

An Overview and Update on Efforts to Improve 9-1-1 Location Accuracy

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CTIA

Wireless 9-1-1 is on a Path to Harness all Available Technologies

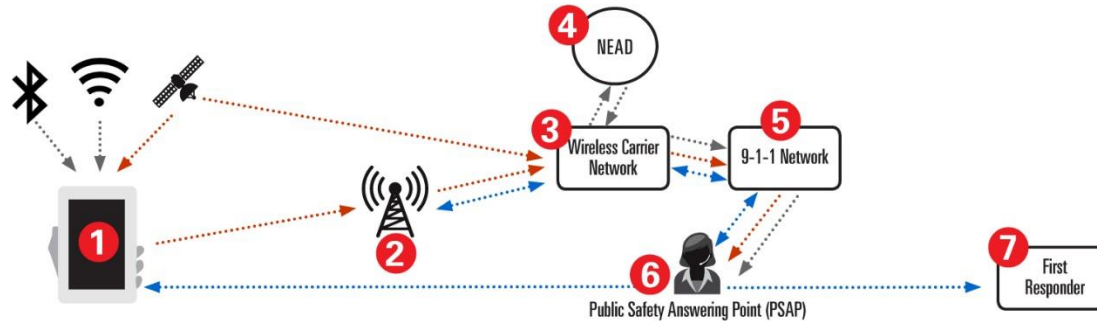
- Enhance A-GPS and other existing carrier location technologies to meet 50m
- Solving *indoor* location challenges with *indoor* location technologies to provide Dispatchable Location
- Z-axis technology as a backstop

Independently Administered Indoor Test Bed

- Baseline Existing and New Location Technologies Against 50m Horizontal Requirement
- Evaluate New Vertical, such as Z-Axis, and Dispatchable Location Technologies

Dispatchable Location

- A National Emergency Address Database (NEAD) of Wi-Fi Access Points and Bluetooth Low Energy (LE) Beacons mapped to street address plus additional info (e.g. floor, suite, etc.)
- NEAD is an *additional* component to the existing 9-1-1 system, *not* a replacement



CTIA Working Group 2015 Progress

Test Bed – Established the Framework for Test Bed LLC

NEAD – Established the Framework for NEAD LLC; Developed NEAD High Level Requirements; Considered a Framework for Privacy & Security Plan

Z-Axis – Analyzed the Requirements for Uncompensated Barometric Pressure Sensor Data Delivery to PSAPs; Awaiting Z-Axis Test Bed Results

PSAP Implementation – Developing Materials to Inform 9-1-1 Professionals about Coming Improvements

Standards – Coordinated with ATIS ELOC, APCO, NENA and other WGs

Demonstration – NENA, APCO and Illinois Institute of Technology

Outreach – Developing Materials for DL Outreach

Mission

9-1-1 Location Accuracy Advisory Group

- Provide advice and input from a diverse body of interested stakeholders to assist the activities of the Working Groups.

Participants

- American Foundation for the Blind
- APCO International
- Center for Democracy & Technology
- Competitive Carriers Association
- Consumer Technology Association
- CTIA®
- Hearing Loss Association of America
- International Association of Fire Chiefs
- International Association of Chiefs of Police
- National Association of Counties
- National Association of State 9-1-1 Administrators
- National Associations of State EMS Officials
- National Cable & Telecommunications Association
- National Conference of State Legislatures
- National Emergency Number Association
- National Governors Association
- National League of Cities
- PCIA–The Wireless Infrastructure Association
- Telecommunications for the Deaf and Hard of Hearing, Inc.
- Telecommunications Industry Association
- VON Coalition

Indoor Test Bed Implementation

“On Track” for Implementation

- Test Bed LLC Established (June 2015)
- ATIS Selected as Program Manager (September 2015)
- RFP Released (September 2015)
- Administrator/Executor Vendor Selection- LCC Design Services (March 2016)

