

21-24 May, 2001

Phoenix, USA

CR-Form-v3

CHANGE REQUEST

⌘ **33.102 CR CR-Num** ⌘ rev **-** ⌘ Current version: **3.8.0** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: ⌘ (U)SIM ME/UE Radio Access Network Core Network

| | | | |
|------------------------|--|-----------------|---|
| Title: | ⌘ Correction to periodic local authentication | | |
| Source: | ⌘ Siemens Atea | | |
| Work item code: | ⌘ Security | Date: | ⌘ 17/05/2001 |
| Category: | ⌘ D | Release: | ⌘ R99 |
| | Use <u>one</u> of the following categories: F (essential correction) A (corresponds to a correction in an earlier release) B (Addition of feature), C (Functional modification of feature) D (Editorial modification) Detailed explanations of the above categories can be found in 3GPP TR 21.900. | | Use <u>one</u> of the following releases: 2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) REL-4 (Release 4) REL-5 (Release 5) |

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|--------------------------------------|--|--|--|
| Reason for change: | ⌘ Clause 6.4.7 TS33.102 is inconsistent with TS25.331 V3.6.0 (2001-3) clause 8.1.5 Counter Check | | |
| Summary of change: | ⌘ Alignment of Stage 2 specification with Stage 3 specifications | | |
| Consequences if not approved: | ⌘ Inconsistent set of specifications | | |

| | | | |
|------------------------------|---|---|--|
| Clauses affected: | ⌘ 6.4.7 periodic local authentication | | |
| Other specs Affected: | <input type="checkbox"/> Other core specifications <input type="checkbox"/> Test specifications <input type="checkbox"/> O&M Specifications | ⌘ | |
| Other comments: | ⌘ Inconsistency to TS 33.102 was introduced with approval by TSG RAN#11 of R2-010543 [CR645 - March 2001] on TS 25.331 | | |

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at: http://www.3gpp.org/3G_Specs/CRs.htm. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <ftp://www.3gpp.org/specs/>. For the latest version, look for the directory name with the latest date e.g. 2000-09 contains the specifications resulting from the September 2000 TSG meetings.

- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

6.4.7 Signalling procedure for periodic local authentication

The following procedure is used by the RNC to periodically perform a local authentication. At the same time, the amount of data sent during the RRC connection is periodically checked by the RNC and the UE. The RNC is monitoring the COUNT-C value associated to each radio bearer. The procedure is triggered whenever any of these values reaches a critical checking value. The granularity of these checking values and the values themselves are defined by the visited network. All messages in the procedure are integrity protected.

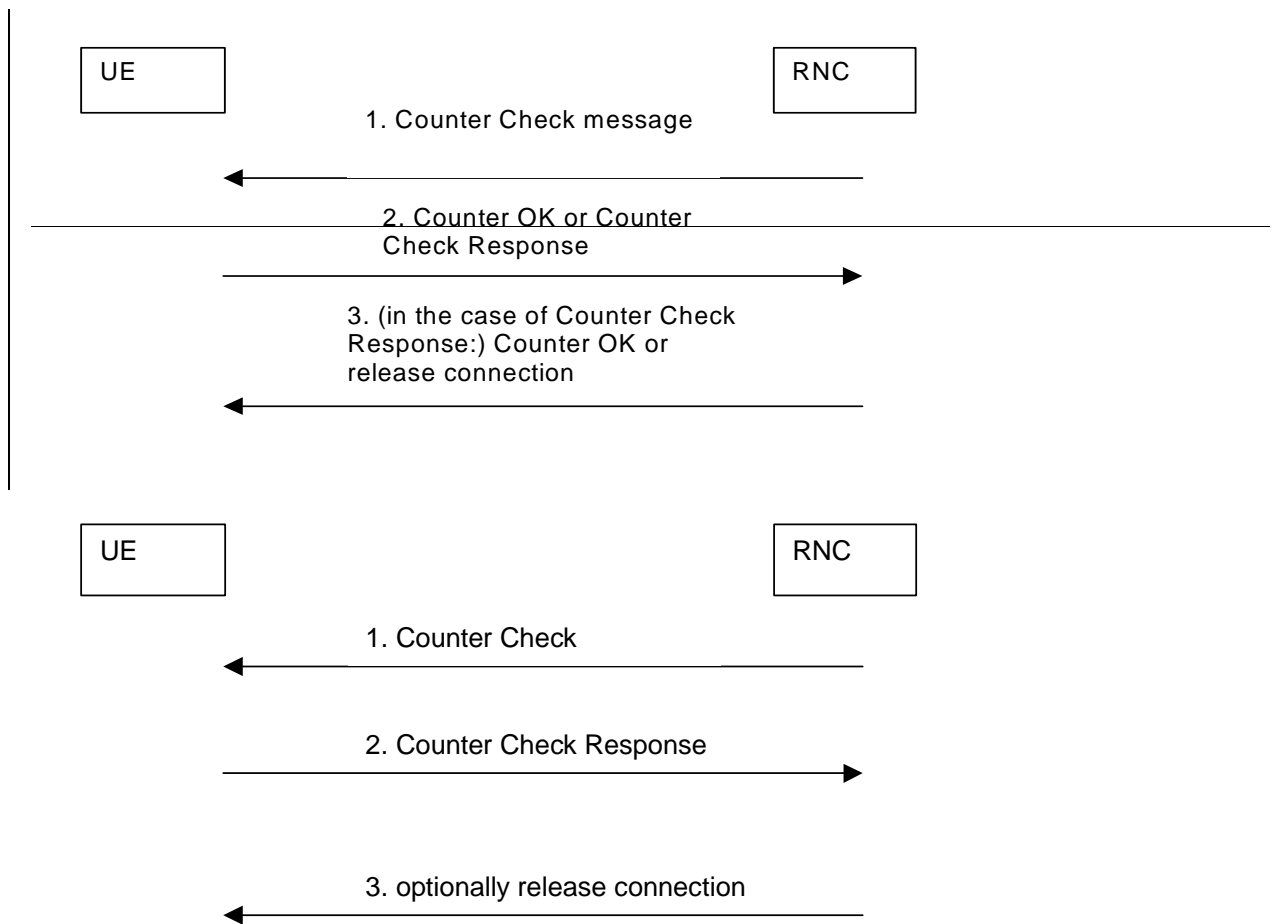


Figure 15a: RNC periodic local authentication procedure

1. When a checking value is reached (e.g. the value in some fixed bit position in the hyperframe number is changed), a Counter Check message is sent by the RNC. The Counter Check message contains the most significant parts of the COUNT-C counter values (which reflect amount of data sent and received) from each active radio bearer.
2. The UE compares the TheCOUNT-C-counter values received in the Counter Check message with the values of its radio bearers. are checked by ME and if they agree with the current status in the ME, a 'Counter OK' message is returned to the RNC. If there is a difference between the counter values in the ME and the values indicated in the Counter Check message, the ME sends a Counter Check response to the RNC. The form of this message is similar to the Counter Check message. Different UE COUNT-C values are included within the Counter Check Response message.

3. ~~If n-ease the RNC receives a counter check response message that does not contain any COUNT-C values, the procedure ends. If the RNC receives a counter check response that contains one or several COUNT-C values, the RNC may release the connection. the 'Counter OK' message the procedure is completed. In case the RNC receives the Counter Check response it compares the counter values indicated in it to counter values in the RNC. If there is no difference or if the difference is acceptable then the RNC completes the procedure by sending the 'Counter OK' message. Otherwise, the connection is released.~~