

CR-Form-v7

CHANGE REQUEST

⌘ **33.cde** CR **CRNum** ⌘ rev **-** ⌘ Current version: **0.1.0** ⌘

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:	⌘ Changes to UICC are allowed		
Source:	⌘ Gemplus		
Work item code:	⌘ WLAN interworking Security	Date:	⌘ 02/10/2002
Category:	⌘ F	Release:	⌘ Rel-6
	<i>Use one of the following categories:</i> F (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.		<i>Use one of the following releases:</i> 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:	⌘ To address the security requirements of WLAN interworking, some changes to the UICC shall be possible.
Summary of change:	⌘ Removal of the security requirement concerning changes to the UICC.
Consequences if not approved:	⌘ This requirement could prevent security improvement for WLAN interworking.

Clauses affected:	⌘ 4.2						
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="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> </table> Other core specifications	Y	N	<input type="checkbox"/>	<input checked="" type="checkbox"/>	⌘	
Y	N						
<input type="checkbox"/>	<input checked="" type="checkbox"/>						
	<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="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> </table> Test specifications	Y	N	<input type="checkbox"/>	<input checked="" type="checkbox"/>	⌘	
Y	N						
<input type="checkbox"/>	<input checked="" type="checkbox"/>						
	<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="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> </table> O&M Specifications	Y	N	<input type="checkbox"/>	<input checked="" type="checkbox"/>	⌘	
Y	N						
<input type="checkbox"/>	<input checked="" type="checkbox"/>						
Other comments:	⌘						

4.2 Security Requirements

[Editor's note: These requirements are copied from TS 23.xxx v0.1.0 for the first version of this TR, and shall be reviewed and updated according to the input from the preceding sections]

- Legacy WLAN terminals should be supported.
- Minimal impact on the user equipment, i.e. client software.
- The need for operators to administer and maintain end user SW should be minimized
- Existing UICC cards should be supported. ~~The solution as such should not require any new changes to the UICC cards.~~
- Changes in the HSS/HLR/AuC should be minimized.
- The security data, i.e. long-term keys, which are stored on the UICCcard must not be sent from the card itself. Instead the interface to the UICC card should be of type challenge-response, i.e. a challenge is sent to the UICC card and a response is received in return.
- The user should have same security level for WLAN access as for 3GPP access.
- Mutual Authentication should be supported
- The selected Authentication solution should also allow for Authorisation
- Methods for key distribution to the WLAN access NW shall be supported
- Selected WLAN authentication mechanisms for 3GPP interworking shall provide at least the same security as 3GPP System authentication procedure
- Subsequent WLAN re-authentication shall not compromise the requirement for 3GPP System equivalent security
- Selected WLAN Authentication mechanisms for 3GPP interworking shall support agreement of session keying material.
- Selected WLAN key agreement and key distribution mechanism shall be secure against man in the middle attacks. In other words, a man in the middle shall not be able to learn the session key material.
- The WLAN technology specific connection between the WLAN UE and WLAN AN shall be able to utilise the generated keying material for protecting the integrity of an authenticated connection
- It shall be possible to store all long-term security credentials used for subscriber and network authentication in a tamper proof memory such as the UICC card.