TSG-RAN Working Group 3 meeting #7 **TSGW3#7(99)B71**
Sophia Antipolis 20th – 24th September 1999

Agenda Item: 10.2 Actions
Source: **NEC**
Title: Timer for RANAP
Document for: Discussion

[1] 25.313 RANAP Specification v1.2.1

1. Abstract
   In the RAN WG3 Iu-SWG meeting in Helsinki, timer handling has been discussed, and it was agreed to discuss further based on contribution.
   This contribution gives some timers for discussion.

2. principle for specifying timer
   Timers for RANAP should be specified in order to satisfy multi-vendor concept.
   The timers that should be specified in the RANAP procedure are those related to the elementary procedures which are categorized as class 1, i.e. element procedure with response (success or failure).

3. Timer list
   Table 1 shows timer list for elementary procedure in RANAP.

Timer	Cause for initiation	Normal Termination	At Expiry	At recycle out	Counter	Nodes which start timers
Trepre	When Relocation Required is sent	At receipt of:: -Relocation Command or -Relocation Failure or -Reset or -Iu Release	Repeat Relocation Required, Crepre+1	Terminate Relocation Preparation procedure	Crepre	RNC
Trereq	When Relocation Request is sent	At receipt of:: -Relocation Request Ack or -Relocation Failure or -Reset or -Iu Release Request	Repeat Relocation Request, Crereq+1	Terminate Relocation Resource allocation	Crereq	CN
Trecan	When Relocation Cancel is sent	At receipt of: -Relocation Cancel Acknowledge or -Reset or -Iu Release	Repeat Relocation Cancel, Crecan+1	Initiate Iu Release Request	Crecan	RNC
Trabass [NOTE1]	When RAB Assignment Request is sent	At receipt of: -RAB Assignment Response or -RAB Assignment Failure or -Reset or -Iu Release Request If a Queuing Indication is received, the CN re-start the timer and not	Repeat RAB Assignment Request Crabass+1	Terminate RAB Assignment Procedure. In case of the RAB Assignment is related to -RABs to establish ➔if the RAB is the only one or all in the Iu connection, Iu Release procedure is initiated	Crabass	CN

		increasing Crabass.		-RABs to modify ➜do nothing -RABs to release ➜ If the RAB is the only one or all in the Iu connection, Iu Release procedure is initiated		
Trabrelre q	When RAB Release Request is sent	At receipt of: -RAB Assignment Request or -Reset or -Iu Release	Repeat RAB Release Request, Crabrelreq+ 1	If the RAB is the only one or all, Iu Release Request is initiated	Crabrelreq	RNC
Tqueuing	When Queuing Indication is sent	Successful of allocation the radio resource or at receipt of -Reset or -Iu Release	RAB Assignment Failure	-	-	RNC
Tiurel	When Iu Release is sent	At receipt ot: -Iu Release Complete or -Reset	Initiate release of SCCP Connection	-	-	CN
Tiurelreq	When Iu Release Request is sent	At receipt of: -Iu Release or -Reset	Initiate release of SCCP Connection	-	-	RNC
Treset	When Reset is sent	At receipt of: -Reset Acknowledge	repeat Reset	no re-cycle out is expected	Creset=	RNC, CN
Tresetac k	At receipt of Rest	-	sent Reset Acknowledg e	-	-	RNC, CN
Tcipher	When Cipher Control Command is sent	At receipt of: -Cipher Control Complete or -Reset or -Iu Release Request	repeat Cipher Control Command, Ccipher+1	Initiate Iu Release procedure	Ccipher	CN
Tcnbroad	When CN Broadcast Information Request is sent	At receipt of: -CN Broadcast Information Confirm or -Reset or -Iu Release Request	Repeat Broadcast Information Request, Ccnbroad+ 1	do nothing	Ccnbroad	CN

Table1 Timer list in RANAP procedure

[NOTE1] The alternative of the timer Trabass can be initiated in the RNC when receiving RAB Assignment Request from the CN. It could be like below.

Timer	Cause for initiation	Normal Termination	At Expiry	At recycle out	Counter	Nodes which start timers
Trabass	When RAB Assignment Request is received	At sending of: RAB Assignment Response or, At receipt of: -Reset or -Iu Release	Send RAB Assignment Failure for each RAB or all RABs	-		RNC

Table 2 The alternative of the timer Trabass

The Table 1 can be incorporated into chapter 9.5 of [1] for further discussion.