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650 Route des Lucioles
F-06921 Sophia Antipolis Cedex - FRANCE

Tel.: +33 4 92 94 42 00 Fax: +33 4 93 65 47 16

Siret N° 348 623 562 00017 - NAF 742 C
Association à but non lucratif enregistrée à la
Sous-Préfecture de Grasse (06) N° 7803/88

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Contents

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1 Scope

The present document gives the stage 2 description of the Gateway Location Register (GLR) within the UMTS Core Network as a means of reducing the amount of MAP signalling traffic associated with location management carried over inter-PLMN links for roaming users.

The present document will be restricted of the case where the GLR supports one VPLMN only.

2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

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[1] 3GPP TS 22.003: "Teleservices Supported by a GSM Public Land Mobile Network (PLMN)".

[2] 3GPP TS 23.007: "Restore procedure".

[3] 3GPP TS 23.012: "Location management".

[4] 3GPP TS 23.018: "Basic call handling".

[5] 3GPP TS 23.040: "Technical realization of the Short Message Service (SMS); Point-to-Point (PP)".

[6] 3GPP TS 23.060: "General Packet Radio Service; Service description; Stage 2".

[7] 3GPP TS 23.171: "Location Services (LCS); Functional Description; Stage 2".

[8] 3GPP TS 23.093: "Technical realization of Completion of Calls to Busy Subscriber (CCBS) - Stage 2".

[9] 3GPP TS 23.116: "Super-Charger Technical Realisation; Stage2".

[10] 3GPP TS 29.002: "Mobile Application Part (MAP) specification".

[11] 3GPP TS 29.120: "Mobile Application Part (MAP) specification for GLR".

[12] 3GPP TS 33.102: "3G Security".

3 Definitions and abbreviations

3.1 Definitions

For the purposes of the present document, the following terms and definitions apply.

Gateway Location Register: this entity handles location management of roaming subscriber in visited network without involving HLR

Intermediate GSN: this entity is used as serving GSN towards home network and relay some PDU notification messages between serving GSN and Gateway GSN