

Agenda Item: 10.3
Source: Nokia
Title: **Location Reporting Over Iu interface**
Document for: Decision

1 Introduction and Proposal

Mechanisms to have UE location information from UTRAN to CN were introduced to RANAP specifications in previous RAN WG3 meeting. The agreed procedures were Location Request and Location Report.

This contribution proposes some modifications to these procedures in order to have easier handling of unsuccessful and abnormal cases for these procedures. Proposed modifications to the procedures are described in chapter 2 and 3 of this contribution. It is proposed to modify the existing RANAP procedures in 25.413 accordingly.

2 Location Request-Reporting Control procedure

2.1 Normal operation

The LOCATION REPORTING CONTROL REQUEST message is issued from the CN to the RNC. It is used to initiate, modify or stop location reporting from UTRAN to CN retrieve the UE location information, while the UE, whose location is to be reported has its connection with the network. Each ongoing Location reporting is assigned a reporting number, which will be used in Location Report messages triggered by the respective Location Reporting Control procedure.

The signalling flow for Location Request-Reporting Control procedure is shown in Figure XX.

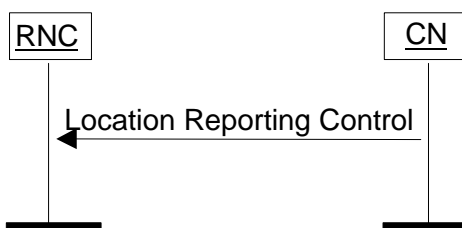


Figure 1. Location Request-Reporting Control procedure.

2.2 Abnormal conditions

2.2.1 Abnormal conditions in RNC

If UTRAN receives a Location Reporting Control message indicating a change in measurement parameters which are contradicting to existing parameters, UTRAN shall ignore the existing parameters in UTRAN and assume the parameters given in the new message as correct.

3 Location Report Procedure

3.1 Successful operation

The LOCATION REPORT message is issued from the RNC to the CN. It is used to provide the UE location information for the CN. This may be used as a response for the LOCATION REQUEST message. Other triggers of this message are FFS.

The signalling flow for Location Report procedure is shown in Figure XX.

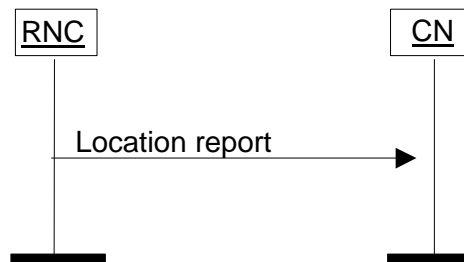


Figure 2. Location Report procedure.

3.2 Unsuccessful operation

If the UTRAN can not deliver the location information as requested, UTRAN shall indicate UE location to be "Undetermined". A cause value shall be added to indicate the reason for the undetermined location.

3.3 Abnormal conditions

3.3.1 Abnormal Conditions in CN

If CN receives a Location Report message reporting Location that was not requested by CN, CN should stop the indicated location reporting by utilising Location Reporting Control procedure.