APCO International

Emerging Technology Forum

Emerging Technologies – Regulatory and Legislative Developments

Jeff Cohen, Chief Counsel
APCO International

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Regulatory & Legislative Developments

- **9-1-1**
- **Reclassification**
- **Emergency Alerting**
- **Spectrum**
- **FirstNet**

9-1-1

FCC 9-1-1 Resiliency Timeline

Wireless Network Resiliency

- **FCC *NPRM*** (Sept. 2013):
  - Proposed requiring wireless service providers to share information regarding the operational status of their networks during emergencies with consumers.
    - CMRS providers would have to report the percentage of cell sites operational during and immediately after disasters; or
    - CMRS providers must disclose practices to promote the reliability of their networks.
      - E.g., Information about provisioning of backup power (% of sites equipped, duration of supply, etc.) and available supplementary deployments (COWs/COLTs, etc.).

Wireless Network Resiliency

- **APCO's Comments**:
  - Specific, timely situational awareness information would be of much greater value than reports of steps providers have taken to improve reliability and resiliency.
  - PSAPs should have this info in a format that can be used to easily assess the outage area on the PSAP's map system.
    - E.g. coordinate boundaries for the outage area, GIS files, or text information from internal carrier reporting systems that can be input into the PSAP's map and/or CAD system to provide visual representation of the affected area.
  - It would be valuable to PSAPs to know what kind of outage has occurred (power outage, physical damage, transport network out of service, etc.), the scope of the outage, and estimated repair time.
    - While wireless network outages threaten the public's ability to contact 9-1-1, they also impede emergency alerts and information transmitted via mobile apps, including social media.

SANDy Act

- **Securing Access to Networks in Disasters (SANDy) Act (H.R. 3998)**
  - Would require FCC to:
    - Launch a proceeding to address roaming during emergencies;
    - Create POC list for PSAPs; and
    - Report on mobile outage data to PSAPs and availability of WiFi networks during emergencies.
  - GAO to report on resiliency of electrical power for telecomm networks and backup at building sites.
  - Require FEMA to ensure escorts, access, and credentialing for essential service providers.
  - Status: Certain portions passed by the House on May 13, 2016.

Wireless Network Resiliency

- **FCC *Notice*** (Apr. 2016):
  - Sought comment on announcement by the five major wireless carriers and CTIA of a Wireless Resiliency Cooperative Framework.
  - Framework aims to "facilitate greater network resiliency and faster restoration of service" by:
    - Providing for reasonable roaming under disaster arrangements when technically feasible;
    - Fostering mutual aid during emergencies;
    - Enhancing municipal preparedness and restoration;
    - Increasing consumer readiness and preparation; and
    - Improving public awareness and stakeholder communications on service and restoration status.

Wireless Network Resiliency

- **APCO Comments**:
  - The Framework can lead to great improvements to wireless network resiliency, restoration, and overall preparedness and response, in disaster situations.
  - Enhancing preparedness
    - PSAPs should be involved in developing best practices to facilitate coordination before, during, and after emergencies to maintain and restore wireless service.
    - CTIA should collaborate with PSAPs as CTIA works with consumer groups to develop consumer readiness checklists and outreach strategies.
  - Improving awareness of service and restoration status
    - In addition to state EOCs, carrier POC list must also be sent to PSAPs for use during disasters and at other times such as service outages.
    - During disasters, EOCs may or may not be activated, but PSAPs are always operational.
    - The commitment to make data publicly available regarding the total number of cell sites out of service on a county-by-county basis will be useful and should be further leveraged to provide more specific situational awareness information to PSAPs.

9-1-1 Reliability

- **FCC *Report & Order*** (Dec. 2013):
  - As of November 2014, covered 9-1-1 service providers must:
    - Notify PSAP "as soon as possible but no later than thirty minutes after discovering the outage" with "all available information" and contact information for follow-up.
    - No later than 2 hours after initial contact, provide "additional material information" including nature of the outage, best-known cause, geographic scope, & estimated time for repairs.
  - Covered providers must provide reliable 9-1-1 service, as evidenced by annual certifications of compliance with best practices or reasonable alternatives as to:
    - Critical 9-1-1 circuit diversity.
    - Central office backup power.
    - Diverse network monitoring.
  - Initial certifications were due October 15, 2015.
  - The most recent certifications were due October 15, 2016.

