



# OFIP

OHIO-FIRST.NET IMPLEMENTATION PROJECT

## INITIAL CONSULTATION MEETING MINUTES

*The following minutes were captured during the State of Ohio and FirstNet initial consultation meeting. While these minutes provide a good overview of the meeting discussion and interaction between team members, they are not a comprehensive documentation of all presentation and discussion topics, and are not a direct transcript of the exchanges.*

All presentation content can be retrieved at <http://ohiofirst.net>.

## MEETING MINUTES

- Darryl Anderson of Ohio introductions
- Dave Buchanan of FirstNet (FN) introductions
  - Here today to consult with you
  - Gather your requirements to integrate into the FirstNet plan
  - FirstNet team intro: Ed Parkinson, Tim Pierce, Chris Mattie (legal), Johnathan Kennedy (scribe), Rich Reed
  - Thank you for being here, we want to hear your ideas, opinions, needs
  - Why we are here today – the goals of the meeting
    - Strengthen our relationship with the State of Ohio
    - Provide FirstNet updates
    - Learn about the unique needs of Ohio (how you do business)
    - Discuss next steps
  - Today is a consultation, not a conference
  - Is this the right plan, we really want to hear from you
  - The current state of First Responder communications
    - The MARCS radio network
    - Commercial LTE services
  - Responsibilities for Network Components
    - Core (FirstNet)
    - RAN deployment (FirstNet or the State)
    - Devices/service (Agency choice)
      - FN has to work hard to win your business, we know you have choices
    - Q: Do you think there will be a time when we FN does not have a coverage problem?
      - A: We will consistently gather and address coverage requirements. We will provide the best possible network for Ohio but will likely always have some coverage problems.
    - Q: Does Ohio have a choice if the cost/benefit analysis does not work.
      - A: The law says we have to deploy the network, we know we have to earn your business and we have to focus on the cost/benefit.
  - 9/11 Commission Report recommended that Congress support the development of a national interoperable communications network



# OFIP

OHIO-FIRST.NET IMPLEMENTATION PROJECT

## INITIAL CONSULTATION MEETING MINUTES

- The 2012 Act created FN and initiated the development of this nationwide network
- Provides an overview of the Act (Governance, \$7B, BC14 spectrum)
- FirstNet organization overview
- Important that we get your feedback
  - Q: Will cybersecurity be handled by the network?
    - A: Local agencies will manage their unique cybersecurity requirements. FN will ensure that the FN network is secure.
  - Q: Are you looking at sourcing towers to support the RAN build out?
    - A: We have early adopter network deployments, but FN has not yet determined the network deployment and vendor relationships.
- Designing a Nationwide Network
  - We have \$7B but we will need much more to build the ideal network
  - According to Mosaik Solutions, 99.3% of the US population is covered by LTE today
  - Leverage the commercial industry
    - Existing infrastructure
    - Built and maintained
    - Global standard
    - Interoperable
    - Economy of scale
  - Why leverage industry?
    - Follow the marketplace to leverage economies of scale and keep costs low
    - Commercial service provider lease sites from large tower companies
    - LTE RAN has high demands
  - FN spectrum – a valuable resource
  - Revenue, Architecture & Priority
    - Need to monetize the BC14 spectrum asset
  - Q: Will priority require manual management?
    - A: No, public safety will be prioritized as needed based on the ongoing analysis of traffic
  - Q: How to prioritize utility industry access to the network?
    - A: We are investigating the definition of “users”. We were in Moore, OK, the fire fighters were able to move their apparatus out of the way of the tornado but could not get to the scene of the disaster due to down power lines. We appreciate the utilities will require access during emergencies, however there are secondary user options for utilities. The overwhelming (statement that \$50,000,000 could be raised at \$1.00 per month for meter reading) support by the utility industry for access to FN.
  - Q: Will public safety have access to FN to communicate to utilities to communicate during the incident?
    - A: We do not want to compete for utilities for commercial business. We are trying to best define the “users”, and in what operational situations when these users will have prioritize access to FN.



