From: **TSG S3**

To: **TSG N2**

– for information –

LS on Authentication Failure Report

During their meeting in Antwerp, Jan 19-21, N2's reaction on S3's CR on *Authentication Failure Report* was considered. Concerns regarding the need of an acknowledgement of authentication failure reporting have been received. After a short discussion in S3 the issue was seen as a mis-understanding between the groups. A new CR was approved (TD S3-000076) removing the acknowledgement part of the *Authentication Failure Report* mechanism.

Attached: S3-000076

TSG SA WG3 #10, Antwerp 19-21 January 2000

DRAFT 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 33.102 CR 049   Current Version: **V3.3.1**

3G specification number ↑   *↑ CR number as allocated by 3G support team*

For submission to TSG **SA#7**   for approval **X**   *(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 **X**
(at least one should be marked with an X)

Source: S3   **Date:** 2000-01-21

Subject: Authentication failure reporting

3G Work item: Security

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

Reason for change: The *Authentication Failure Report* from the SGSN/VLR does not need to be acknowledged by the HLR and consequently the acknowledge should be removed.

Clauses affected: 6.3.6

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: This CR is the result of a request from N2 to consider removing the acknowledge part of the *Authentication Failure Report* mechanism.

6.3.6 Reporting authentication failures from the SGSN/VLR to the HLR

The purpose of this procedure is to provide a mechanism for reporting authentication failures from the serving environment back to the home environment.

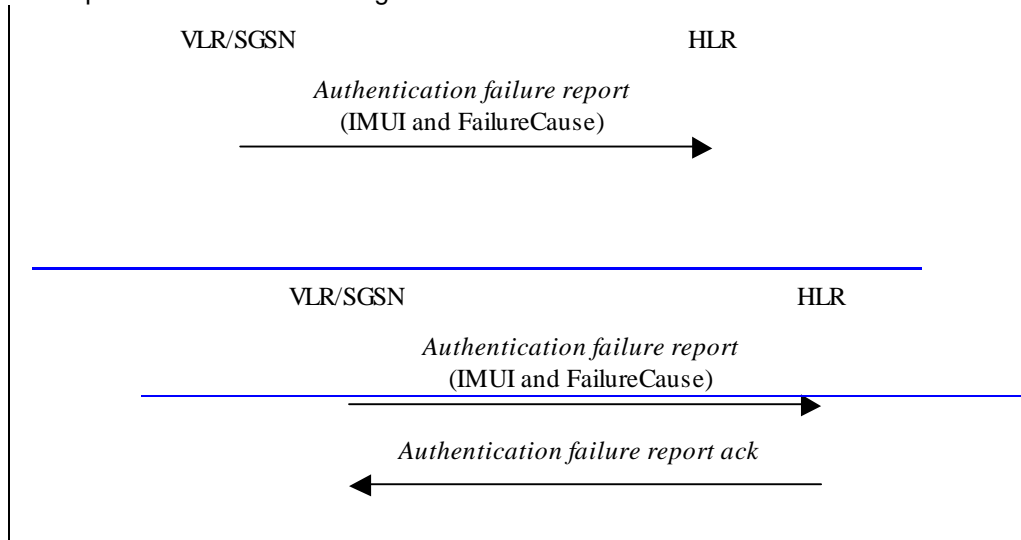The procedure is shown in Figure 13.

VLR/SGSN   HLR

Authentication failure report
(IMUI and FailureCause)

VLR/SGSN   HLR

Authentication failure report
(IMUI and FailureCause)

Authentication failure report ack

Figure 13: Reporting authentication failure from VLR/SGSN to HLR

The procedure is invoked by the serving network VLR/SGSN when the authentication procedure fails. The *authentication failure report* shall contain the subscriber identity and a failure cause code. The possible failure causes are either that the network signature was wrong or that the user response was wrong.

When the home environment receives the *authentication failure report* it shall respond by an acknowledge back to the serving network. The HE may decide to cancel the location of the user after receiving an *authentication failure report*.