Key Points

- Test Bed Regions: Atlanta, GA and San Francisco, CA
- Dry Run Testing underway in both Regions
- Staged Testing
 - Stage 1 – Carrier Compliance Testing (2Q16 – 4Q16)
 - Stage 2 - New and Emerging Technology Testing, including Z-Axis (Est. 4Q16)
- Stage 2 Test Applications Due: June 10

Creating the NEAD

Implementation

- NEAD LLC is “On Track” – RFP Released (Nov. 2015)
- First Progress Report to FCC (Feb. 2017)
- Privacy and Security Plan due to the FCC (Feb. 2017)
- Second Progress Report to the FCC (Aug. 2018)

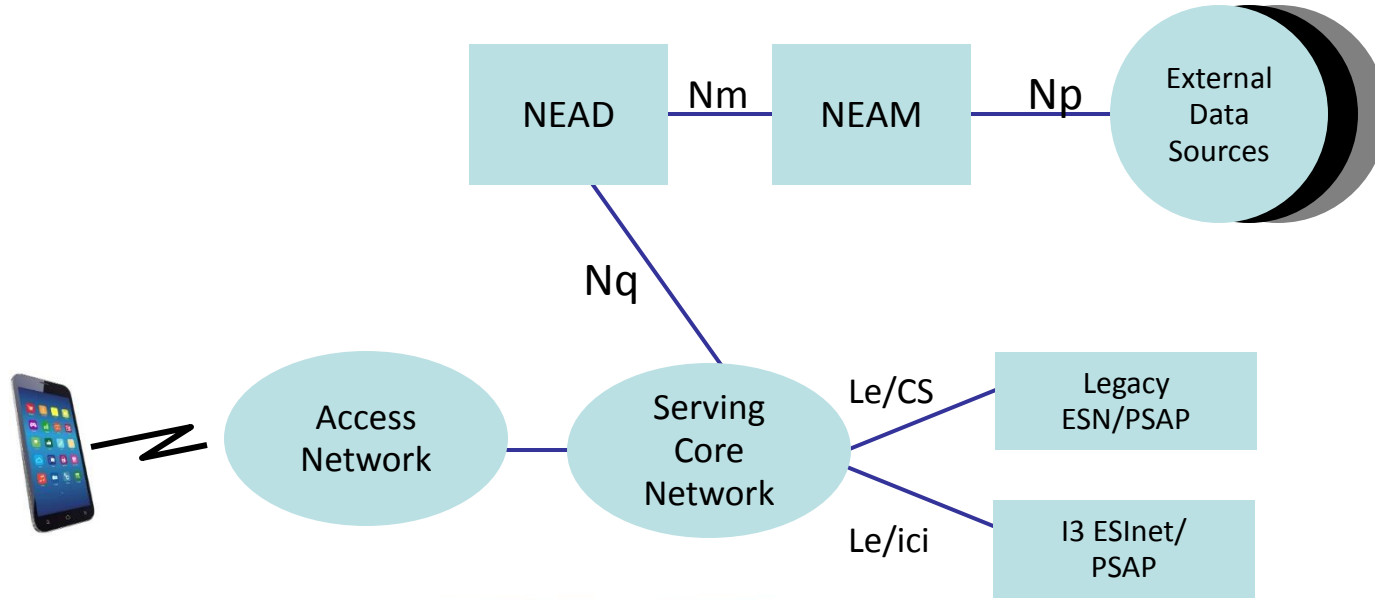
Capacity

- 25% of Population of Top 25 CMAs (April 2021)
- 25% of Population of Top 50 CMAs (April 2023)

Use

- Wireless carriers must certify that they will not use the NEAD or associated data for any non-911 purpose, except as otherwise required by law.

NEAD IN THE 9-1-1 SYSTEM



Next Steps in 2016

- Selected Test Bed Administrator/Executor to Begin Indoor Testing
- Select NEAD Vendor to Begin Building, Testing and Populating the Database
- Submit NEAD Privacy & Security Plan (Feb. 2017)
- Other On-Going Activities:
 - Standards
 - Test Methodologies for Z-Axis
 - Education and Outreach

Questions?

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911LocationTestBed.Org

911NEAD.Org