# OFIP

OHIO-FIRST.NET IMPLEMENTATION PROJECT

## INITIAL CONSULTATION MEETING MINUTES

- Q: If utilities are on FN, then public safety will have direct communications lines with the utilities.
  - A: This capability is an application, not necessarily a network issue.
- Q: CAD systems and public safety radio networks provide access to utilities now.
  - A: This is important dialogue and we will continue to review and address going forward.
- Q: Emergencies are a life savings effort and we should be focused on providing communications during these events.
  - A: We absolutely agree
- Q: Co-located commercial and FN sites could be a risk together. How do we manage the network outage risk is we are all collocated?
  - A: We would like to understand the degree of hardening that we need from public safety. Hardening is expensive, we need to understand what is required, what can afford initially and into the future.
- Q: What do you do to harden MARCS?
  - A: Generators, bullet proof doors, redundant backhaul and other components
- Statement: Flexibility in providing commercial communications facilities; generators and redundant backhaul can be provided, extra capacity is built into the facilities and facilities will be customized to customer needs.
- Q: Does spectrum sharing give you concerns?
  - A: If you do not share, we will not be able to deploy and maintain the network.
- Statement: Downside for LTE is that we need 1,000 of sites, but these sites provide natural redundancy. The platform for FN should be NIMS.
- Q: Will we be able to roam out of BC14 to commercial networks?
  - A: Maybe, we are seeking the partners to provide these capabilities.
- Statement: Commercial industry interested in bidding to integrate into their existing commercial cellular networks, others interested in BC14 only
- Rural deployment is a requirement of the Act (high power base stations and devices)
- The FirstNet Opportunity
  - We have \$7B in the bank today
  - Fees generated from public safety subscribers, make them as competitive as possible, we are in competition with commercial carriers
  - Synergies including backhaul, sites, etc.
  - Excess capacity covered lease agreement are projected to drive revenue above the required breakeven threshold
- Q: Do you anticipate that commercial carriers will bridge their networks to BC14?
  - A: The RFP will drive that answer.
- Consultation and State Plan Process
  - Need inputs to get answers
  - Objective to achieve a state of self-sustainment
  - Stakeholder inputs
    - Public notices and comment process



# OFIP

OHIO-FIRST.NET IMPLEMENTATION PROJECT

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- Acquisition process, RFI and RFP process, current draft responses due on July 27, 2015, available through the [www.firstnet.gov](http://www.firstnet.gov) web site
- Outreach engagement
- Public Safety Advisory Committee
- Additional inputs (National and regional association meetings and others)
- State consultation (34 conducted to date)
- State Plan Contains
  - Information the Act requires
  - Contains the information the State desires
  - Captures a snap shot in time
  - Allows the governor to make an informed decision on the FN value
  - Is a non-binding document (allows governor to make a decision)
  - Is implementation and affordable
  - Supports the FCC and NTIA in evaluation the plan
- Governor will have 90 days to
  - Participate in the FN RAN deployment
  - Assume responsibility to conduct its own
- FN Chairwoman: "FirstNet must provide a service that is compelling to public safety in order to earn your business."
- Pablo Vegas President and COO, AEP Ohio, American Electric Power (3<sup>rd</sup> largest power utility company)
  - Operates a multi-state 800 MHz land mobile radio network
  - AEP operates in 8 states throughout the US (AEP in Ohio)
  - Millions of times per day utilities' telecommunications systems around the work operate to prevent injury or loss of life, and to protect property of the electric utility, personal residences and the general public
  - Use telecommunications systems to operate their transmission systems
  - Uses
    - LMR (Voice and data telecom for personnel)
    - Distribution automation (Self-healing grid monitoring)
    - Distribution generation (Monitoring and control of distribution systems such as solar, wind, industrial, others)
  - Supervisory Control and Data Acquisition (SCADA) systems monitor and control the electric grid
  - Utilities do not have dedicated access to spectrum, must compete with industrial users
  - Bandwidth requirements for these systems are not significant
  - Estimate that we would need a minimum guaranteed access to FN of 250 kbps access, which is less than one percent of the FN spectrum
    - Priority access that would not include guaranteed access to 250 kbps, would result in AEP building an independent network
    - This would result in a redundancy of the investment and not cost effective
    - Utilities would bring resources and funding into the initial construction of the PSBN
    - Metering for example could bring along significant revenues to FN



