

**Title:** Reply LS to S3-040187(N4-040240) on use of authentication re-attempt IE  
**Release:** Rel-6  
**Work Item:** Security

**Source:** TSG CN4  
**To:** TSG SA3  
**Cc:** TSG CN1

**Contact Person:**

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**Attachments:** None

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**1. Overall Description:**

CN4 thanks SA3 for their LS response (S3-040187) regarding to the use of the 'Re-attempt' parameter in the Authentication Failure Report (AFR) Service.

CN4 understand that the serving network sets the Re-attempt to “true” if the second authentication described in the following cases failed.

- Authentication with (P-)TMSI failed in MS (reject cause 'MAC failure') and new authentication procedure (re-attempt) is taken because an IMSI obtained by the followed IDENTITY REQUEST procedure does not match to the original IMSI that linked with (P-)TMSI. See TS 24.008 section 4.3.2.6 c) [Case 1]
- Authentication failed in MS (reject cause 'GSM authentication unacceptable') and new authentication procedure (re-attempt) is taken after MSC obtains UMTS authentication vectors from HLR. See TS 24.008 section 4.3.2.6 c) [Case 2]
- Authentication failed in MS (reject cause 'synch failure') and new authentication procedure (re-attempt) is taken after MSC obtains new authentication vectors from HLR for re-synchronisation. See TS 24.008 section 4.3.2.6 c) [Case 3]
- SRES mismatches with (P-)TMSI in VLR(SGSN) and new authentication procedure (re-attempt) is taken because an IMSI obtained by the followed IDENTITY REQUEST procedure does not match to the original IMSI that linked with (P-)TMSI. See TS 23.012 section 4.1.2.2 Procedure Authenticate\_VLR, and TS 23.018 section 7.1.2.6 Procedure Authenticate\_VLR [Case 4]

**2. Discussion**

In order to document whole information described above into 3GPP specifications, CN4 concluded as follows.

For the case 4, CN4 can provide necessary updates regarding to the 'Re-attempt' parameter handling in both TS 23.012 and TS 23.018.

However for the case 1 through 3, CN4 do not believe that TS 24.008 is the right place to specify the use of 'Re-attempt' parameter since this specification basically specifies the radio interface Layer 3 protocol between terminal and core network.

As the conclusion, CN4 concluded that TS 33.102 is the best fit place to describe over all handling of the 'Re-attempt' parameter for the Authentication Failure Report (AFR) Service.



### 3. Actions

To SA3 group.

**ACTION:** CN4 would like SA3 to update TS 33.102 (REL6) with the information described in the section 1 in this liaison.

### 4. Date of Next CN4 Meeting

CN4 #23	10th – 14th May 2004	Zagreb
CN4 #24	16th – 20th August 2004	Sophia Antipolis