

Agenda Item: 8.2
Source: Nokia
Title: Cell Update Signalling Procedure Examples
Document for:

1 Introduction

This contribution presents signalling flows for the Intra RNS and Inter RNS *Cell Update* procedures. Placeholders for these signalling examples were included in SMG2 ARC "UTRAN Functions, examples on Signalling Procedures" /1/.

The applicability of the contribution to the adopted 3GPP documents has to be checked after the merging process between technical specifications from the partner organisations.

2 Proposal for Intra-RNS Cell Update

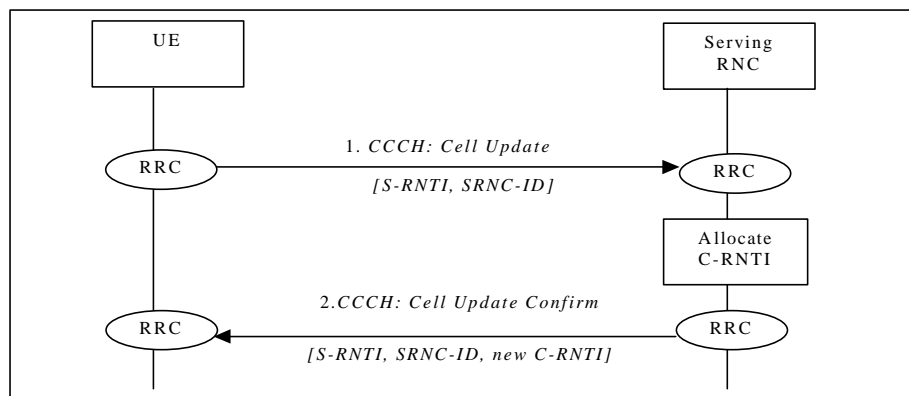


Figure 1. Intra RNS Cell Update.

1. UE sends a RRC message Cell Update to the UTRAN, after having made cell re-selection. Upon reception of RRC Cell Update message Serving RNC may allocate a new C-RNTI for the UE.
2. Serving RNC acknowledges the message by RRC Cell Update Confirm.

It is ffs. whether a Cell Update Complete is needed to confirm the successful reception of Cell Update Confirm. The decision is to be made by 3GPP RAN WG2.

3 Proposal for Inter-RNS Cell Update with switching in CN

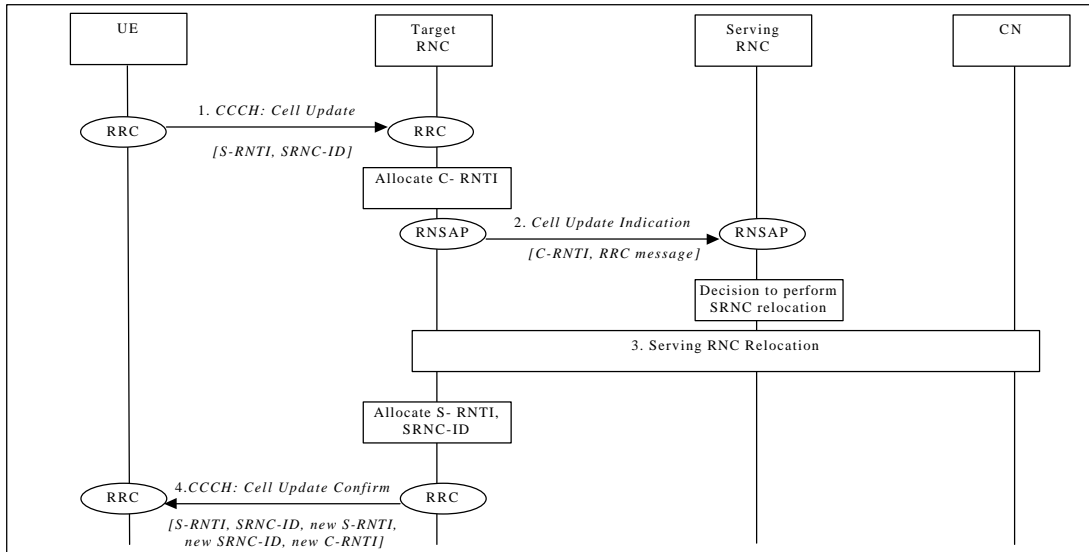


Figure 2. Inter RNS Cell Update with switching in CN.

1. UE sends a RRC message Cell Update to the UTRAN, after having made cell re-selection. Upon reception of a CCCH message from a UE, controlling RNC allocates a C-RNTI for the UE.
2. Controlling RNC forward the received uplink CCCH message towards the SRNC by RNSAP protocol. C-RNC includes the allocated C-RNTI to the RNSAP message, which is used as a UE identification within the C-RNC. Upon reception of the RNSAP message SRNC decides to perform a SRNC relocation towards the target RNC.
3. Serving RNC relocation procedure is executed as defined in Chapter SRNC Relocation (UE connected to a single CN node). After completing SRNC relocation, target RNC allocates new S-RNTI for the UE.
4. Serving RNC responds to UE by RRC Cell Update Confirm, including old S-RNTI and SRNC ID as UE identifiers. Message contains also the new S-RNTI, SRNC-ID and C-RNTI.

It is ffs. whether a Cell Update Complete is needed to confirm the successful reception of Cell Update Confirm. The decision is to be made by 3GPP RAN WG2.

4 Proposal

It is proposed that the Intra RNS Cell Update procedure is not included into the RAN WG3 documentation, since it is purely a air interface RRC protocol elementary procedure. Thus the placeholder for the procedure is proposed to be removed from the WG3 document corresponding to /1/. The description in chapter 3, Inter RNS Cell Update (with switching in CN) is proposed to be included in the WG3 document corresponding to /1/.

5 References

/1/ UMTS ZZ.02, *UTRAN Functions, Examples on Signalling Procedures* v. 0.1.0, from Editor (CSELT)