# OFIP

OHIO-FIRST.NET IMPLEMENTATION PROJECT

## INITIAL CONSULTATION MEETING MINUTES

- Utilities would make excellent partners
- Q: You are speaking on behalf of AEP, do you think other utilities would think likewise
  - A: Yes we do
- Q: Are you responding to FN public notice documents?
  - Yes we are actively participating
- Q: Appreciate the presentation and approach to provide emergency control of electrical systems
  - A: We are focused on the solutions that allow AEP to optimally deliver services
- Q: From experience, other utilities have a common message regarding access to FN
  - A: Glad to hear that
- Rick Schmahl, CIO, City of Akron, OH
  - Statement on the use of mobile data within the city of Akron
  - Presentation of the Ebola incident and how the City responded
  - A Nurse who tended to an Ebola patient arrived in OH and traveled throughout the state
  - Returns home and is diagnosed with Ebola
  - Havoc breaks out once the media learns that the nurse visits the state
  - The incident managed us!
  - FirstNet – We manage the incident
    - Virtual EOC with video conferencing, conference calling, screen sharing
    - Better manage information distribution and status
  - Q: How did you manage information sharing and communications with the surrounding jurisdictions and agencies?
    - A: Leveraged legacy tools, could not talk with the Feds.
  - Q: Was there a need for mobile data communications?
    - A: Absolutely, for example video conferencing access would have allowed responders to participate from the field and avoid being tied down to the office, or EOC. We did use the LMR network
  - Q: Do we need to graduate the dissemination and access to information, guiding and controlling information access and sharing?
    - A: Certainly
  - Q: What would it take to train the users on the use of FN? What would you do, how would you use it?
    - A: Roll calls, although roll calls are becoming old school. Web based training,
  - Q: Top down training will be required?
    - A: Local governance and control will be required to ensure we are using the network properly
- LT Curtis Braniger – Guernsey County Sheriff's Office (41,000 residents in the County) (549 sq. mi. area)
  - We are using similar mobile data tools and applications as the larger jurisdictions
  - We have access to:
    - ALERTS/DDTI E911 Mapping (routing, mapping, AVL)
    - RDP (Remote desktop protocol): Access to both patrol and corrections divisions RMS, associated agency databases
    - ALERTS Sentinel (LEADS/NCIS interface)



# OFIP

OHIO-FIRST.NET IMPLEMENTATION PROJECT

## INITIAL CONSULTATION MEETING MINUTES

- OHLEG- people, places, training, references
- ALPR: license plate readers
- Traffic Monitoring Cameras
- Live feed cruiser (UC footage)
- School IP access
- Verizon has provided for our needs, each cruiser is equipped with a Verizon 4G LTE jetpack
- We have better coverage from Verizon then from our LMR network
- Currently pushing live video from the field through Verizon
  - Need better video capabilities but we have proved the value through the current application
- E911 Mapping is very valuable application
- Would like to live feed body cams back to dispatch
- Continuous live video cruiser feeds
- Scalable RMS to include written statements
- Where does FirstNet stand
  - Comparable speeds of LTE
  - Assurance of bandwidth regardless of volume or situational status
  - Comparable data limits
  - Comparable if not lower pricing
  - Comparable coverage in SE Ohio, which is not easy to achieve. Ability to program, port forwarding, external antennas, etc.
- Q: What does Verizon charge?
  - A: \$37.99 per month
- Q: How do you store LPR data?
  - A: We do not save the data, we are now evaluating governance.
- Q: How do you store video?
  - A: 60 to 90 days
- Q: How can FN win your business?
  - A: At \$25.00 per month of unlimited data
- Chief Paul McKahan, City of Caldwell, Noble County, OH
  - We do not have good coverage, we need FN coverage
  - Show me the money, service at a lower fee, you will have our business
  - New chief, trying to figure it all out
  - We do not have towers, very limited service, that's why we need FN help
- Brandon Abley, Televate, Ohio FirstNet Implementation Program (OFIP) Project Manager
  - Two phase survey strategy to identify key points of contact (POC) and to determine end user requirements and other information of value to the consultation
    - Projection of potential FN subscribers throughout the state
  - OFIP user survey is available over the secure [www.OhioFirst.Net](http://www.OhioFirst.Net) web site, divided into four distinct chapters