9-1-1 Governance

- **FCC *Policy Statement & NPRM*** (Nov. 2014) proposed:
  - Expanding the definition of "covered service providers;"
  - Increasing info sharing during 9-1-1 disruptions; and
  - Ensuring transparency/accountability for major changes to 9-1-1 service through public notification.
- **APCO Comments & Reply Comments**:
  - New 9-1-1 elements should have necessary redundancy, reliability & governance mechanisms to extent of FCC authority.
  - Support appropriate, reasonable regulations, so long as FCC does not exceed jurisdiction over state/local PSAPs.
  - Covered service providers should be responsible for acts of agents and subcontractors.
  - Prefer consensus-based standards and best practices.
  - Providers should provide notice of "major changes" and service discontinuance.
  - Given the critical nature of public safety networks and systems, cybersecurity should be part of the 9-1-1 certification process.

IP Transition

- The transition from legacy copper networks to IP-based technologies will impact current and future 9-1-1 services:
  - Consumers must be able to reach 9-1-1 whether they use PSTN, VoIP, or wireless phone.
  - For public safety, IP transition must preserve reliability, redundancy, security, and back-up power.
- **FCC *Report & Order*** (Aug. 2015):
  - Recognizes that unlike copper lines, fiber- and IP-based networks do not carry their own power.
    - In the event of power outage, may not be able to reach 9-1-1.
  - Requires providers of residential, non-line-powered voice services to make available 8-hours of standby backup power to consumers.
    - Within 3 years, providers must make available 24-hours of standby backup power.

IP Transition

- **APCO's Position**:
  - Backup power for 9-1-1 is essential (for voice, and eventually NG9-1-1 capabilities).
    - Public education and standardization needed.
  - Must ensure PSAPs and the public receive timely, accurate, and informative notices of transition from copper.
    - Alarm systems, medical alert inputs to PSAPs must be preserved.
  - Cybersecurity increasingly important.
    - IP-based technology and increased interconnection introduces vulnerabilities.
  - Automatic location information (ALI):
    - Need consistency with ALI provided over copper.
    - Ensure no additional costs for PSAPs to receive ALI.

9-1-1 Outage Reporting

- **FCC *NPRM*** (Mar. 2015):
  - Proposed updates to the FCC's Part 4 Outage Reporting rules.
    - Sought comment on reporting requirements based on partial loss of communications and/or geographic scope.
- **APCO Comments**:
  - Supported reporting requirements where an outage "significantly degrades or prevents 9-1-1 calls from being completed."
  - Supported reporting requirement for any outage affecting one-third of a county or PSAP service area.
  - Required outage report whenever at least half of trunks serving a PSAP are out of service.

9-1-1 Outage Reporting

- **FCC *Report & Order and FNPRM*** (May 2016):
  - A "loss of communications" to a PSAP occurs when a malfunction significantly degrades or prevents 911 calls from being completed, including when 80% or more of a provider's trunks serving a PSAP become disabled.
  - Proposes to extend outage reporting to broadband network disruptions, amend VoIP requirements, require reporting of call failures due to blocking/congestion in wireless and wireline access networks, and require geography-based reporting of wireless outages in rural areas (1/3 or more of macro cell sites).

9-1-1 Outage Reporting

- **APCO Reply Comments**:
  - Loss of communications threshold is less than APCO's request, but should provide PSAPs with improved situational awareness of 9-1-1 network health.
    - 9-1-1 service provider must still report "if not all 9-1-1 traffic can be re-routed, or if the re-routed traffic cannot be delivered without stripping it of number or location information."
  - FCC should develop an outage reporting mechanism for broadband services; particularly important to NG9-1-1.
  - Supports reporting of systemic wireless call failures that result from overloading or any other causes of call blocking.
  - Geography-based outage reporting less than APCO's request (1/3 of county/PSAP service area vs. 1/3 of macro cell sites in rural areas).
    - Willing to see how this requirement works, along with other overloading-based proposal.

