Technical Specification Group Services and System Aspects ***TSGS#17(02)0542***
Meeting #17, Biarritz, France, 9-12 September 2002

Source: **TSG SA WG2**
Title: **Proposed Updated WID for 3GPP-WLAN Interworking**
Agenda Item: **7.2.3**

In TSG SA#15 a feasibility study type of SA2 work item *WLAN Interworking – Architecture Definition* was created.

SA2 architecture definition work has converged to a specific 3GPP-WLAN interworking architecture where the WLAN access to 3GPP system is independent of existing 3GPP PS and CS domains as well as the existing 3GPP RANs - UTRAN and GERAN. The current status of this feasibility study work is documented in the TR 23.934 (attached).

The set of functionalities provided by the identified architecture in TR 23.934 is in line with the service requirements identified by TSG SA1 for their scenario 2 type of 3GPP-WLAN interworking [TR 22.934]. At TSG SA#15 SA1 was mandated to create stage 1 specifications for such scenario 2 type of 3GPP-WLAN interworking system.

This updated SA2 work item description proposes that the current SA2 feasibility study type of work item is similarily modified into a work item for creation of stage 2 specifications for the identified "3GPP WLAN subsystem".

It is further proposed that the current contents of the SA2 TR 23.934 is moved into a new stage 2 3GPP Technical Specification *TS 23.xxx WLAN Subsystem, System Description*. The TR 23.934 will be maintained and it will be used for documenting further feasibility study results about more advanced interworking functionalities which are not in the scope of the new TS.

The proposed updated work item description is below.

Work Item Description

Title

WLAN Interworking – Architecture Definition and stage 2 definition of WLAN access and Interworking ~~subsystem~~

1 3GPP Work Area

X	Radio Access
X	Core Network
X	Services

2 Linked work items

TSG SA1: 3GPP system - WLAN Interworking

3 Justification

The ~~current~~ study work within SA1, described in 3GPP system - WLAN Interworking WID, covered~~s~~ requirements aspects of WLAN-3GPP system Interworking. The SA1 feasibility study work item was later converted into stage 1 work item for a specific type of 3GPP-WLAN interworking. ~~This WI will complement this study with architectural considerations.~~

The study work conducted within SA2 feasibility study work item *WLAN Interworking – Architecture Definition* has converged to a specific 3GPP-WLAN interworking access control and charging architecture being independent of existing 3GPP PS and CS domains as well as the existing 3GPP RANs, UTRAN and GERAN.

The set of functionalities provided by the identified architecture is in line with the scope of the stage 1 service requirements being identified by TSG SA1. SA2 work item for creation of stage 2 specifications for such a 3GPP-WLAN interworking architecture is the natural next step in the 3GPP specification process.

Feasibility study of more advanced interworking functionalities, i.e. related to scenarios 4 and above, need~~s~~ to be progressed.

4 Objectives

~~The purpose of this work is to study a generic interworking functionality between 3GPP system and WLAN systems (e.g. IEEE 802.11 family, HIPERLAN/2, MMAC HISWAN). In specific it aims at identifying and analysing potential Interworking architectures.~~

The objective is to create a 3GPP stage 2 technical specification document *TS 23.xxx* WLAN access Interworking ~~*WLAN Subsystem, System Description.*~~ The 3GPP WLAN subsystem is assumed to provide bearer services for connecting a 3GPP subscriber via WLAN to IP based services compatible with those offered via PS domain, e.g. IMS. Functionality related to scenarios 4 and 5 as defined by SA1 Work Item are out of scope of this TS for release 6.

5 Service aspects

See parent Work Item.

6 MMI aspects

See parent Work Item.

7 Charging Aspects

See parent Work Item.

8 Security Aspects

See parent Work Item.

9 Impacts

Affects:	USIM	ME	AN	CN	Others
Yes		X		**X**	
No					
Don't know	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 23.934.	3GPP system to Wireless Local Area Network (WLAN) interworking – Architecture aspects	SA2		SA#17	~~SA#18~~	TR
TS 23.XXX	WLAN Subsystem, System Description	SA2		SA#17	SA#18	TS
Affected existing specifications						
TS 23.002						
-						

11 Work item rapporteurs

Frederic Paint, Telenor

12 Work item leadership

SA2

13 Supporting Companies

Telenor, Telia, Ericsson, Motorola, Vodafone, Lucent, Telefonica, Fujitsu, Nokia, Siemens. Orange, T-Mobile, Sonera, Cisco , Alcatel, Intel, Toshiba, Telecordia, LG Electronics, Megisto Systems Inc., China Mobile.

~~[to be added]~~

14 Classification of the WI (if known)

The work item includes ~~is~~ a feasibility study as well as~~and~~ stage 2 specification of 3GPP WLAN subsystem.

The parent work item is TSG SA1 3GPP system - WLAN Interworking