Agenda Item: 10.3

Source: Nokia

Title: **Modifications to Relocation Resource Allocation**

Document for: Decision

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1. INTRODUCTION

This contribution proposes additions and modifications to the RANAP procedure Relocation Resource Allocation, required for handling the unsuccessful and abnormal cases for ther procedure.

It is proposed that the current text for the Relocation Resource Allocation Procedure is replaced by the text in chapter 2 of this contribution.

2. RANAP PROCEDURES

2.1.1.1 Relocation resource allocation

2.1.1.1.1 Successful operation

> The CN node sends a RELOCATION REQUEST message to the target RNC (selected by the source RNC and indicated in the RELOCATION REQUIRED message). Timer T(RELOCATION REQUEST ACKNOWLEDGE) is started upon transmission of the message. This message contains details of the resource(s) required like bearer identifier and binding ID of each bearer to be established to the new Iu interface.

> Chapter XXX gives the parameters included in the above message (FFS).

> On receipt of this message the target RNC shall check availability of requested resources.

> If a radio resource is available then necessary user plane links will be established over the Iu interface. RELOCATION REQUEST ACKNOWLEDGE message is transmitted to the CN node, when the target RNC has received and successfully processed RELOCATION REQUEST messages from all active CN nodes.

> Chapter 6.6.1.31XXXXX gives the parameters included in the above message (FFS).

> The RELOCATION REQUEST ACKNOWLEDGE message sent by the target RNC may optionally contain a transparent field, which is transferred by the CN node to the source RNC using the RANAP message RELOCATION COMMAND.

> When the CN receives the RELOCATION REQUEST ACKNOWLEDGE the timer T(RELOCATION REQUIRED ACKNOWLEDGE) is reset.

> Fig. X shows the signalling flow for Relocation resource allocation.
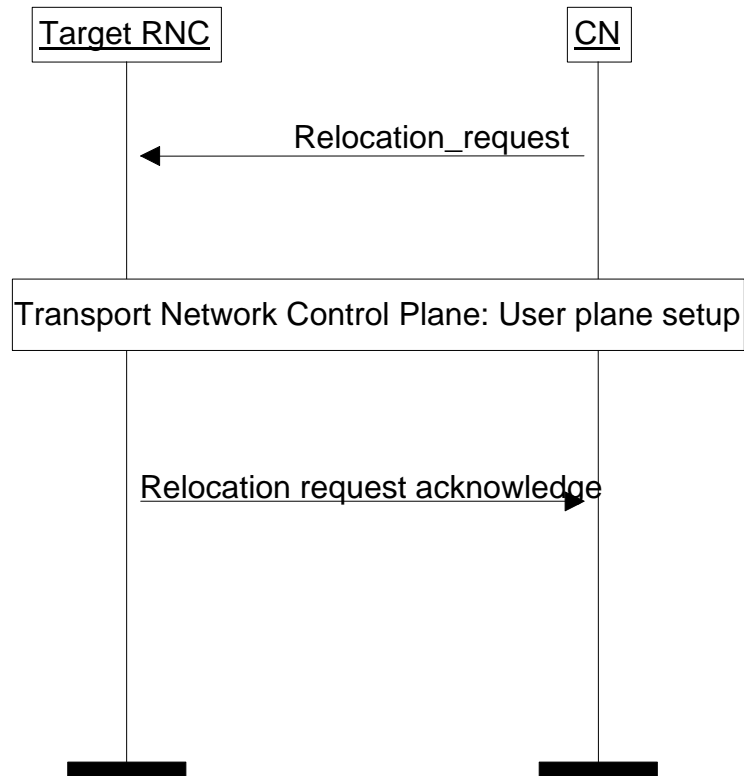
Figure 114. Resource allocation for relocation.

2.1.1.1.2 Unsuccessful Operation

If RNC can not execute the Relocation Resource Allocation procedure as requested in RELOCATION REQUEST message, RNC shall abort the procedure and initiate a RELOCATION FAILURE procedure towards the CN node.

2.1.1.1.3 Abnormal Conditions

2.1.1.1.3.1 Abnormal Conditions in CN

If timer T(RELOCATION REQUEST ACK) expires the CN shall abort the ongoing procedure and initiate new Relocation Resource Allocation procedure towards target RNC.

If a new Relocation Resource allocation procedure is decided to be initiated after having aborted the previous procedure, the pending Transaction ID count should be incremented by 1 and new transaction ID shall be used for the new procedure.

If the amount of pending transaction IDs for the Relocation Resource Allocation procedure equals to N(RELOCATION RESOURCE ALLOCATION) the CN shall abort the procedure and initiate Iu Release procedure towards the target RNC and Relocation Failure procedure towards the source RNC.

If CN receives a RELOCATION REQUEST ACKNOWLEDGE message related to an aborted procedure the message shall be ignored.

If CN receives a RELOCATION REQUEST ACKNOWLEDGE message which is conflicting to the existing parameters within the CN node, the CN shall abort the procedure and initiate Iu Release procedure towards target RNC and Relocation Failure towards Source RNC, indicating the cause for the failure.

2.1.1.1.3.2 Abnormal Conditions in RNC

If RNC receives a RELOCATION REQUEST message which is conflicting to the existing parameters within the RNC, the RNC shall abort the procedure and initiate Relocation Failure procedure towards the CN node, indicating the cause for the failure (Parameter Mismatch).