

<h2 style="margin: 0;">CHANGE REQUEST</h2>			Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly.	
33.102 CR xxx		Current Version: 3.6.0		
GSM (AA.BB) or 3G (AA.BBB) specification number ↑		↑ CR number as allocated by MCC support team		
For submission to: SA #10	for approval for information	<input checked="" type="checkbox"/>	strategic	<input type="checkbox"/>
list expected approval meeting # here ↑		<input type="checkbox"/>	non-strategic	<input type="checkbox"/>
			(for SMG use only)	

Form: CR cover sheet, version 2 for 3GPP and SMG The latest version of this form is available from: <ftp://ftp.3gpp.org/Information/CR-Form-v2.doc>

Proposed change affects: (U)SIM ME UTRAN / Radio Core Network
 (at least one should be marked with an X)

Source: Nokia **Date:** 2000-11-22

Subject: Corrections to Counter Check procedure

Work item:

Category:	F Correction <input checked="" type="checkbox"/>	Release:	Phase 2 <input type="checkbox"/>
	A Corresponds to a correction in an earlier release <input type="checkbox"/>		Release 96 <input type="checkbox"/>
	B Addition of feature <input type="checkbox"/>		Release 97 <input type="checkbox"/>
	C Functional modification of feature <input type="checkbox"/>		Release 98 <input type="checkbox"/>
	D Editorial modification <input type="checkbox"/>		Release 99 <input checked="" type="checkbox"/>
			Release 00 <input type="checkbox"/>

(only one category shall be marked with an X)

Reason for change: The description of Counter Check procedure has been aligned with the one in TS 25.331.

Clauses affected: 6.4.7

Other specs affected:	Other 3G core specifications	<input type="checkbox"/>	→ List of CRs:
	Other GSM core specifications	<input type="checkbox"/>	→ List of CRs:
	MS test specifications	<input type="checkbox"/>	→ List of CRs:
	BSS test specifications	<input type="checkbox"/>	→ List of CRs:
	O&M specifications	<input type="checkbox"/>	→ List of CRs:

Other comments:



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

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 and COUNT-I 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.

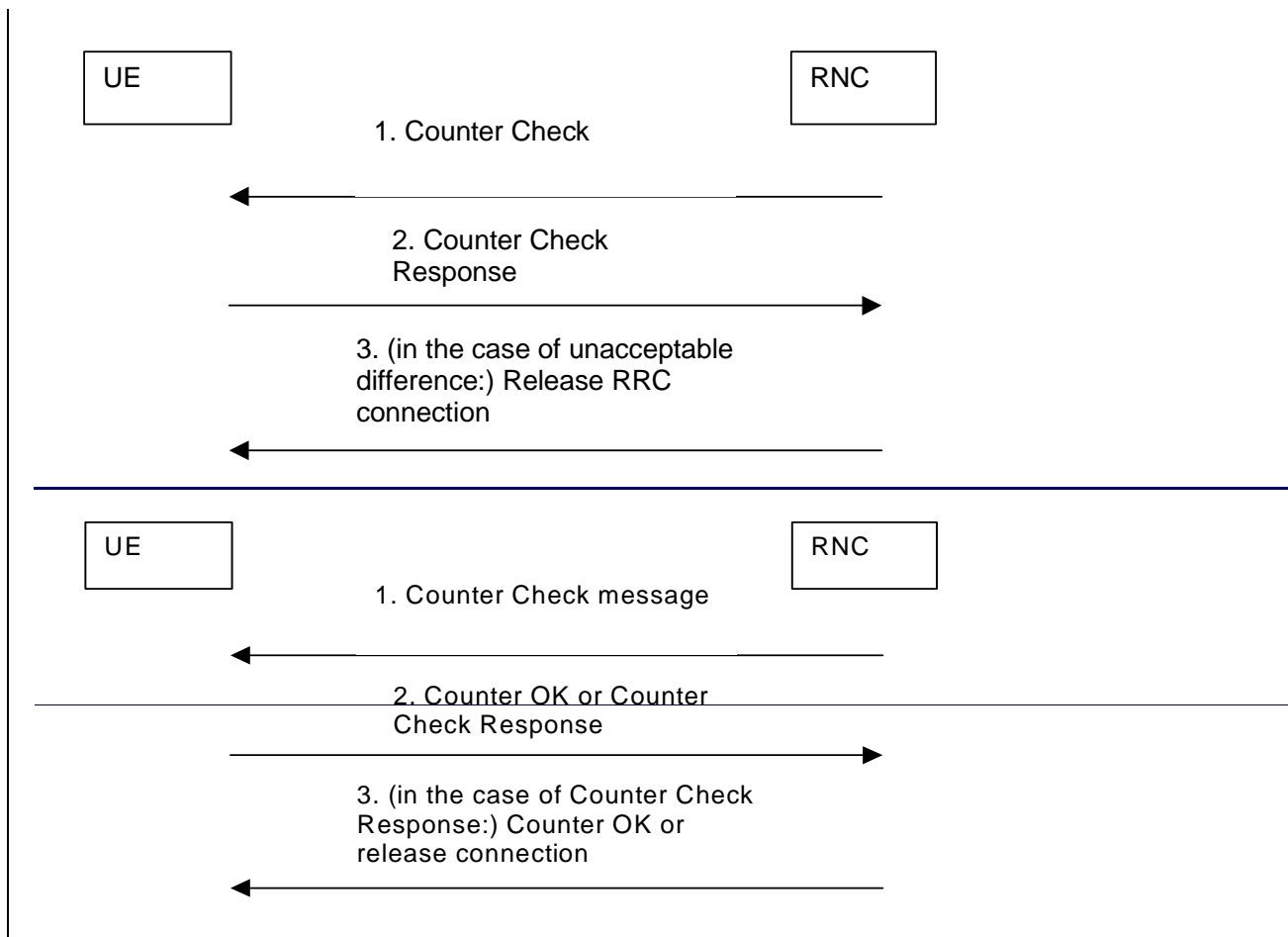


Figure 15a: RNC periodic local authentication procedure

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 and COUNT-I values (which reflect amount of data sent and received) from each active radio bearer.

2. If the number of radio bearers using UM or AM RLC mode or any of the COUNT-C MSB values is different, the mismatched COUNT-C values shall be included in the Counter Check Response message. The UE sends the Counter Check Response message to the RNC.

The counter values in the Counter Check message 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.

3. In case the RNC receives 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. If 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 message that contains one or several COUNT-C values, it ~~should~~shall compare the COUNT-C values in the message to the COUNT-C values which were used in forming the Counter Check message.

If there is no difference or if the difference is acceptable, the procedure ends. If there is a difference that is not acceptable, the RNC ~~should~~ shall initiate the release of the RRC connection.

If there is no Counter Check Response, the RNC ~~should~~ shall initiate the release of the RRC connection.