

CR-Form-v7
<h2 style="margin: 0;">PSEUDO CHANGE REQUEST</h2>
⌘ 33.234 CR - ⌘ rev - ⌘ Current version: 0.7.0 ⌘

For [HELP](#) on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: UICC apps ME Radio Access Network Core Network

Title:	⌘ Clarification to reauthentication procedures		
Source:	⌘ Nokia		
Work item code:	⌘ WLAN	Date:	⌘ 10/11/2003
Category:	⌘ F	Release:	⌘ Rel-6
	Use <u>one</u> of the following categories: <i>F</i> (correction) <i>A</i> (corresponds to a correction in an earlier release) <i>B</i> (addition of feature), <i>C</i> (functional modification of feature) <i>D</i> (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) Rel-6 (Release 6)

Reason for change:	⌘ Not clear reauthentication process
Summary of change:	⌘ Added more information about WLAN-UE and 3GPP AAA server reauthentication process. Clarified which authentication is in question: 802.1x/AAA or EAP SIM/AKA. Moved informative text under NOTE. Some minor wording changes done also.
Consequences if not approved:	⌘ Unclear specification

Clauses affected:	⌘ 5.1.7 Re-authentication										
	⌘ 5.5 Immediate Service Termination										
Other specs affected:	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; text-align: center;">Y</td> <td style="width: 20px; text-align: center;">N</td> </tr> <tr> <td style="width: 20px; text-align: center;"> </td> <td style="width: 20px; text-align: center;">N</td> </tr> <tr> <td style="width: 20px; text-align: center;"> </td> <td style="width: 20px; text-align: center;">N</td> </tr> <tr> <td style="width: 20px; text-align: center;"> </td> <td style="width: 20px; text-align: center;">N</td> </tr> </table> Other core specifications	Y	N		N		N		N	⌘	
Y	N										
	N										
	N										
	N										
	Test specifications										
	O&M Specifications										
Other comments:	⌘ -										

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at <http://www.3gpp.org/specs/CR.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://ftp.3gpp.org/specs/>. For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 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.

 ----- CHANGED SECTION -----

5.1.7 Re-authentication

WLAN [802.1x/AAA](#) re-authentication is performed between WLAN-UE and AAA server, through Ws and Wr interfaces.

NOTE: The WLAN-AN ~~may~~ initiate the [802.1x/AAA](#) re-authentication process periodically. The frequency of the [802.1x/AAA](#) re-authentications is determined by a ~~timer~~~~counter~~ which normally is set by O&M procedures in the WLAN-AN but it ~~may~~ be sent to the WLAN-AN by the AAA server in a RADIUS or Diameter message (in the attribute [RADIUS Session Timeout](#) or [Diameter AVP Authorization-Lifetime](#)).

The WLAN UE may initiate the 802.1x/AAA re-authentication process for example upon moving to a new access point. The WLAN UE may also initiate the 802.1x/AAA re-authentication periodically; however it is out of the scope how the UE determines the frequency of periodic 802.1x/AAA re-authentications.

The 3GPP AAA server may initiate the 802.1x/AAA re-authentication process upon some event (for example the amount of data reported in accounting messages exceeds some limit), or periodically, alternatively to the usage of the Session Timeout/Authorization-Lifetime. The frequency of periodic 802.1x/AAA re-authentications is determined by a timer which is normally set by O&M procedures in the 3GPP AAA server.

NOTE: If several elements (UE, WLAN AN, 3GPP AAA server) maintain timers for periodic 802.1x/AAA re-authentications, then the element that has the shortest timer will determine the frequency of periodic 802.1x/AAA re-authentications, because each element is able to initiate a 802.1x/AAA re-authentication.

At reception of ~~the Session Timeout~~~~this~~ attribute or the [Authorization-Lifetime AVP](#), the WLAN-AN may substitute the previously set counter by the received one. Nevertheless, the 3GPP network does not have the certainty that the counter sent by the AAA server is enforced by the WLAN AN, since the latter may not support this feature (the reception and acceptance of ~~the Session Timeout~~~~this~~ attribute or AVP). In this case, the WLAN AN will discard it and trigger [802.1x/AAA](#) the re-authentications in the period set by O&M procedures as mentioned before.

The [802.1x/AAA](#) re-authentication process ~~initiated by the WLAN-AN~~ will be performed either with an [EAP SIM/AKA](#) full authentication process or with an [EAP SIM/AKA](#) fast re-authentication process (from now on it will be simply called [EAP SIM/AKA](#) re-authentication). When the process is triggered ~~by the WLAN-AN~~, it is the ~~client~~UE's decision to perform either a [EAP SIM/AKA](#) full authentication or a [EAP SIM/AKA](#) re-authentication (~~fast~~). This is indicated to the WLAN AN by sending either a pseudonym ([EAP SIM/AKA](#) full authentication) or a re-authentication id ([EAP SIM/AKA re-authentication](#)~~fast~~). Both processes are described in this TS.

The [EAP SIM/AKA](#) re-authentication process ~~shall~~~~must~~ be implemented together with the full authentication procedure, although its use is optional and depends on operators' policies.

NOTE: These policies depend on the level of trust of the 3GPP operator and the WLAN AN, and the possible threats detected by operator which may require a periodic refresh of keys. The full process description can be found in ref. [4] and [5].

[Editor's ~~N~~note: it is still pending to define how the re-authentication id is generated. It could be a long random number with minimum length defined, e.g. 64 bits.]

----- NEXT CHANGED SECTION -----

5.5 Immediate Service Termination

The AAA server initiates immediate service termination when some events may require stopping user's activity (end of subscription, expiration of charging account, etc.). This process can be initiated at any time by the AAA server with the Diameter command Diameter-Abort-Session-Request and Diameter-Abort-Session-Answer (the Ws interface is implemented with Diameter protocol) as specified in [24]. The AAA proxy will just forward this procedure to the WLAN AN through Wr interface if the latter supports Diameter. If it supports [appropriate RADIUS extensions](#), the AAA proxy will map the procedure to the RADIUS messages Disconnect-Request and Disconnect-Response as specified in [25].