“Location Standards Status Update”

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Overview

- 3GPP Location Standards
- 3GPP2 Location Standards
- OMA Location Standards
- 3GPP Release 9 Work Items
### 3GPP Standards

- **TS 22.071** 3GPP Location Control Services (LCS) Service Description – GERAN, UTRAN, LTE
- **TS 23.271** 3GPP LCS Functional Description – Core Network
- **TS 25.305** 3GPP LCS Functional Description – UTRAN
  - Cell Id Based, OTDOA, Network-assisted GNSS, U-TDOA
- **TS 43.059** 3GPP LCS Functional Description – GERAN
  - Timing Advance, E-OTD, GNSS, U-TDOA
- **TS 44.031** 3GPP MS Assisted/MS Based Positioning Protocol for GSM
- **TS 25.331** 3GPP UE Assisted/UE Based Positioning Protocol for WCDMA

### 3GPP2 Standards

- **C.S0022-0 v3.0** 3GPP2 positioning protocol for 1xRTT (also known as IS-801-1)
  - A-GPS, AFLT
- **C.S0022-A v1.0** 3GPP2 positioning protocol for 1xRTT and EVDO (also known as TIA-801-A)
  - Partial mGPS, AFLT for EVDO
- **X.S002-0 v2.0** 3GPP2 MAP Location Service Enhancements (also known as IS-881-1)
  - Control Plane Solution
- **X.S0024-0 v1.0** 3GPP2 IP-based Location Services (also known as TIA-1020)
- **X.S0009-0 v1.0** 3GPP2 WIN-based Location Services (also known as TIA-843)
OMA Standards

- OMA-AD-SUPL-V1_0_20080521-D: OMA SUPL 1.0 Architecture - GSM, WCDMA, 1xRTT, EVDO
- OMA-TS-UPL-V1_1_20071022-D: OMA SUPL 1.0 User Location Protocol (ULP)
- OMA-AD-SUPL-V2_0_20070615-A: OMA SUPL 2.0 Architecture - LTE, UMB, WiMAX
- OMA-TS-UPL-V2_0_20080524-D: OMA SUPL 2.0 User Location Protocol (ULP)

3GPP Release 9 Work Items

- LCS Control Plane Solution for Enhanced Packet System (EPS) – Architecture
- Support for IMS Emergency Calls over GPRS and EPS
  - Specify a solution to add EPS support of IMS emergency calls that complies with applicable requirements for provision of location information