

November 23-26, 2004**Shenzhen, China**

Title: LS on Control of simultaneous accesses for WLAN 3GPP IP access
Release: Rel-6
Work Item: WLAN Interworking

Source: SA3
To: SA2, CN1, CN4
Cc: -

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Attachments: None.

SA3 has studied the problem of simultaneous accesses in WLAN 3GPP IP access (scenario 3).

The purpose of the simultaneous session control in scenario 3 is to restrict (in the 3GPP home network) the connections that a certain user can have simultaneously at a certain moment. This will help to prevent potential fraud situations, for example that a user is giving access to his/her (U)SIM to several devices. These devices access the (U)SIM to get security credentials and authenticate successfully to the 3GPP home network. Thereby, with only one subscription, an unlimited number of people get access to the 3GPP network.

SA3 has concluded that a suitable mechanism to have this control in the 3GPP home network is to limit the IKEv2 security associations per W-APN that can be active at the same time. As the activation of a W-APN implies the creation of a new IKE Security Association, the 3GPP home network has to detect and limit the number of attempts of IKE Security Associations.

This is possible because the 3GPP AAA server has to be contacted when a new IKE SA is to be established. When this happens, the 3GPP AAA server will receive an EAP authentication attempt, and shall proceed checking the W-APN active flag, as follows: If the W-APN to be setup is already active, the existing IKE SA(s) for that W-APN will be deleted (the AAA server will have to point the PDG to do so).

For this purpose, the AAA server will have to maintain an "active yes/no" flag for every subscribed W-APN. This will limit the IKE SAs per W-APN to one. SA3 does not identify any case in which more than one IKE SA per W-APN is needed.

Actions:

SA3 kindly asks SA2, CN1 and CN4 to consider the mechanism described above and introduce the corresponding changes in their respective technical specifications if needed.

Date of Next TSG-SA3 Meeting:

SA3#37

21st – 25th February 2005

Sophia Antipolis, Frances