

TSG-RAN Working Group 3 meeting #7
Sophia Antipolis, France 20 – 24 September 1999

Agenda Item: 15.3

Title: Health Check (Layer3)

Source: NTT DoCoMo

Document for: Decision

References

[1] TS 25.433 NBAP specification version 1.1.2

1. Abstract

We propose the procedure to confirm the normality of Layer 3 level on Iub interface.

2. Discussion

In the middle of process to restart the UTRAN application, any messages should not be sent from the neighboring node, because they can disturb the restarting process. So the neighboring node needs to know if the partner is in the event of failure or not. If it is long before the restoration, it may be impossible for facing node to detect abnormal situation of the other side immediately.

Also it is supposed that there is a possibility that only L3 entity is in abnormal situation though other functions are in normal situation. For example, it would be possible that signalling link is alive and the node is recognized as normal condition though L3 entity (APL) is in abnormal situation. In this case, the reset for the firmware could not be initiated.

So we propose a new message that enables for neighboring UTRAN node to detect the event of failure each other. It is possible for the normal condition node to indicate the normality by sending this message periodically. We assume that the proposed message is sent from NodeB to RNC and vice versa, which realizes notification of normality of Layer 3 level to neighboring UTRAN node simply and quickly.

Due to the introduction of this procedure, when the abnormal situation on facing node is detected, the detecting node could take proper action.

For example,

- the notification to the maintenance system (O&M operator)
- Detecting node would stop the message to an abnormal node.

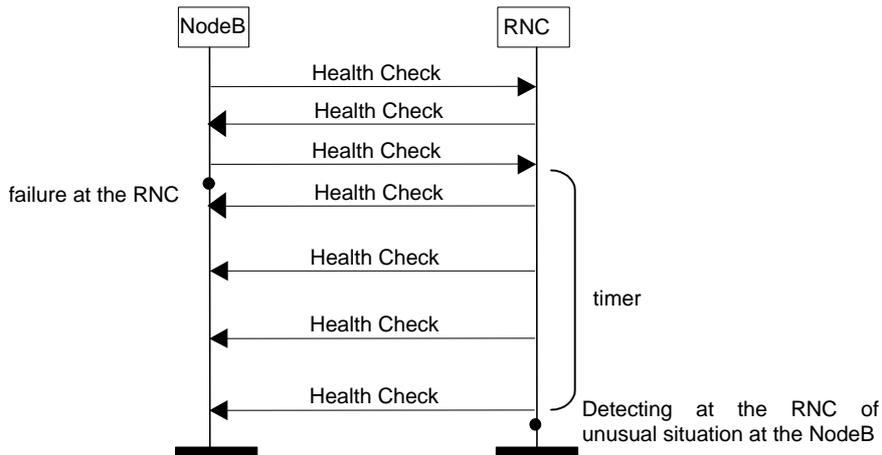


Figure1: Health check timer expired at the RNC

3. Proposal

It has been proposed to incorporate the following statement into proper section in reference [1].

Annex 1.

X. Health check

The RNC and Node B can indicate each other their normality by sending HEALTH CHECK message periodically. It is possible to recognise the abnormal situation in the other side by non-receipt of this message in a certain term.



Figure X : HEALTH CHECK from RNC



FigureX : HEALTH CHECK from Node B

Y. HEALTH CHECK

INFORMATION ELEMENT	REFERENCE	TYPE
Message Identifier		M