Text-to-911

- **Carrier-NENA-APCO Agreement** (Dec. 2012):
  - 4 largest carriers agreed to make text-to-911 available by May 15, 2014.
- **FCC *Report & Order*** (May 2013):
  - Required bounce-back by September 30, 2013.
- **FCC *Order & FNPRM*** (Aug. 2014):
  - Starting December 31, 2014, "covered text providers" must deliver texts to PSAPs within 6 months of a valid request.
  - Established PSAP Text-to-911 Readiness and Certification Registry.
  - Remaining issues:
    - Roaming, location info, OTT, text via non-CMRS networks (WiFi), rich media, real-time text, vehicle telematics, etc.
  - Established a Task Force on Optimal PSAP Architecture (TFOPA).

TFOPA Update

- The most recent TFOPA meeting was held on September 23, 2016.
- There are currently three Working Groups:
  - Working Group 1 - Optimal Approach to Cybersecurity;
  - Working Group 2 - Optimal Approach to NG9-1-1 Architecture Implementation; and
  - Working Group 3 - Optimal Approach to NG9-1-1 Resource Allocation.
- The current tasks are:
  - "NG9-1-1 Ready" scorecard;
  - 9-1-1 funding sustainment model;
  - In-depth review of the Emergency Communications Cybersecurity concept;
  - Study on NG9-1-1 workforce and education challenges; and
  - Practical guide to ESInet deployment.
- The first Final Report was released January 29, 2016.

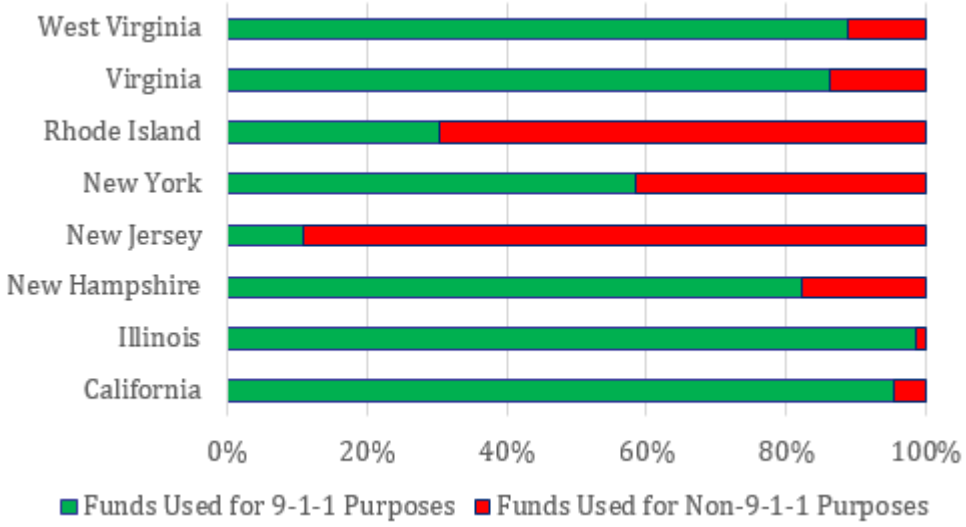
TTY to Real Time Text Transition

- **FCC *NPRM*** (April 2016):
  - Proposes that carriers implementing RTT be capable of transmitting and receiving RTT communications to and from PSAPs, and be backwards-compatible with TTY.
  - Does not propose changes to existing text-to-911 rules but seeks comment on facilitating migration from SMS to RTT-based text-to-911.
- **APCO Comments**:
  - RTT has the potential to enable faster, more robust text communications with 9-1-1 than TTY or SMS, but must be compatible with TTY and existing IP-based solutions.
  - FCC must ensure that PSAPs are not faced with additional costs to implement RTT.
  - RTT-to-TTY should not become a de facto nationwide text-to-911 solution, without accounting for PSAP readiness and preferred alternatives for receiving SMS texts.

FCC 9-1-1 Fee Report

- Annual report to Congress on states' use of 9-1-1 fees and charges, as required by the NET911 Act.
  - **8** states reported diverting 9-1-1 fees and charges to non-9-1-1-related purposes.

Amount of 9-1-1/E9-1-1 fees spent on non-9-1-1-related purposes:	**$223,420,909**
Amount of 9-1-1/E9-1-1 fees spent on cybersecurity-related expenditures:	**$25,306,952**



FCC 9-1-1 Fee Report

- **APCO's Comments**:
  - Fee diversion hurts the case for 9-1-1/NG9-1-1 funding nationwide.
  - Need a common and comprehensive definition of NG9-1-1.
    - The Commission should take a proactive role in comprehensively defining NG9-1-1 as "***end-to-end (from the caller to the telecommunicator) IP connectivity enabling current voice communications, future multimedia, and other data capabilities to flow from the 9-1-1 caller to the PSAP and be properly reported, archived, and further transmitted between the PSAP and first responders***."
  - FCC should request further detail about how states are spending money on NG9-1-1 and cybersecurity, standards being employed, as well as the number of texts received and methods used to receive them.
  - FCC should request information on governance-related issues inhibiting the deployment of NG9-1-1.
- The FCC will file its 8th annual report to Congress in December.

