# Technical Specification Group Services and System Aspects **TSGS#19(03)0022** Meeting #19, Birmingham, UK, 17-20 March 2003

Source: SA1

Title: CR to 22.101 on Simultaneous connection to 3GPP systems and

I-WLANs (Rel-6)

**Document for:** Approval

Agenda Item: 7.1.3

SA Doc	Spec	CR	Rev	Phase	Cat	Subject	Old Vers	New Vers	SA1 Doc
SP-030022	22.101	114	-	Rel-6	В	Simultaneous connection to 3GPP systems and I-WLANs	6.2.0	6.3.0	S1-030215

CR-Form-v7 CHANGE REQUEST Current version: 6.2.0 22.101 CR 114 **#rev** For **HELP** on using this form, see bottom of this page or look at the pop-up text over the \mathbb{H} symbols. UICC appsж X ME X Radio Access Network Core Network X Proposed change affects: Title: Simultaneous Connection to I-WLANs and the 3GPP systems Source: 第 SA1 (WLAN SWG) Date: # 22/01/2003 В Release: # Rel-6 Category: Use one of the following categories: Use one of the following releases: (GSM Phase 2) **F** (correction) 2 A (corresponds to a correction in an earlier release) R96 (Release 1996) **B** (addition of feature), R97 (Release 1997) **C** (functional modification of feature) R98 (Release 1998) **D** (editorial modification) (Release 1999) R99 Detailed explanations of the above categories can Rel-4 (Release 4) be found in 3GPP TR 21.900. Rel-5 (Release 5) Rel-6 (Release 6) Reason for change: # There are use cases when simultaneous access to the 3GPP system and an I-WLAN are required. For example, for an integrated WLAN/3GPP device the user will want to maintain the WLAN connection when an incoming call is received. The user should not be forced to drop the WLAN connection to take the voice call. Summary of change: # In section 4.8, a new subsection has been included

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#### How to create CRs using this form:

**3 4.8** 

Consequences if

Clauses affected:

Other comments:

not approved:

Other specs

affected:

Comprehensive information and tips about how to create CRs can be found at <a href="http://www.3gpp.org/specs/CR.htm">http://www.3gpp.org/specs/CR.htm</a>. Below is a brief summary:

Other core specifications

Test specifications

**O&M Specifications** 

**光 Limitations on user access.** 

1) Fill out the above form. The symbols above marked \( \mathcal{H} \) contain pop-up help information about the field that they are closest to.

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- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <a href="ftp://ftp.3gpp.org/specs/">ftp://ftp.3gpp.org/specs/</a> For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

# 4.8 Interworking Between PLMN and Wireless LANs

## 4.8.1 General

WLAN-3GPP system interworking is defined as a wireless IP connectivity service where the user obtains access via a Wireless LAN technology. It shall be possible to deploy the WLAN as an integral part of the 3GPP system or the two systems can be separate.

The 3GPP system shall be capable of interworking with one or more WLANs and a WLAN shall be capable of interworking with one or more 3GPP systems see figure 0.

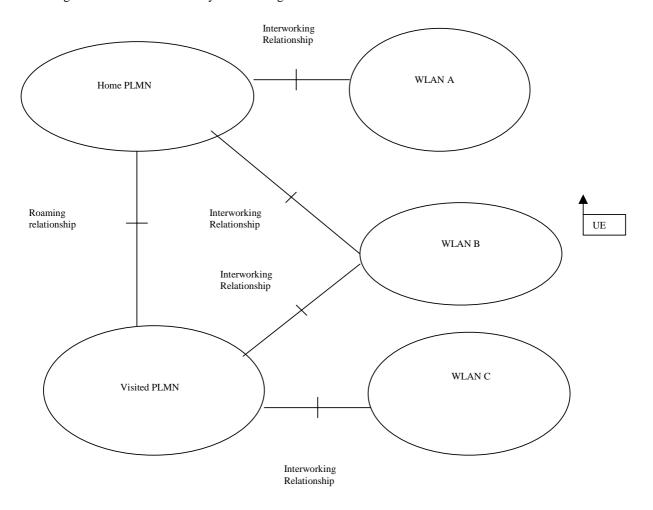


Figure 0: WLAN-3GPP system Interworking Relationships

Selection of the network is defined in TS 22.011 [11]

The service is subject to a 3GPP system subscription see section 15. Both IPv4 and IPv6 connectivity via a Wireless LAN (WLAN) shall be supported.

It is an operator decision as to the level of interworking supported. This can be broadly grouped as:

- 1. 3GPP based access control and charging. The user shall be able to access general internet services and/or corporate intranets. (Scenario 2 of TR 22.934 [32])
- 2. Access to 3GPP PS based services, e.g. IMS. (Scenario 3 of TR 22.934 [32])
- 3. Access to 3GPP PS based services with service continuity. The user mayor may not notice a disruption in service, depending upon the level of service continuity supported. This is further defined in TS 22.129 [9]. (Scenarios 4 and 5 of TR 22.934 [32])

NOTE: Further information on these levels of interworking and the use cases supported can be found in TR 22.934 [32].

In addition to the general requirements on I-WLAN defined in the present document, the following requirements apply:

- 1. When enabling access to 3GPP services that require separate authentication and access control, such as IMS, the service authentication and access control mechanisms for that service shall be used.
- 2. It should be possible to provide access via I-WLAN on deployed WLAN devices.

### 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.