

**Agenda Item:** 15.3

**Source:** Nortel Networks

**Title:** Addition of NodeB and NodeB Control Port objects in Resource Status Indication message

**Document for:** Approval

---

## 1 Introduction

This contribution presents a way to explicitly exhibit the hierarchical relations between NodeB logical objects in the Resource Status Indication message and introduces two new objects in this message:

- NodeB
- NodeB Control Port

## 2 Rational

In the current definition of Iub interface, messages on the interface for logical resource setup always allow NodeB to link the new logical resource with its father object.

Example:

In the Common Transport Channel Setup Request message, the Cell Identifier is given to allow the Node B to link the new Common Transport Channel with an existing cell object.

We propose to exhibit these objects dependencies in the Resource Status Indication message.

Example:

We propose to add a Cell Id before each Common Transport channel state.

<b>BCH ID</b>		<b>O</b>
Cell ID		M
Resource Operational State		M
Resource Availability Status		O

The UMTS network operator needs to have a clear vision of all the NodeB logical resources availability to be able to identify hardware failure impacts or O&M action impacts on these logical resources, including the NodeB logical object itself. Moreover, in case of multiple NodeB Control Port (this point is still FFS in [R3] ), the RNC will have to know the availability of each NodeB control port for redundancy or load sharing management purpose and reporting to the OMC-R.

We propose to add these two objects in the Resource Status Indication message.

### 3 Resource Status Indication

This message is sent from the Node B to the CRNC to notify the CRNC of the status of the resources at Node B.

Information Element	Reference	Type
Message Discriminator		M
Message Type		M
Indication Type (FFS)		O
<b>Resource Impact</b>		<b>M</b>
<b>NodeB ID</b>		<b>O</b>
Resource Operational State		M
Resource Availability Status		O <sup>1</sup>
<b>NodeB Control Port ID</b>		<b>O</b>
Resource Operational State		M
Resource Availability Status		O
<b>Cell ID</b>		<b>O</b>
Resource Operational State		M
Resource Availability Status		O
<b>BCH ID</b>		<b>O</b>
Cell ID		M
Resource Operational State		M
Resource Availability Status		O
<b>PCH ID</b>		<b>O</b>
Cell ID		M
Resource Operational State		M
Resource Availability Status		O
<b>FACH ID</b>		<b>O</b>
Cell ID		M
Resource Operational State		M
Resource Availability Status		O
<b>RACH ID</b>		<b>O</b>
Cell ID		M
Resource Operational State		M
Resource Availability Status		O
<b>DSCH ID</b>		<b>O</b>
Cell ID		M
Resource Operational State		M
Resource Availability Status		O

<sup>1</sup> The availability status is optional when the resource works properly with its full nominal capacity (operational state = disabled)

<b>USCH ID</b>		<b>O</b>
Cell ID		M
Resource Operational State		M
Resource Availability Status		O
<b>Traffic Termination Point ID<sup>2</sup></b>		<b>O</b>
Resource Operational State		M
Resource Availability Status		O
<b>Communication Control Port ID</b>		<b>O</b>
Traffic Termination Point ID		M
Resource Operational State		M
Resource Availability Status		O
Transaction ID		M

NOTE:

- The resource objects defined above is an initial list only. The addition or removal of further objects is ffs.
- The reporting of all the states of all objects or only states of objects which have changed using this message is

---

<sup>2</sup> It is proposed to add Traffic Termination Point object in [R4]

## **4 Proposal**

- Replace section 9.1.30 of [R1] with section 3 of this contribution

## **5 Reference**

- [R1] : TS 25.433 – NBAP Specification V.1.2.1, Source: Editor
- [R2] : CCITT Rec. X.731: Information technology - open systems interconnection – system management: state management function
- [R3] : TS 25.430 - V .0.1.2
- [R4] : R3-99c71 : Node B Capacity management on Iub interface, Source: Nortel Networks