TSG-RAN Meeting #11

RP-010009

Palm Springs, CA, USA, 13 - 16 March 2001

(S2-002113, to TSG-RAN) LS on Provision of Open Interfaces within the GERAN & UMTS for LCS Support

Source: 3GPP SA2

To: 3GPP TSG-SA, 3GPP TSG-RAN, 3GPP TSG-SA1, 3GPP TSG-RAN2, 3GPP TSG-RAN3, 3GPP TSG-GERAN, GSM NA

CC: GSMA

Title: Provision of Open Interfaces within the GERAN & UMTS for LCS Support

3GPP TSG-SA2 would like to thank GSM NA and 3GPP TSG-SA1 for their liaison statements regarding open interfaces for LCS support. These liaison statements were discussed within 3GPP TSG-SA2 along with a proposed work item (attached, TSG S2-002030) which was seen as an overall work item needing refinement. The work item was approved in principle but the following issues were raised:

- This work item spans multiple working groups and affects many specifications outside S2
- This work item has internal UTRAN architectural impacts
- The work item introduces concerns on the functional split between core and network access
- It was not clear from the discussions whether the positioning is an exclusive radio functionality or needing network involvement.

As a result of the above mentioned concerns, a workshop was proposed. The goal of the workshop would be to ensure that the issues raised in the liaison statements and work item were assigned to the appropriate working groups and to discuss issues and overall project management.

It is recommended that the date and place of the workshop be decided at the upcoming TSG meetings in Bangkok in December.

Attached for your information are the work item agreed by SA2, the GSM NA liaison statement, and the 3GPP TSG-SA1 liaison statement.

Tdoc S2-002030

3GPP TSG_SA 2

Makuhari, Japan

13th – 17th November 2000.

Source: Pacific Bell Wireless

Title: Work item description for Open Location Services Interfaces in UMTS and GERAN

Document for: APPROVAL

Work Item Description

1

Title: Open Location Services Interfaces in UMTS and GERAN

2

1 3GPP Work Area

| Х | Radio Access |
|---|--------------|
| Х | Core Network |
| | Services |

2 Linked work items

335 Location Services
336 FS on Geographical Area Description
337 Event Based and Periodic LS
341 LCS Network Management
343 LCS support in the CS domain
344 LCS support in the PS domain
350 LCS interoperation Stage 2 Aspects
352 Position method enhancement in UTRAN
357 FS on LCS support in the IM CN subsystem

3 Justification

Location services functionality and open interfaces standardized in GSM Releases '98 and '99 is missing from the current 3GPP Release 2000 GERAN and UMTS.

Provision of the missing functionality and open interfaces is viewed as being important to carriers in providing an open flexible architecture, and ensuring smooth network evolution (architectural compatibility).

4 Objective

The objective of this work item is to provide support for functionally similar open interfaces and protocols

(to the degree possible) in UMTS and GERAN comparable to those provided in GSM Release 99. This includes provision of open interfaces between interfaces in UMTS and GERAN that would correspond to the following GSM interfaces:

- the BSC and the network based SMLC (Lb interface), and
- the MSC/VLR and the network based SMLC (Ls interface), and
- the LMU (Type A) and the BTS (over the air, Um interface), and
- the LMU (Type B) and the BTS (fixed connection interface), and
- the Cell Broadcast Center and the SMLC.

5 Service Aspects

None identified.

6 MMI-Aspects

None identified.

7 Charging Aspects

None identified.

8 Security Aspects

None identified.

9 Impacts

| Affects: | USIM | ME | AN | CN | Others |
|---------------|------|----|----|----|--------|
| Yes | | | Х | Х | |
| No | Х | Х | | | |
| Don't know | | | | | |

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

| | | | | New speci | fications | | |
|----------|--|----------------|------------------|----------------------|---|--|--|
| Spec No. | Title | | Prime rsp. WG | 2ndary rsp. WG(s) | Presented for information at plenary# | | Comments |
| | S SRNC – SMLC Location Protocol | | RAN 3 | RAN 2 | | | This interface would be analogous to the Lb interface. The starting points would be GSM 09.31 and GSM 08.71. |
| | S MSC/SGSN – SMLC Location Protocol | | CN X | SA 2 | | | This interface would be analogous to the Ls interface. The starting points would be GSM 09.31 and GSM 08.71. |
| | | | Affect | ed existing | specificatio | ons | |
| Spec No. | CR | Subject | | | | plenary# | Comments |
| 25.305 | UTRAN Stage 2 | | | | | High Level details presented in Tdoc S2- 001440. | |
| 25.331 | | RRC Protocol | | | | | High Level details presented in Tdoc S2- 001440. |
| 23.271 | LCS Stage 2 | | | | | | High Level details presented in Tdoc S- LCS000015. |
| 43.509 | GERAN Stage 2 | | 2 | | | | High Level details presented in Tdoc S- LCS000015. |
| 25.413 | | lu Interface | | | | | Will need to support CN Based SMLC |
| 23.041 | | Cell Broadcast | | | | | Will need to support interface to SMLC and SRNC to support LCS |

11 Work item raporteurs

Kirk Burroughs, Qualcomm, San Jose, California, USA

12 Work item leadership

SA 2

13 Supporting Companies

Vodafone, Voicestream, Pacific Bell Wireless, Orange, Bell South Mobility, Mannesmann, Lucent, Qualcomm, France Telecom, diAx.

14 Classification of the WI (if known)

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

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

N/A

14b The WI is a Building Block: parent Feature

N/A

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