

Opportunistic RF Localization for Next Generation Wireless Devices June 16-17, 2008 Worcester Polytechnic Institute Worcester, MA, USA





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## 3GPP Standards

 TS 22.071 3GPP Location Control Services (LCS) Service Description – GERAN, UTRAN, LTE

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- 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 Standar	rds veriron
<ul> <li>C.S0022-0 v3.0</li> </ul>	3GPP2 positioning protocol for 1xRTT (also known as IS-801-1) – A-GPS, AFLT
<ul> <li>C.S0022-A v1.0</li> </ul>	3GPP2 positioning protocol for 1xRTT and EVDO (also known as TIA-801-A) - Partial mGPS, AFLT for EVDO
<ul> <li>X.S002-0 v2.0</li> </ul>	3GPP2 MAP Location Service Enhancements (also known as IS-881-1) - Control Plane Solution
<ul> <li>X.S0024-0 v1.0</li> </ul>	3GPP2 IP-based Location Services (also known as TIA-1020)
<ul> <li>X.S0009-0 v1.0</li> </ul>	3GPP2 WIN-based Location Services (also known as TIA-843) 4

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OMA Standards	verizon
<ul> <li>OMA-AD-SUPL-V1_0</li></ul>	OMA SUPL 1.0 Architecture
_20080521-D	- GSM, WCDMA, 1xRTT, EVDO
<ul> <li>OMA-TS-UPL-V1_1</li></ul>	OMA SUPL 1.0 User Location
_20071022-D	Protocol (ULP)
<ul> <li>OMA-AD-SUPL-V2_0</li></ul>	OMA SUPL 2.0 Architecture
_20070615-A	- LTE, UMB, WIMAX
<ul> <li>OMA-TS-UPL-V2_0</li></ul>	OMA SUPL 2.0 User Location
_20080524-D	Protocol (ULP)
	5