Next Generation 9-1-1

- 2012 law created a $115 million grant program.
  - Grant criteria being formulated.
- Senator Bill Nelson (D-FL) announced plans to introduce a bill that will promote the development and deployment of next generation 9-1-1 services.
- Modernizing the Nation's 9-1-1 system is essential for the safety and security of the general public as well as first responders.
  - Many states have been making progress toward deploying NG9-1-1, but deployment is ad hoc and limited.

Next Generation 9-1-1

What Should be the Key Goals for NG9-1-1 legislation?

- Interoperability
  - Need a common and comprehensive definition of NG9-1-1:

    "End-to-end (from caller/data source to the telecommunicator) IP connectivity enabling current voice communications and future multimedia and other data capabilities to flow from the 9-1-1 caller/data source to the PSAP and be properly reported, archived, and further transmitted between the PSAP and first responders/FirstNet users."
  - Standards need to be consensus-based, nationally accredited:
    - Achieve economies of scale for equipment and services.
    - Prevent proprietary solutions.
    - Create a competitive, innovative environment for new technologies.
    - Promote interoperability, including with FirstNet, smart city architectures, Internet of Things, vehicle and roadway telematics, etc.

Next Generation 9-1-1

- Sustainability
  - Sufficient, one-time federal funding opportunity to support the capital costs of the NG9-1-1 transition.
  - Incentives for states to develop mechanisms to sustain NG9-1-1 deployments.
  - Discourage 9-1-1 fee diversion.
  - Account for states that have already made progress deploying NG9-1-1.
- Optimization
  - Eliminate any state or local laws, regulations, or policies acting as barriers to NG9-1-1 deployment.
  - Promote resource and information sharing (ex – cyber), while preserving the benefits of local control.
  - Ensure sufficient training of telecommunicators.
  - Use open and competitive RFP processes.

Recognizing Public Safety Telecommunicators for the Life-Saving Work They Perform

Reclassifying Public Safety Telecommunicators

- The Standard Occupational Classification (SOC), a comprehensive list of all occupations in the U.S., is one of several classification systems established by the federal government to ensure coordination of federal statistical activities.
- In the current version of the SOC, 9-1-1 professionals are identified as "Police, Fire, and Ambulance Dispatchers" and classified as "Office and Administrative Support Occupations."
- In 2014, the Office of Management and Budget (OMB), who coordinates the SOC, sought comments on revisions for the 2018 version of the SOC.
  - APCO filed comments in 2014 recommending the SOC use the label "Public Safety Telecommunicators" for 9-1-1 professionals and that they be reclassified as Protective Service Occupations.
- APCO's comments received support from the Congressional NextGen 9-1-1 Caucus Co-Chairs and Rep. Torres, a member of the Caucus and former dispatcher.

Reclassifying Public Safety Telecommunicators

- On July 22, OMB announced its interim decision, which rejected APCO's recommendations. OMB provided a limited explanation, indicating misunderstanding and unfair treatment of Public Safety Telecommunicators.
- APCO initiated a multi-step grassroots effort.
- **APCO Comments**:
  - Provided numerous examples of the "protective" work performed.
  - Corrected inaccuracies of OMB's explanation and challenged the pattern of ad hoc and arbitrary criteria.
- Status: OMB to publish final recommendations in Spring 2017.

