

Source: TSG-RAN WG3
To: TSG-RAN WG2
Date: 30th April 1999
Subject: Answer for Liaison statement regarding the feasibility study for addressing mechanisms for the MAC protocol

TSG-RAN WG3 would like to thank TSG-RAN WG2 for the received liaison statement regarding the feasibility study of Iur aspects regarding the two air interface addressing schemes. In the following the considerations from the RAN WG3 are stated.

It is assumed that the UE is not, and should not, be aware of the UTRAN architecture. CRNC shall also be able to reallocate the C-RNTI always when the UE accesses a new cell for which a C-RNTI has not yet been allocated by the controlling RNC. UE shall therefore use S-RNTI and SRNC-ID as UE identifier always when accessing such a new cell. These identifiers shall be decodable for the CRNC. RAN WG3 assumption is that all messages identified by S-RNTI and SRNC-ID (in case SRNC-ID \neq CRNC-ID) are transported over Iur by the RNSAP protocol message Uplink Transfer.

It is assumed that each time UE accesses a cell with a message identified by S-RNTI and SRNC-ID in RACH/FACH state, UE context (identified by the S-RNTI and SRNC-ID) for the UE is created within CRNC (if not already existing). It is also assumed that one C-RNTI is always associated to the UE context. That C-RNTI is communicated to the UE in the response message for the previously mentioned access. It is assumed that UE shall use that C-RNTI as a UE identification in subsequent communication with UTRAN (utilising RACH) as long as the transmission is done via the same cell.

Some requirements for having periodic uplink transmissions are foreseen in order to be able to manage the CRNC internal resources for the existing UE contexts. E.g. if no activity is detected for some defined period of time the UE context shall be removed by the CRNC. Whether these kind of messages would use the S-RNTI&SRNC-ID or C-RNTI as UE identifier and other details of this kind of possible mechanisms are ffs.

In RAN WG3 it is a general assumption that only messages used for Cell Updating, URA Updating and RRC Connection Re-establishment would be identified by the S-RNTI and SRNC-ID. It is also considered that in order to be able to better estimate capacity requirements for Iur, the size of these messages shall not be significantly larger than what is required for their functionality. Increased protocol complexity is also foreseen if a lot of interactions with user plane data transfer and control plane signalling is introduced e.g. interactions between RNSAP entity and RLC/MAC-d entity within SRNC

In this liaison statement RAN WG3 has listed the RAN WG3 assumptions which are related to the Iur interface and UTRAN architecture regarding the two addressing mechanism proposals from RAN WG2.

Provided that these assumptions are fulfilled, it is seen that RAN WG2 can select the most suitable protocol layer for the UE identifiers and design other details of the Cell and URA update procedures purely from the RAN WG2 point of view.

Regarding the proposed email discussion RAN WG3 delegates are ready to give some additional comments from RAN WG3 point of view in case some WG3 related issues are still unclear. It is proposed that the required joint email discussions (if required) are initiated by RAN WG2 and are carried out both in RAN WG2 and RAN WG3 email reflectors with a prefix "WG2/3 CELL UPDATE" in the subject field.