



**Digital cellular telecommunications system (Phase 2+) (GSM);
Universal Mobile Telecommunications System (UMTS);
LTE;
Location Services (LCS);
LCS Application Protocol (LCS-AP)
between the Mobile Management Entity (MME)
and Evolved Serving Mobile Location Centre (E-SMLC);
SLs interface
(3GPP TS 29.171 version 14.2.0 Release 14)**



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Foreword

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1 Scope

The present document specifies the procedures and information coding for LCS Application Protocol (LCS-AP) that is needed to support the location services in E-UTRAN. The LCS-AP message set is applicable to the SLs interface between the E-SMLC and the MME. LCS-AP is developed in accordance to the general principles stated in 3GPP TS 23.271 [3].

2 References

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- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.

- [1] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".
- [2] 3GPP TS 36.305: "Stage 2 functional specification of User Equipment (UE) positioning in E-UTRAN".
- [3] 3GPP TS 23.271: "Functional stage 2 description of Location Services (LCS)".
- [4] IETF RFC 4960: "Stream Control Transmission Protocol".
- [5] TIA/EIA/IS-J-STD-036 (2000): "Wireless Enhanced Emergency Services".
- [6] 3GPP TS 23.032: "Universal Geographical Area Description (GAD)".
- [7] 3GPP TS 36.413: "S1 Application Protocol (S1AP)".
- [8] ITU-T Recommendation X.680 (07/2002): "Information Technology - Abstract Syntax Notation One (ASN.1): Specification of basic notation".
- [9] ITU-T Recommendation X.681 (07/2002): "Information Technology - Abstract Syntax Notation One (ASN.1): Information object specification".
- [10] 3GPP TS 22.071: "Location Services (LCS); Service Description; Stage1".
- [11] 3GPP TS 23.003: "Numbering, addressing and identification".
- [12] ITU-T Recommendation X.691 (07/2002): "Information Technology - ASN.1 encoding rules - Specification of Packed Encoding Rules (PER)".
- [13] IETF RFC 4119: "A Presence-based GEOPRIV Location Object Format".
- [14] IETF RFC 5139: "Revised Civic Location Format for Presence Information Data Format Location Object".
- [15] IETF RFC 6848: "Specifying Civic Address Extensions in the Presence Information Data Format Location Object (PIDF-LO)".