Non-Service Initialized (NSI) Devices

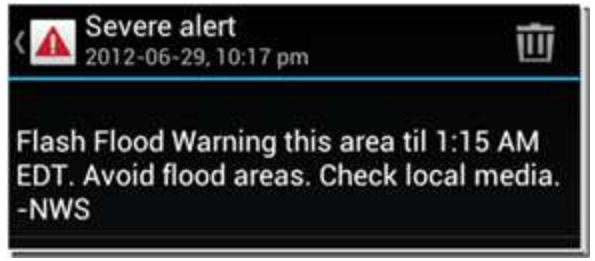
NSI Call Rule

- **FCC *NPRM*** (Apr. 2015):
  - FCC asks whether to sunset the rule requiring providers to transmit 9-1-1 calls from NSI devices.
- **APCO Comments**:
  - Has led to significant abuses of 9-1-1 while industry has evolved to offer low-cost alternatives.
    - A significant # of 9-1-1 calls from NSI devices are hang ups, false reports of emergencies, harassing calls, or other intentional non-emergency calls.
    - Anyone in need of emergency assistance should have full access to 9-1-1 capabilities, including call-back and location info offered by newer low-cost options.
  - FCC should *prohibit* providers from forwarding 9-1-1 calls from NSI devices.
- **APCO Ex Parte:**
  - Problem will grow with technology retirements (2G).
  - The time spent dealing with each call is highly variable but resource-intensive.
  - There are several impediments to tracking NSI calls that make it difficult to quantify the "costs" and may result in underestimating the burden of the call- forwarding rule on PSAPs.
  - Concerns with alternatives (e.g. call blocking, intercepts).

Emergency Alerting

Wireless Emergency Alerts (WEA)

- Launched in April 2012, special type of message sent by authorized governmental agencies to consumers' mobile devices.
- Each alert is accompanied by a unique signal and vibration.
- Reserved only for specific emergency situations:
  - Presidential Alert
  - Imminent Threat to Safety or Life
  - AMBER Alert (abducted child)
- Consumers receive WEA alerts by default, but may opt out of all but Presidential Alerts.
- Carrier participation is voluntary, but most do.



Wireless Emergency Alerts (WEA)

- **FCC *NPRM*** (Nov. 2015):
  - FCC proposed to enhance the content and geo-targeting of WEA:
    - Expand max. character limit from 90 to 360.
    - New class of alerts: Emergency Government Information.
    - Allow embedded URLs, phone numbers, and other multimedia.
    - Allow alerts in languages other than English.
    - Target alerts to a geocode, circle, or polygon no larger than the target area.
    - Establish state and local testing and logging/reporting requirements.
- **APCO Comments**:
  - Largely supported FCC's proposals:
    - WEA is the only official channel for reliable and secure wireless alerts.
    - Larger max. character limit and embedded information could help reduce unnecessary 9-1-1 calls and enable more informed and focused 9-1-1 calls to PSAPs.
    - Narrower geo-targeting could reduce public confusion and help emergency managers and responders better control and manage the situation.

Wireless Emergency Alerts (WEA)

- **FCC *Report & Order and FNPRM*** (Sept. 2016):

New Rules:

- Expand max. character limit from 90 to 360 for LTE and future networks.
- New class of alerts: Public Safety Messages.
- Require providers to support embedded phone numbers and URLs.
- Target alerts to areas that "best approximate" alert areas specified by the alert originator.
- Support for state and local testing; impose logging/reporting requirements.

FNPRM:

- Earthquake Alerts.
- Disaster Relief Messaging.
- Alert message preservation.
- Allow support of multimedia messages.
- Allow transmission of alerts in languages other than English and Spanish.
- Improve Geo-targeting capabilities by matching the target area.
- Anticipate WEA for 5G networks.

Emergency Alert System (EAS)

- A national public warning system requiring broadcast systems to provide communications capability to the President to address the public during a national Emergency.
- The system may also be used by state and local authorities to deliver important emergency information such as:
  - AMBER Alerts
  - Weather information targeted to specific areas
- **FCC *NPRM*** (Jan. 2016):
  - Expand testing regime including community-based public safety exercises;
  - Ensure alerting mechanisms can leverage advancements in technology, including IP-based technologies; and
  - Secure EAS against accidental misuse and malicious intrusion.

Emergency Alert System (EAS)

- **APCO Comments:**
  - Testing, training, and exercises are routine and essential.
    - But cautions against overuse of the EAS Attention Signal and over-testing to avoid "alert fatigue" among the general public and unnecessarily taxing PSAP resources.
  - Agrees with leveraging the innovative tools offered by new technologies to improve alerting, such as Internet-connected devices.
  - Expresses concerns with operational impacts of "many-to-one" messaging.
  - Security rules should be applied with consistency and must take into account PSAPs' varying resources and cyber-readiness.

