

TSG-RAN Working Group 2 meeting #2
8-11 March 1999
Stockholm, Sweden

Tdoc RAN WG2 067/99

TSG-RAN Working Group 3 meeting #1
Bonn 2nd - 5th February 1999

TSGW3#1(99)101

To: TSG-RAN Working Group 2
From: TSG-RAN Working Group 3
Date: 5th February 1999
Subject: Definition and usage of RNTI, LS from TSG-RAN WG3

TSG-RAN WG3 would like to inform TSG-RAN WG2 of the working assumption on RNTI definition and usage that has been taken in TSG-RAN WG3 to fulfill the Architecture requirements.

The working assumption is the following :

Radio Network Temporary Identity Definition

A Radio Network Temporary Identities (RNTI) are used as UE identifiers within UTRAN and in signalling messages between UE and UTRAN.

Two types of RNTI exist. One is used within the Serving RNC and it is denoted by Serving RNC RNTI (s-RNTI), the other is used within C-RNC, when applicable, and it is denoted by Controlling RNC RNTI (c-RNTI).

s-RNTI is allocated for all UEs having a RRC connection, it is allocated by the Serving RNC and it is unique within the Serving RNC. s-RNTI is reallocated always when the Serving RNC for the RRC connection is changed.

In addition, each RNC has a unique identifier within the PLMN, denoted by RNC identifier (RNC-ID).

c-RNTI for an UE is allocated by each controlling RNC through which UE is able to communicate on DCCH. c-RNTI is unique within the allocating C-RNC. c-RNTI is always allocated when a new UE context is created to a RNC. UE is aware of its c-RNTI only when in RACH/FACH state, while c-RNTI is used as a UE identifier within UTRAN in all UE states. Serving RNC is always aware of all c-RNTIs allocated for the UE.

Usage of RNTI

S-RNTI together with the RNC-ID is used as a UE identifier in all CCCH and (in UTRAN originated) PCCH messages on the air interface. RNC-ID is used by Controlling RNC to route the received uplink messages towards the Serving RNC.

C-RNTI is used as a UE identifier in all DCCH/DTCH common channel messages on air interface. c-RNTI is also used as a UE identifier in the connectionless RNSAP protocol messages on the lur interface.

TSG-RAN WG3 would like to have the opinion of TSG-RAN WG2 on that working assumption from the Radio protocols stand point to get alignment between the two Working Groups.