.x+2 Cell Reconfigure Failure in 25.433 v1.2.0 NBAP Specification.

Proposal 5

Add the contents of chapter 2.5 in this contribution to chapter 9.2.x Primary SCH Power in 25.433 v1.2.0 NBAP Specification.

Proposal 6

Add the contents of chapter 2.6 in this contribution to chapter 9.2.x+1 Secondary SCH Power in 25.433 v1.2.0 NBAP Specification.

Proposal 7

Add the contents of chapter 2.7 in this contribution to chapter 9.2.x+2 CPICH Power in 25.433 v1.2.0 NBAP Specification.

Proposal 8

Add the contents of chapter 2.8 in this contribution to chapter 9.2.x+3 Max Transmission Power in 25.433 v1.1.1 NBAP Specification.

4.   REFERENCES

[1]   TS 25.433 V1.2.0 - NBAP Specification