Spectrum

Spectrum

- **4.9 GHz**
  - FCC inquiry regarding public safety use of the 4.9 GHz channels seeking to promote more efficient and effective use of the band.
  - APCO convened a Task Force to address how to increase use of 4.9 GHz by public safety and filed Report September 28, 2015.
- **Railroad Police Interoperability**
  - FCC ***Report & Order*** (Aug. 2016):
    - Permits railroad police to access public safety interoperability and mutual aid channels.
- **800 MHz NPSPAC Interference**
  - Sprint ESMR and Cellular A Block deployments have been overloading front end of public safety radios, causing interference to public safety NPSPAC channels.
  - APCO encouraging licensees to submit any additional information to FCC.

Spectrum

- **800 MHz**
  - **FCC *NPRM*** (Aug. 2016):
    - Extend conditional licensing authority to site-based applications; and
    - Allow incumbent licensees 6 months to apply for Expansion Band and Guard Band frequencies.
- **5 GHz**
  - The FCC sought to update and refresh the record on sharing options for 5 GHz Unlicensed National Information Infrastructure (U-NII) devices.
    - U-NII, aka dedicated short range communications (DSRC), afford short range, high speed unlicensed operations
  - **APCO Comments:**
    - Discussed important use cases including Vehicle to Vehicle and Vehicle to Infrastructure technologies.
    - Need to ensure protection from interference; any sharing techniques should be tested in advance.

Spectrum

700 MHz Narrowband

- **FCC *Order on Reconsideration and FNPRM*** (Aug. 2016):
  - Allow P25 CAP compliance/equivalent to be completed after equipment certification but prior to marketing/sale.
  - Asks whether to exempt Vehicular Repeater Systems (VRS) from trunking requirements.
  - Asks whether to adopt P25 CAP AP list of recommended feature sets to establish baseline I/O.
- **APCO Comments:**
  - 700 MHz VRS equipment should be exempted from trunking requirements.
  - Manufacturers have a responsibility to ensure that all public safety users – regardless of whose customer they are – have seamless interoperability for operations on the nationwide I/O channels.
  - Establish specific functions for baseline interoperability for 700 MHz I/O channels.
    - Defers to CAP AP on the feature sets but baseline should go beyond minimal voice capability (e.g. packet data, location info, encryption management).
    - Manufacturers should be required to demonstrate I/O for any additional features offered for public safety agencies to utilize in mutual aid situations.

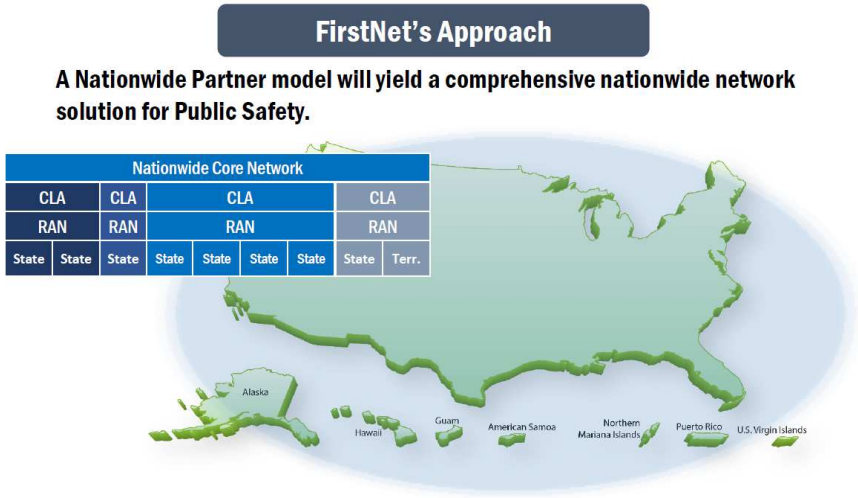
FirstNet

Timeline

Action	Date
Draft RFP Released	April 27, 2015
Cybersecurity Special Notice Released	October 5, 2015
Final Legal Interpretations Released	October 20, 2015
NTIA *Notice* on FirstNet Fees Released	December 15, 2015
Final RFP Released	January 13, 2016
Vendor Capability Statements Due	March 31, 2016
Vendor Proposals Due	May 13, 2016
Estimated Award Date	November 1, 2016

Request for Proposals (RFP)

- **Nationwide Approach**
  - "FirstNet is seeking a comprehensive network solution covering each of the 56 states and territories."
    - FirstNet only accepting nationwide bids.
    - Contractor must deliver a detailed deployment plan for every state and territory.
- **Minimum Technical Requirements**
  - FirstNet required to comply with 3GPP LTE standards and open, non-proprietary, commercially available standards.



