

Liaison statement

To: SMG1, SMG2, SMG3, SMG9, SMG10, 3GPP TSGs: S1, S2, S3, N2, R2, T3

From: 3GPP TSG SA

Title: Liaison statement on usage of GSM-only SIM Cards

For: Discussion and response

3GPP TSG SA received the attached document SP-99143 on the subject of GSM/UMTS interworking with regard to SIM and USIM. The discussion of the document lead to the conclusions summarised in the attached document SP-99208.

The addressed groups are invited to comment on the implications of the decision given in SP-99208.

Attachments: SP-99143: "Discussion Document on GSM/UMTS "interworking" with regard to SIM and USIM".
SP-99208: "SIM/USIM Compromise".

3GPP TSG-SA-3#2
Stockholm, 23-25 March

Tdoc S3-99-080

LIAISON STATEMENT

Source: 3GPP SA 3 (Security Aspects)

To SMG#29, SMG1, TSG-SA, TSG -SA WG1

Discussion Document on GSM/UMTS "interworking" with regard to SIM and USIM.

There is a service requirement that a UMTS Terminal shall support a GSM SIM, however, some have raised concerns over the security aspects of this. (This requirement is expressed in a "position paper" on the USIM originated in SMG9 and approved at SMG#27, Tdoc 98-624, with a further piece of added text added to it and approved at SMG#28.)

It has also been expressed that it would be useful if a UMTS USIM could work if inserted into a GSM terminal, although this is not a firm service requirement.

Consider the matrix below:

		Mobile type	
		GSM	UMTS
Card type	SIM	OK	GSM level of service, and GSM level of security
	USIM with a SIM installed	If a GSM application is available and "visible", GSM service will be offered, at GSM level of security	OK, enhanced UMTS security

In order to allow the combination of a SIM installed in a UMTS Mobile, the UMTS security system will have to deal with GSM security, i.e. the 64 bit Kc, in addition to the new and improved pure UMTS security.

3GPP Security group would like to make the point that the service represented in the top right box could extend some of the GSM security weaknesses into UMTS. Please see the attached LS from SMG10 which highlights some of the concerns.

SMG10 #4/98
Paris, 17-20 November, 1998

Tdoc SMG10 98P 315

To: SMG1, SMG#28
From: SMG10

Liaison Statement on the use of GSM SIMs as access devices for UMTS

SMG10 has reviewed document 22.00, v1.2.1.

SMG10 notes requirement 9 (2), specifically, that:

“The UMTS mobile terminal shall support phase 2 and phase 2+ GSM SIMs as access modules to UMTS networks”

This requirement (in spite of the option of operators not to accept GSM SIMs as access modules) will mean that UMTS has to support two security architectures for UMTS, an improved UMTS architecture, and the GSM security architecture. SMG10 believe this is a complex and involved task for the specification of the terminal and the network that can only be justified by firm service requirements. Further, the work that SMG10 has done in devising improved security for UMTS is rendered of little use if operators are allowed to revert to GSM security on their UMTS networks.

SMG10 therefore ask SMG1 to reconsider the requirement for UMTS to support phase 2 and phase 2+ GSM SIMs as access modules to UMTS networks and, to consider whether the requirement is really necessary or not.

Source: Leadership TSG SA
Title: SIM/USIM Compromise
Document for: Approval
Agenda Item: 5.3

A compromise solution proposes to:

- 1) support access to UMTS access networks while using cards equipped with either the GSM SIM, the UMTS SIM functionality or both as shown in the diagram in SP-99143 (all four blocks in the diagram shown below) and
- 2) allow a serving UMTS operator the option to block access to the UMTS access network when a card equipped only with a GSM SIM is used.

In order to ensure functionality of the above compromise it is recognized that at least the following functionality will be required

- possibility for the network to detect the type of SIM used
- possibility for the network to restrict the access of GSM-only SIM user to the GSM access portion of a PLMN

It was the assumption of the meeting that the companies (operators and their vendors) who require this capability should do the work on the signaling and mechanisms necessary to assure GSM functionality (security, authentication mechanism, services, etc.) are present in the UMTS specifications.

		Mobile type	
		GSM	UMTS
Card type	SIM	OK	GSM level of service, and GSM level of security
	USIM with a SIM installed	If a GSM application is available and "visible", GSM service will be offered, at GSM level of security	OK, enhanced UMTS security