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TSG-RAN Working Group 3 meeting #6 Sophia Antipolis, France, 23-27 August 1999

Agenda Item:16.3Source:Nortel NetworksTitle:NBAP procedures for NodeB Setup and AvailabilityDocument for:

1 Introduction

This contribution presents :

- The different NBAP procedures for NodeB management :
 - NodeB Setup
 - NodeB Availability Indication

1.1 Description

1.1.1 NodeB Setup

1.1.1.1 NodeB Setup procedure

This NBAP common procedure is used to configure the NodeB-related parameters in a Node B. This procedure is initiated by the RNC.

The RNC configures the NodeB-related parameters in Node B, which also uses this procedure as a mean to transfer the values of these, and other, parameters back to the RNC.

For this procedure to be executed successfully the following is needed :

- Node B equipment has previously been defined and configured
- A Node B control port is available for communication between the RNC and the Node B



a) Successful case

The NODEB SETUP message contains the following mandatory information:

- Transaction ID (assumed unique in the RNC)
- NodeB ID
- NodeB administrativeState

AdministrativeState parameter is compliant with TMN states defined in [R2] .

The NODEB SETUP RESPONSE message contains the following mandatory information:

• Transaction ID

The NODEB SETUP FAILURE message contains the following mandatory information:

- Transaction ID
- Failure Cause

1.1.1.2 NodeB Setup

This message is sent from the RNC to the Node B to request the creation and configuration of a Node B. The NodeB is supervised after the successful completion of this procedure.

Information Element	Reference	Туре
Message Type		М
Transaction ID		М
Node B ID		М
AdministrativeState		М

1.1.1.3 NodeB Setup Response

This message is sent to inform the RNC that the Node B is successfully created and configured.

Information Element	Reference	Туре
Message Type		М
Transaction ID		М

1.1.1.4 NodeB Setup Failure

This message is sent to inform the RNC that the attempt to create and configure the Node B has failed.

Information Element	Reference	Туре
Message Type		М
Transaction ID		М
Failure cause		М

1.1.2 Node B Availability

1.1.2.1 Node B State Change Procedure

This NBAP common procedure is used by the Node B to inform the RNC of its availability or not. This procedure is initiated by the Node B on each state change, using Node B Control Port.

For this procedure to be executed successfully the following is needed :

- A Node B control port is available for communication between the RNC and the Node B
- Node B equipment has previously been defined and configured



The NODEB STATE CHANGE INDICATION message contains the following mandatory information:

- Node B ID
- Node B operationalState
- Node B availabilityStatus

Node B operationalState and availabilityStatus parameters are compliant with TMN states defined in [R2] .

NODE B STATE CHANGE INDICATION RESPONSE message contains standard mandatory information.

1.1.2.2 Node B State Change Indication

This message is sent to inform the RNC about the Node B state change.

Information Element	Reference	Туре
Message Type		М
Transaction ID		М
Node B ID		М
OperationalState		М
AvailabilityStatus		Μ

1.1.2.3 Node B State Change Indication Response

This message is sent to inform the Node B that its new state has been taken into account by the RNC.

Information Element	Reference	Туре
Message Type		М

Transaction ID	М

2 Proposal

- Add sections 1.1.1.1 and 1.1.2.1 of this contribution to section 8.1 of [R1]
- Add sections 1.1.1.2, 1.1.1.3, 1.1.1.4, 1.1.2.2 and 1.1.2.3 of this contribution to add in section 9.1 of [R1]

3 Reference

- [R1] : TS 25.433 V.1.1.1
- [R2] : CCITT Rec. X.731: Information technology open systems interconnection system management: state management function