Technical Specification Group Services and System Aspects
Meeting #22, Maui, Hawaii, USA, 15-18 December 2003

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Source:	**SA1**
Title:	**Update of WLAN WID**
Document for:	**Approval**
Agenda Item:	**7.1.3**

TSG-SA WG 1 (Services) meeting #22 **S1-031341**
Bangkok Thailand, Oct. 27 - 31 **Agenda Item: 10.9**

Title: **Updated WLAN Interworking WID**

Source: **rapporteur**

Work Item Description

Title

3GPP system - WLAN- Interworking

1 3GPP Work Area

	Radio Access
X	Core Network
X	Services

2 Linked work items

Linked Building Blocks to be defined.

3 Justification

There is an increasing demand for wireless 'local area' access in very different scenarios. Wireless access to Internet is provided to public users by the use of currently existing WLAN technology such as IEEE 802.11b. In companies wireless access is provided to portable computer users by use of the same technology. For residential use wireless access is also increasing. 3rd generation technologies and systems will provide bearers for similar packet switched services, with greater mobility and wider area coverage albeit with reduced data rate.

WLAN technology can complement 3GPP based networks in deployment environments with high user density and demand for higher data rates. However, in order to provide flexible use of both technologies in these environments and to provide mobility of services between the two technologies it is sensible that some degree of interworking exists between the two technologies/systems.

4 Objective

The purpose of the work is twofold

- Continue the feasibility study
- Proceed with specification work

The purpose of the feasibility study is to study a generic interworking functionality between 3GPP system and WLAN systems (e.g. IEEE 802.11 family, HIPERLAN/2, …). In specific it aims at:

- Study the service requirements for Interworking scenarios.
- Study the different possible architectures for interworking.

The feasibility study has identified several Interworking scenarios. Scenario 2 provides an IP

connectivity via WLAN system for 3GPP subscribers. In that scenario access control and charging are 3GPP system based.

The specification work will aim at specifying the service and operational requirements for Interworking scenarios, beginning with scenario 2.

5 Service aspects

Service aspects should assess service requirements and the support of UMTS services over the WLAN radio access.

6 MMI aspects

MMI aspects should define a minimum set of functions to support the choice of access system by the user and/or terminal for when both access systems are available.

7 Charging Aspects

Both charging requirements and charging architecture should be studied. In particular it should considered whether WLAN charging should be integrated with the UMTS charging architecture or not.

8 Security Aspects

Security requirements should be studied given the prerequisite that a) the security level of the UMTS platform itself is not impacted, b) the security level provided to users in the WLAN mode is comparable to the one of UMTS.

9 Impacts

Affects:	USIM	ME	AN	CN	Others
Yes					
No					
Don't know	X	X	X	X	X

10 Expected Output and Time scale (to be updated at each plenary)

New specifications						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
TR 22.934	Feasibility study on 3GPP system to Wireless Local Area Network (WLAN) interworking	SA1	SA2	SA#15	SA#16	Completed
TS 22.234	I-WLAN Stage 1 Service Requirements	SA1	SA2	SA#23	SA#25	

Affected existing specifications				
22.101		Service principles		SA1
22.115		Charging and Billing		SA1

11 Work item rapporteurs

Mark Younge, T-Mobile USA

12 Work item leadership

SA1 (secondary SA2)

13 Supporting Companies

Alcatel, BT, Ericsson , Lucent, Nokia, Nortel Networks, Orange, TeliaSonera, T-Mobile, Toshiba, Vodafone.
~~Telenor, Ericsson, Telia, Nokia, Sonera, Voicestream, Nortel, Alcatel, Toshiba, Cisco, Vodafone.~~

14 Classification of the WI (if known)

The work item is a feature