3GPP TSG SA 3 Meeting #15 Washington, 12-14 September 2000

Document \$3-000545

e.g. for 3GPP use the format TP-99xxx or for SMG, use the format P-99-xxx

CHANGE REQUEST Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly.					
		3 <mark>3.102</mark> CR	0xx	Current Versi	on: 3.5.0
GSM (AA.BB) or 3G (AA.BBB) specification number ↑					
For submission		for approva		strate non-strate	
Proposed change affects: (at least one should be marked with an X) (U)SIM X ME UTRAN / Radio Core Network X					
Source:	Vodafone			<u>Date:</u>	4 September 2000
Subject:	Removal of duplic reference to 02.48			essaging and add	dition of a
Work item:	Security				
Category: (only one category Shall be marked With an X)	Corresponds to a Addition of feature Functional modific	e cation of feature	arlier release	Release:	Phase 2 Release 96 Release 97 Release 98 Release 99 Release 00
Reason for change:	To avoid duplication delete some text in new formulation for in 33.102.	n 33.102 and inclu	ude a reference	to 02.48 and 03.4	
Clauses affected: 2.2, 5.4.1, 8.1					
Other specs Affected:	Other 3G core spec Other GSM core specifications MS test specificatio BSS test specifications	ns	 → List of CRs: 		
Other comments:	This CR should be t	forwarded to T3 fo	or information.		
help.doc					

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

** Add new reference to section 2.2 **

2.2 Informative references

[x] 3G TS 31.111, USIM Application Toolkit

** Next modified section **

5.4 Application security

5.4.1 Secure messaging between the USIM and the network

<u>USIM Application Toolkit</u>, as specified in 3G TS 31.111 [x]. It is expected that 3GMS will_provides the capability for operators or third party providers to create applications which are resident on the USIM (similar to SIM Application Toolkit in GSM). There exists a need to secure messages which are transferred over the 3GMS-network to applications on the USIM, with the level of security chosen by the network operator or the application provider.

Security features for USIM Application Toolkit are implemented by means of the mechanisms described in GSM 03.48 [19]. These mechanisms address the security requirements identified in GSM 02.48 [16].

The following security features are provided with respect to protecting messages transferred to applications on the USIM over the 3GMS network:

- Entity authentication of applications: the property that two applications are able to corroborate each other's identity.
- Data origin authentication of application data: the property that the receiving application is able to verify the
 claimed data origin of the application data received;
- Data integrity of application data: the property that the receiving application is able to verify that application data has not been modified since it was sent by the sending application;
- Replay detection of application data: the property that an application is able to detect that the application data
 that it receives is replayed;
- Sequence integrity of application data: the property that an application is able to detect that the application data that it receives is received in sequence;
- **Proof of receipt:** the property that the sending application can proof that the receiving application has received the application data sent.
- Confidentiality of application data: the property that application data is not disclosed to unauthorised parties.

NOTE: It is assumed that these security features will be based on GSM SIM Application Toolkit security features. Further work is required to identify what enhancements need to be made to SIM Application Toolkit security. Possible areas of enhancement may include: key management support, enhancement of security mechanisms/features, increased flexibility in algorithm choice and security parameter size. A joint 3GPP TSG SA 'Security'/3GPP TSG T 'USIM' working group may be required to progress this issue.

8 Application security mechanisms

8.1 Secure messaging between the USIM and the network Void

This clause will specify the structure of the secured messsages in a general format so that they can be used over a variety of transport channels between an entity in a 3GMS network and an entity in the USIM. The sending/receiving entity in the 3GMS network and in the USIM are responsible for applying the security mechanisms to application messages as defined to provide the security features identified in 5.4.1.

Note: A joint 3GPP TSG SA 'Security'/3GPP TSG T 'USIM' working group may be required to progress this issue.

8.2 Void