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|---|---|
| **Source:** | **SA1** |
| **Title:** | **New WI on LCS for 3GPP Interworking WLAN** |
| **Document for:** | **Approval** |
| **Agenda Item:** | **7.1.3** |

## Work Item Description

Title: LCS for 3GPP Interworking WLAN

**1        3GPP Work Area**

|   | |
|---|---|
|   | Radio Access |
| X | Core Network |
| X | Services |

## 2        Linked work items

31012 WLAN-UMTS interworking
32023 LCS Enhancements

## 3        Justification

The 3GPP has developed and continues to develop Location Services (LCS) requirements and standards for GSM and UMTS.  To further the advancement of LCS within the 3GPP, LCS requirements and standards may be extended for 3GPP WLAN interworking to support the same location-based services that have been deployed today for GSM and UMTS. LCS with 3GPP WLAN Interworking system is considered to enlarge the area of location service.

This work item proposes that a feasibility study be performed to outline the technical requirements, scope of work required, and perform a gap analysis to determine whether existing 3GPP specifications can support LCS requirements for 3GPP WLAN interworking. If it is determined that providing for this service is feasible, then this work item will continue forward to encompass future work.

## 4        Objective

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

- Study the LCS requirements for 3GPP WLAN Interworking scenarios.
- Study the different possible LCS architectures for interworking.

**5        Service Aspects**

Service aspects should assess service requirements and the support of LCS over integrated 3GPP WLAN.

# 6        MMI-Aspects

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

# 7        Charging Aspects

Both charging requirements and charging architecture should be studied. In particular it should be considered whether or not WLAN charging for LCS should be integrated with the architecture for UMTS charging for LCS. The charging for LCS will follow the charging aspects of 3GPP WLAN Interworking.

# 8        Security Aspects

Security requirements for LCS for 3GPP WLAN interworking 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: | UICC apps | 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.XXX | Feasibility study on 3GPP system to Wireless Local Area Network (WLAN) Interworking with LCS | SA1 | SA2 | SA#25 | SA#26 | |
| | | | | | | |
| Affected existing specifications | | | | | | |
| Spec No. | CR | Subject | | Approved at plenary# | | Comments |
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# 11        Work item raporteurs

Mike Loushine, Telcordia
Vijay Varma, Telcordia

**12**          **Work item leadership**

SA1 (secondary SA2)

**13**          **Supporting Companies**

Telcordia, Samsung, Qualcomm, BT

## 14 Classification of the WI (if known)

To be determined by the Feasibility Study.

|   |   |
|---|---|
|   | Feature (go to 14a) |
| X | Building Block (go to 14b) |
|   | Work Task (go to 14c) |

14a    The WI is a Feature: List of building blocks under this feature

To be determined by the Feasibility Study.

14b    The WI is a Building Block: parent Feature

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14c    The WI is a Work Task: parent Building Block

To be determined by the Feasibility Study.