Request for Proposals (RFP)

- **Contract Requirements**
  - **Most Favored Customer Pricing Consideration**:
    - The Contractor must provide a "most favored customer pricing arrangement to public safety subscribers."
      - Ensures that public safety subscribers receive the lowest price available for any customer receiving equivalent service.
  - **Minimum Payments to FirstNet:**
    - $5.625 billion over 25 years.
      - $80 million/year in Years 1-5, gradually increasing to $430 million/year in Years 22-25.

Request for Proposals (RFP)

- **9-1-1**
  - **Spectrum Act** requires that FirstNet promote integration of the network with PSAPs.
  - **FCC TAB Report**: "FirstNet must ensure that its network interoperates and interconnects with Next Generation 9-1-1 systems to meet the expectations of consumers who request service through 9-1-1."
  - RFP requires implementation plan for integrating each public safety enterprise network (PSEN) into NPSBN.
    - Establish PSEN point-of-presence locations;
    - Implement PSEN connectivity and interfaces with ESInet; and
    - Interconnect with CAD, dispatch, PSAPs, and NG9-1-1 systems.

Request for Proposals (RFP)

- **Apps**
  - FirstNet requires an **applications ecosystem** that supports the NPSBN with capabilities and services relevant to public safety.
  - Includes the following components:
    - Service delivery platform
    - Application development platform
    - Hosting and cloud services
    - FirstNet applications store
    - Applications life-cycle management
    - Developer and application certification
    - Application security
    - Offeror-provided applications

FirstNet Fees

- The Spectrum Act requires that NTIA review and approve the fees that FirstNet assesses its users.
- **NTIA *Notice*** (Dec. 15, 2015):
  - Proposes to conduct its review to afford FirstNet as much flexibility as possible.
  - Sole purpose of fee review is to ensure FirstNet is self-sustaining.
  - Will not evaluate the reasonableness of fees or analyze terms and conditions of any CLA or other agreement between FirstNet and another entity.
  - Will defer to FirstNet on its use and retention of reserve or working capital funds.
- **APCO Comments**:
  - Supports deferential approach proposed by NTIA.
  - NTIA must allow FirstNet flexibility to respond to changing market conditions and first-responder demands.
  - Agrees NTIA is to approve fees if, in aggregate and combined with other non-fee based income, they are sufficient, but not in excess, of what's projected as necessary to carry out FirstNet's obligations.

Band 14 Incumbent Users

- The Spectrum Act directs FCC to grant FirstNet an exclusive license to Band 14.
- **FirstNet Letter** (Oct. 2015) and **FCC *Public Notice*** (Nov. 2015):
  - FirstNet requesting that:
    - No operations absent express consent of FirstNet after July 31, 2017.
    - Alternatively, or in addition, continued operation must cease within 90 days written notice from FirstNet that deployment is to begin in its state.
  - Board authorized grant program to clear incumbents by July 31, 2017.
- **APCO Comments**:
  - FCC should provide FirstNet with appropriate deference and assistance, consistent with the Spectrum Act.
  - FirstNet must have full discretion in addressing incumbent operations in its licensed spectrum.

State Opt Out

Opt out is a false choice

"There is simply no reason for any state to opt-out, which entails an arduous process and shifts the important responsibility to implement a radio access network (RAN) from FirstNet to the state. Compared to any state, FirstNet has significant advantages provided by Congress to achieve the best overall solution for the country. Yet a state that seeks to construct its own RAN introduces many serious risks to the communications capabilities of first responders within its own borders as well as those across the nation."

