TSG-SA WG1 SWGs #21   **S1-030966**
Sophia Antipolis, France, 7th–11th June 2003   **Agenda Item: 10.9**

3GPP TSG SA WG1 Services Aspects — SA1#21
7-11 July 2003
Sophia Antipolis, France

Title:	Reply LS on WLAN Interworking requirements for SIM and USIM
Response to:	S3-030306 (Reply LS on 'Request for Information Regarding WLAN Interworking Impacts to UICC applications') and T3-030411 (LS on WLAN interworking)

Source:	SA1
To:	SA3, T3
Cc:	SA2, EP SCP

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SA1 thanks SA3 and T3 for their guidance thus far on the impacts to UICC applications for WLAN interworking. SA3 and T3 have both asked SA1 to clarify and/or reaffirm the service requirements for (U)SIM authentication of I-WLAN subscribers. Further, T3 have identified three technical solutions that they feel meet the current SA1, SA2, SA3 requirements:

1) EAP-SIM (using a legacy SIM): possible consequences are:
- no need to change 2G HLR nor SIMs
- security threats as identified by SA3
- impact on T3 specs: none (all mechanisms in S3 specs)

2) Secured EAP-SIM (using an enhanced SIM): possible consequences are:
- no need to change the 2G HLR
- need to replace or upgrade the SIM
- impact on T3 specs : yes, and there is the issue that the SIM specification (TS 51.011) is frozen.
- Some non-security related additions could be useful: provisioning files, etc…

3) EAP-AKA (using a USIM): possible consequences are:
- need a 3G HSS/HLR (might be necessary anyway in Rel-5, because Rel-5 GSM terminals support USIM)
- this could work with legacy USIMs (R99 to Rel-5), some enhancement might also be proposed (Rel-6)
- impact on T3 specs : none if existing USIM (R99 to Rel-5) is used
- Some non-security related additions could be useful: provisioning files, etc…

SA1 have discussed these 3 technical solutions and have reached the following consensus on each.

1) EAP-SIM (using a legacy SIM): There is strong support for specification of authentication in I-WLAN using SIM. SA1 are aware of the potential security risks associated with this solution however there is significant interest in providing SIM based authentication with the current generation of SIMs and HLR/AuC without upgrades.

2)   Secured EAP-SIM (using an enhanced SIM): There is currently not enough support for an enhanced SIM specification for authentication of I-WLAN. Operators are not inclined to standardize an enhanced version of SIM in 3GPP at this time.

3)   EAP-AKA (using a USIM): Specification of I-WLAN authentication using USIM must be included in 3GPP Release 6. We fully expect that operators will evolve I-WLANs from SIM to USIM and we encourage T3 to leverage USIM advanced capabilities for WLAN Interworking.

SA1 hopes that our position on each of these technical solutions fully articulates the service requirements to SA3 and T3 for SIM and USIM WLAN Interworking.

Actions: Note previous comments for I-WLAN.

Date of Next SA 1 Meetings: October 27 – 31, 2003 and January 12 – 16, 2004