3GPP TSG RAN#11 Palm Springs, USA, 13-16 March 2001

Source: Nokia, Hutchison 3G

Title: Work Item Description for an Open SMLC-SRNC

Interface within the UTRAN to support UTRAN Rel'4

positioning methods

Document for: Approval

Agenda Item: 6.11

Work Item Description

Title: Open interface between the SMLC and the SRNC within the UTRAN to support Rel'4 positioning methods

13GPP Work Area

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

2 Linked work items

None identified.

3 Justification

At the 3GPP LCS Work Shop held in London on 1/11/01 and 1/12/01 it was agreed standalone SMLC could be specified for A-GPS method and other positioning methods should be also considered for standalone SMLC.

4 Objective

The objective of this work item is to provide for support of an open interface between the SMLC and the SRNC within the UTRAN for the support of Rel'4 positioning methods positioning, i.e. Cell ID based. OTDOA based and A-GPS

Whether standalone SMLC is used or not needs to be transparent for the UE and will only impact the SRNC which supports standalone SMLC.

In UTRAN is shall be also transparent to other network elements besides SRNC, whether standalone SMLC or integrated SMLC is supported.

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 | | | X | | |
| No | X | X | | X | |
| Don't | | | | | |
| know | | | | | |

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

This is a Release 5 Work Item

| | | | | New speci | fications | | |
|----------|------------------------------------|--|------------------|-------------|---------------------------------------|---------|---|
| Spec No. | Title | | Prime rsp. WG | | Presented for information at plenary# | | Comments |
| New TR | R SRNC – SMLC Location Protocol | | RAN 2 | RAN 3 | RAN #12 | RAN #13 | See Note 1. |
| | | | Affect | ed existing | specificatio | ns | |
| Spec No. | CR | Subject | | | . • | | Comments |
| 25.401 | | UTRAN architecture description; Stage 2 | | | RAN #14 | | Add new lux interface and new SMLC network entity. |
| 25.305 | | UTRAN Stag | ge 2 | | RAN #14 | | Modify Network Reference Model add stage 2 call flows for Cell ID based, OTDOA and A-GPS positioning methods. |

Note 1: There exists (not yet RAN approved) a WI for A-GPS only, and in this case intention is to use the defined A-GPS call flows/messages/protocols when applicable assuming the interface is done with consideration for extending to other methods. Whether the same specification can be extended or whether a new one needs to be created is to be evaluated once the needed signalling elements are concluded.

To allow for a stand alone SMLC, a new interface is required between the SMLC and the SRNC. The SMLC principle will be such that the SRNC without intergrated SMLC can query the standalone SMLC for the position of the UE.

The measurement in support for LCS defined in Rel'99/Rel'4 for UE/LMU are usable for the SMLC and can be relayed by the SRNC to the standalone SMLC for UE location calculation purposes.

11 Work item raporteurs

Antti Toskala, Nokia, Finland

12 Work item leadership

RAN 2

13 Supporting Companies

Hutchison3g, Nokia, Siemens, Vodafone Group 14 Classification of the WI (if known)

| | 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

14b The WI is a Building Block: parent Feature UE positioning

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