

TSG-RAN Working Group 2 (Radio layer 2 and Radio layer 3) *TSGR2#6(99)804*
Sophia Antipolis, France, August 16th to 20th 1999

Agenda Item: 4.3

Source: Nokia

Title: CR to TS25.301 on Addition of Integrity protection function in RRC layer

Document for: Decision

3G CHANGE REQUEST

Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly.

TS 25.301 CR 005

Current Version: **3.1.0**

3G specification number ↑

↑ CR number as allocated by 3G support team

For submission to TSG **RAN#5** for approval (only one box should
list TSG meeting no. here ↑ for information be marked with an X)

Form: 3G CR cover sheet, version 1.0 The latest version of this form is available from: ftp://ftp.3gpp.org/Information/3GCRF-xx.rtf

Proposed change affects: USIM ME UTRAN Core Network
(at least one should be marked with an X)

Source: TSG-RAN WG2 **Date:** 09/07/99

Subject: Addition of Integrity protection function in RRC layer

3G Work item:

Category: F Correction
A Corresponds to a correction in a 2G specification
(only one category shall be marked with an X) B Addition of feature
C Functional modification of feature
D Editorial modification

Reason for change: The integrity protection function is described in TS 33.102 and TS 33.105. It is not yet mentioned in RAN WG2 specifications, although potentially being a function of a radio interface protocol between UE and UTRAN. It is proposed to include this functionality into the RRC protocol.

Clauses affected: 5.4.2

Other specs affected: Other 3G core specifications → List of CRs:
Other 2G core specifications → List of CRs:
MS test specifications → List of CRs:
BSS test specifications → List of CRs:
O&M specifications → List of CRs:

Other comments:



help.doc

<----- double-click here for help and instructions on how to create a CR.

5.4.1. RRC functions

The Radio Resource Control (RRC) layer handles the control plane signalling of Layer 3 between the UEs and UTRAN. The RRC performs the following functions:

- **Broadcast of information provided by the non-access stratum (Core Network).** The RRC layer performs system information broadcasting from the network to all UEs. The system information is normally repeated on a regular basis. This function supports broadcast of higher layer (above RRC) information. This information may be cell specific or not. As an example RRC may broadcast Core Network location service area information related to some specific cells.
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- **Initial cell selection and re-selection in idle mode.** Selection of the most suitable cell based on idle mode measurements and cell selection criteria.
- **Integrity protection.** This function adds a Message Authentication Code (MAC-I) to those RRC messages that are considered sensitive and/or contain sensitive information. The mechanism how the MAC-I is calculated is described in [TS 33.105].

The following functions are regarded as further study items:

- **Arbitration of the radio resource allocation between the cells.** This function shall ensure optimal performance of the overall UTRAN capacity.

[Note: Some clarification should be provided what exact requirements this function implies on the RRC protocol, beyond general radio resource optimization.]

- **Congestion control.** Further study item.