



# ATIS Update to NPSTC

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# Emergency Location (ELOC) Task Force

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- ATIS ELOC TF developing solutions in support of November 2014 voluntary agreement by AT&T, Verizon Wireless, T-Mobile, Sprint, APCO, and NENA.
  - Completed initial National Emergency Address Database (NEAD) requirements in support of FCC's 4th R&O on Wireless E911 Location Accuracy Requirements in 2Q2016 ([ATIS-0700028](#)).
    - NEAD will store the location of a “beacon” device (e.g., WiFi, Bluetooth), which will allow carriers to query for delivery of a 911 caller's dispatchable location
  - ATIS selected as Program Manager for the NEAD LLC (created under CTIA) to help administer and execute the creation of the NEAD.

# Wireless Emergency Alerts (WEA)

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- ATIS developed Wireless Emergency Alert (WEA) solutions per the WARN Act.
- Completed three feasibility studies in December 2015 to address FCC CSRIC IV recommendations:
  - [Display of additional content](#) -- multimedia content cannot be supported in cell broadcast-based WEA.
  - [Message length](#) -- increase to 360 displayable characters is technically feasible for LTE WEA.
  - [Geo-targeting](#) -- current wireless infrastructure-based geo-targeting continues to be recommended solution.
- [Responded to FCC NPRM on WEA](#) in January 2016, summarizing the feasibility studies' findings noted above.
- Recently initiated two new WEA projects:
  - WEA End-to-End Security Best Practices
  - Feasibility Study for Impact of URLs in WEA Messages

# Location Accuracy

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- ATIS selected as Program Manager for the Test Bed LLC (created under CTIA) to help administer and execute the near- and long-term Test Beds of wireless indoor location technologies.
  - Test Bed work is based upon existing ATIS ESIF standards.
  - Standard test methodology includes test point randomization, building selection, and range of environmental conditions.
- ATIS ESIF continues to develop consensus-based industry requirements for testing location accuracy performance.
  - Completed definition of San Francisco and Atlanta polygons and test building types.
  - Developed methodology for barometric pressure based z-axis solutions.
  - Started developing Wi-Fi and crowd sourced solutions test methodology.

# Earthquake Early Warning (EEW) System

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- ATIS WTSC [initiated project](#) to develop the architecture and requirements of an EEW System (Target: 1Q2017).
  - Builds upon [June 2015 study](#) that addressed implementation of an EEW System.
    - Explained feasibility of cellular networks for providing earthquake early notifications in an EEW System.
    - Identified point-to-point communications and WEA as incapable of supporting the requirements.
- Held meetings with various EEW stakeholders and continue engagement via private-public collaboration on architecture/requirements development.

# Real-Time Text (RTT)

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- ATIS WTSC is currently developing:
  - RTT end-to-end service description specification to:
    - Facilitate consistent use of RTT among multiple service providers by describing the service interactions between RTT and IMS.
    - Define end-to-end RTT service requirements, such as character error rate, transmission delay, and transmission rate, and include an analysis of a variety of RTT use cases.
  - RTT mobile device behavior specification to:
    - Identify behavior requirements of a device performing RTT user-to-user communication, including: (1) minimum requirements for RTT-capable device user interfaces; (2) mobile device behavior in support of emergency services requirements; and (3) minimum RTT user options.
- ATIS PTSC developed *Support of TTY Service Over IP Using Global Text Telephony (GTT)* ([ATIS-1000068](#))
  - Explains how GTT can be provided over service providers' IMS networks.

# Contacts



For additional information or to get engaged in ATIS activities, contact ATIS' NPSTC representatives:

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# Supplemental Material





# About ATIS

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- Founded in 1984, ATIS develops solutions that include:
  - Standards;
  - Requirements;
  - Implementation Guidelines;
  - Specifications;
  - Feasibility Studies;
  - Business use cases;
  - Software toolkits; and
  - Interoperability testing.
- Founding Partner of 3GPP and oneM2M.
- Broad membership comprised of service providers, manufacturers, public safety (APCO Int'l, NENA, Tarrant County 9-1-1, etc.), government agencies (US DoC, US DHS OEC, US DoJ, Public Safety Canada), software companies, etc.



# About ATIS

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- Work is completed through ATIS' 14 industry committees and its Technology and Operations (TOPS) Council.
  - Many of ATIS' committees work on emergency services projects, including:
    - Wireless Technologies and Systems Committee (WTSC)
    - Emergency Services Interconnection Forum (ESIF)
    - Packet Technologies and Systems Committee (PTSC)
    - Network Reliability Steering Committee (NRSC)



# ATIS Committees and Forums

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- Automatic Identification and Data Capture Committee (**AIDC**)
- Copper/Optical Access Synchronization and Transport Committee (**COAST**)
- Emergency Services Interconnection Forum (**ESIF**)
- IMSI Oversight Council (**IOC**)
- Industry Numbering Committee (**INC**)
- Network Functions Virtualization Forum (**NFV**)
- Network Reliability Steering Committee (**NRSC**)
- Next Generation Interconnection Interoperability Forum (**NGIIF**)
- Ordering and Billing Forum (**OBF**)
- Packet Technologies and Systems Committee (**PTSC**)
- SMS/800 Number Administration Committee (**SNAC**)
- Sustainability in Telecom: Energy and Protection Committee (**STEP**)
- Telecom Management and Operations Committee (**TMOOC**)
- Wireless Technologies and Systems Committee (**WTSC**)

# ATIS and Third Generation Partnership Project (3GPP)



- ATIS is the North American Partner to 3GPP, where LTE-Advanced specifications are developed.
  - Responsible for transposing 3GPP specifications into formal North American (ATIS) deliverables.
  - Public safety has been a very active topic over the past few years, with new 3GPP “Mission-Critical Applications” group has recently created (SA6).
  - “5G” Study Item approved in 3GPP.
  - ATIS members are active in 3GPP.
    - ATIS provides a venue to discuss and develop 3GPP Change Requests.