- APCO International

State Opt Out

Opt out is a false choice

- FirstNet has many inherent advantages no state can match, and opting-out only introduces unnecessary risks to first responders' communications capabilities.
  - An expert team that can deliver a sustainable and secure network design;
  - The ability to avoid differing state and local procurement and approval processes;
  - National-level bargaining power and synergies with potential partners across a competitive, diverse, multiple-vendor ecosystem;
  - National-level economies of scale; and
  - A special focus on establishing and maintaining a seamless, nationwide level of interoperability.
- No recourse for a state that has opted out and faces a change in leadership or priorities that removes resources essential to maintaining the RAN, placing entire network & interoperability at risk.
- Any notions that opt out can lead to new revenue-generating opportunities for a state are baseless.
- A state can always augment a FirstNet-built network, provided it meets FirstNet's technical requirements to sustain interoperability.
- Congress strongly discouraged opt-out, requiring a rigorous double-agency approval process, and spectrum lease agreement with FirstNet.

State Opt Out: Process

- FirstNet completes RFP and provides each state with proposed plan for that state.
- Within 90 days, Governor determines whether to accept FirstNet plan or opt out.
- State electing to opt out has 180 days to complete RFP for RAN buildout & submit alternative plan to FCC that demonstrates:
  - State will be in compliance with the minimum technical interoperability requirements previously developed at FCC; and
  - Interoperability with the nationwide public safety broadband network.
- If FCC approves, state must next apply to NTIA.

State Opt Out: FCC Process

- **FCC *NPRM*** (Aug. 2016):
  - Sought comment on the FCC's role in state alternative plan evaluation.
- **APCO Comments**:
  - Opt out is a false choice.
  - A completed RFP means a final contract has been awarded.
  - FCC has a clear, specific, and limited role to "approve or disapprove" alternative state plans.
    - No public comment, no rules, no decisional explanation.
    - Expediency is key – entire network is being held up.
  - FCC role is limited to an evaluation of RAN interoperability.
  - There should be a review "shot clock" of 30 days.
  - No amendments to or clarifications of a plan should be permitted.
  - If a plan is incomplete or disapproved the state forfeits its right to opt out.
  - State plans should be kept confidential.

State Opt Out: NTIA Process

- **NTIA *Notice*** (July 2016):
  - After a state plan receives approval from the FCC, the state ***must apply*** to NTIA for the authority to enter into a spectrum capacity lease with FirstNet and ***may apply*** to NTIA for a grant.
    - A state must demonstrate that its plan meets the **five criteria** listed in the Act:
      - The state has the technical capabilities to operate, and the funding to support, the state RAN;
      - The state has the ability to maintain ongoing RAN interoperability with the NPSBN;
      - The state has the ability to complete the RAN buildout within specified comparable timelines specific to the state;
      - The cost-effectiveness of the state alternative plan; and
      - The ability to provide RAN security, coverage, and quality of service comparable to that of the NPSBN.

State Opt Out: NTIA Process

- **APCO Comments:**
  - Opt out is a false choice.
  - 60 day deadline for filing applications after FCC approval.
    - Plan should be identical to the FCC approved plan.
  - Grants are discretionary and for initial construction only.
    - NTIA should take into account the needs of the NPSBN as a whole.
    - NTIA will not consider a funding award unless state first successfully executes lease agreement with FirstNet.
  - Supports NTIA's interpretation of the five criteria.
    - States must follow FirstNet's network policies.
    - Require a thorough showing of ability and resources to maintain ongoing interoperability.
    - Completion timelines must be comparable to FirstNet timelines.
    - NTIA should consider a state's entire plan to determine cost effectiveness.
    - Cybersecurity and meeting rural coverage milestones are significant concerns.

What's Next

Action	Date
Vendor Capability Statements Due	March 31, 2016
Vendor Proposals Due	May 13, 2016
Estimated Award Date	November 1, 2016
Complete and Issue All State Plans	6 Months After Award
Nationwide Coverage on Band 14 or Non-Band 14. Band 14 Deployables and Devices Available.	6 Months After Award
State Decision to Participate or Opt-Out Due	90 Days After Receipt of State Plan
If Opt-Out, Alternative Proposals Due	180 Days After Notice of Opt-Out
Implementation of Mission Critical Push-to-Talk; Proximity Services; and Support for NG9-1-1 Systems.	2 Years After Award

Thank You!

- APCO GRO website: https://www.apcointl.org/advocacy.html
- AppComm: www.appcomm.org
- Twitter: @GRO_APCO

- APCO events: www.apcointl.org/events.html
  - February 28 – March 1: Emerging Tech Forum in Raleigh
  - May 16-17: Broadband Summit in DC
  - August 13-16: APCO's Annual Conference in Denver

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