

Title: LS reply on WLAN/3GPP Simultaneous Access
Source: 3GPP TSG SA WG1
To: 3GPP TSG SA2
Cc: 3GPP TSG SA3, T3

Contact Person:

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1. Overall Description:

SA1 would like to thank SA2 for the LS "WLAN/3GPP Simultaneous Access" (Tdoc S2-030279, S1-030338). SA1 has considered the questions and arrived at the following answers:

Question 1. Are there any requirements mandating or prohibiting simultaneous WLAN and 3GPP access?

SA1 answer: Yes. Simultaneous WLAN and 3GPP access must be possible and architectural choices must not prevent or preclude simultaneous access.

Simultaneous usage of both radio access technologies will depend on the requirements of the user's application, the capabilities of the UE and the coverage of the radio access technologies. The standards shall not preclude the simultaneous use of both WLAN and 3GPP radio access technologies.

TR 22.936 v6.1.0 , Section 6.4.1 Service Aspects says:

The user's actions related to service invocation should be the same when using either the WLAN or the 3GPP system.

TSG-SA #19 approved CR#114 to TS 22.101 v6.2.0 (SP-030022) on Simultaneous connection to 3GPP systems and I-WLANs (Rel-6) with the following addition:

4.8.2 Simultaneous Connection to I-WLANs and 3GPP systems

The 3GPP system shall support simultaneous connection to an I-WLAN and to the 3GPP systems for the following scenarios:

·For an integrated WLAN/3GPP device the user shall be able to make or receive a CS domain call without the need to drop the connection to the I-WLAN and visa versa.

·For an integrated WLAN/3GPP device the user shall be able to connect to both the PS domain and to the I-WLAN at the same time, to access different services. For example, this will allow the user to access the Presence service via the 3GPP system and the internet via the I-WLAN.

The user shall be able to connect simultaneously to the 3GPP system and the I-WLAN with multiple devices (which have separate UICCs) on the same subscription.

Question 2: Does simultaneous access apply to the same set of services or is it intended that different set of services be available over each access? (i.e. is it envisaged to allow a single UE connected to both 3GPP and WLAN to access simultaneously different services depending on the access?)

SA1 answer: Most likely not all services will be available over both I-WLAN and 3GPP accesses. Hence it shall be possible to access, e.g., IMS or MMS over 3GPP PS and simultaneously the Internet over WLAN. Whether a certain service is simultaneously available over both accesses may be service-specific. Currently we have not determined the need to access the same service simultaneously, this is for further study. For example Internet access or intranet access (such as access to a private intranet) may be supported simultaneously over both accesses.

Question 3: Is there a stage 1 requirement that ensures that a GPRS user is not detached or that PDP context is not de-activated when a user enters WLAN coverage?

SA1 answer: Yes. This is an important requirement for all scenarios and for any pre-release 6 implementations. This is because in early I-WLANs (pre-R6 and R6 scenario 2 compliant), I-WLAN may only provide access to a subset of the services that will be available over 3GPP PS. For example, I-WLAN may only provide Internet access while all the other services are only available over 3GPP PS. Therefore, entering WLAN coverage or establishing a WLAN session shall not de-activate or detach user's simultaneous GPRS sessions/PDP contexts.

In addition, the existence of GPRS PDP contexts or GPRS attachment shall not prevent the user from establishing WLAN sessions. This is because non-3GPP-operator WLAN sessions will anyway be possible, thus it would be highly undesirable to "eject" users from WLAN networks that are not provided by the home 3GPP operator.

Question 4: Does simultaneous access have any impact on networks fraud detection capability (for instance, multiple simultaneous authentication using the same SIM, multiple simultaneous online debit, etc.)

SA1 answer: Currently, simultaneous 3GPP PS and CS are possible, so at minimum, similar fraud detection considerations shall apply for simultaneous WLAN and 3GPP PS/CS [TS 33.102]. This issue is tightly related to I-WLAN security, which is being worked on in 3GPP SA3. Possibly a LS reply from SA3 will clarify this issue more.

2. Actions:

SA2 is kindly asked to consider the replies given in Section 1 of this document in their architectural work.

3. Date of Next TSG SA WG1 Meetings:

Title	Date	Location	Country
SA1#21 SWG	May 12-16, 2003	San Diego	USA
SA1#21	July 7-11, 2003	Sophia Antipolis	France
SA2#22	October 27-31, 2003	Asia	TBD