# OFIP

OHIO-FIRST.NET IMPLEMENTATION PROJECT

## INITIAL CONSULTATION MEETING MINUTES

- Multimedia outreach strategy
  - Training videos available over the web site
- Lessons learned
  - Difficult to excite stakeholders about a service they can't have today, tomorrow or even the next day
  - State public safety association outreach is fundamental to spread the OFIP news and to identify contacts
  - Outreach requires persistence, persuasion and patience
  - Difficult to reach stakeholders with online publications
  - Key contributors are golden
  - Just when you think all FirstNet requirements are defined, FirstNet seeks something additional
    - FirstNet agrees that they are evolving, improving and seeking input so the project will change and expand
- Surveys
- POC Survey (3095 recipients, 980 opened, 808 POC completed)
- UserPop Survey (89 responses to date)
- Barriers to adoption: interesting results positive to commercial carrier networks
- Q: Do you have a breakdown of the number of tables for police and fire? CJIS requirements for police and are much greater than for fire.
  - A: Yes we have this data and will analyze accordingly.
- Q: Is there a police to secure the patrol car when not in the car, need to lock it up?
  - A: Yes
- Traffic profile workshops will be undertaken based on incident tabletops
- We are developing a 3D training video demo/scenario to best describe the benefits of FirstNet
  - With and without the use of future situational awareness
  - Structural fire rescue
  - Player will navigate structure in poor visibility, perform rescue and extraction
- Dave Buchanan and Rich Reed of FirstNet: FirstNet Network Benefits
  - Dedicated to public safety
  - Quality OF Service (QoS)
- Key discriminators
  - Cost
  - Coverage
  - Reliability
- What do you like about your current service?
- What could FirstNet offer to improve your current service?
- What would make your agency become a subscriber?
- How often does your agency interact with your provided?
- Does your agency use telephone support? Web? Dedicated person?



# OFIP

OHIO-FIRST.NET IMPLEMENTATION PROJECT

## INITIAL CONSULTATION MEETING MINUTES

- Does your agency have a process to report dead spots to the provided? How do they address them?
  - A: We have a dedicated commercial carrier account manager.
  - A: We report dead spots but not likely to get a response.
  - A: We get some level of coverage gaps fixes.
- FN: We are different, we have a requirement to build out to rural areas, but it is challenging to support these objectives.
- Q: Do you have a need for deployables?
  - A: We have requested them but do not have them. We understand that there is a fee to deploy the COW/COLT.
- Public safety does not have priority access over commercial networks. They will have priority access over FirstNet.
  - Q: How is FN providing deployable assets?
    - A: Through the RFP process
- Budget and Planning
  - How far in advance do you conduct budget planning for mobile data services:
    - A: Most agencies have 5-7 year forecast budgets.
    - A: Chiefs can include into annual budget but the legislature may not improve?
    - A: Invoices are paid monthly
    - A: We have 324 PSAPs in Ohio
- Stakeholder input critical to inform FirstNet Planning
  - Where?
    - Where needed (objectives)
    - Different devices types
    - Throughout levels
  - How much?
    - # of devices
    - Application usage
    - Data consumption
  - FN financial team
    - RFP development/evolution
    - Economic development
- Data collection categories
  - Coverage objectives
  - Users and operations
  - Current services
  - Capacity
- Please respond to the survey
- Guiding principles for data requests
  - Critical data
  - When needed



# OFIP

OHIO-FIRST.NET IMPLEMENTATION PROJECT

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- Pre-populated
- Specific deliverables
- Be flexible
- Get feedback
- Advance notification
- Local knowledge
- Data collection milestones
  - To inform the acquisition process (9/30/2015)
  - Input to the draft state plan
- Coverage Objective vs. Coverage Maps
- FN Coverage Objective Goals
  - The RFP coverage maps were designed to set a FN nationwide coverage objective baseline as a starting point, states will determine their coverage requirements
  - Facilitate coverage discussion
- Starting coverage user population
  - Public safety user population
  - Public safety high risk / areas of interest (Source: HSIP)
  - US Population (Source: 2012 census)
  - Developed areas/ buildings (Source: 2006 national land cover database)
  - Roadways (Source: US Dept of Transportation)
- We need to understand the needs in these areas where we do not have data, the white spaces
- We do not have this data for US Territories
- There are significant areas of the state of Ohio where we do not have data
- Dialogue regarding the white spaces, where we do not have data. These areas may not have the required assets, population
- Where are Changes Needed?
  - End user local knowledge
  - Calls for service data
  - Tourist/recreational areas
  - Evacuation routes
  - Large temporary venues
  - Mass transit routes
  - Highly navigable waterways
  - Etc.
- We will use your data to update the current maps and integrate into the RFP. We want you to tell us what is important to Ohio to meet your objectives. We understand that providing coverage into areas that have little to know infrastructure has a cost.
  - Q: How do we provide service in this limited infrastructure areas? Where we may have commercial service.
    - A: We need to know where you need coverage.



# OFIP

OHIO-FIRST.NET IMPLEMENTATION PROJECT

## INITIAL CONSULTATION MEETING MINUTES

- Q: How will you cover our most complex to cover areas?
  - A: Could be fiscally irresponsible to provide coverage into areas that may be too expensive to cover?
- Q: The MARCS network is meeting our coverage requirements throughout the state.
  - A: FN may or may not support those coverage needs, but you need to identify your needs so we can include these requirements into the RFP
- Q: We need robust coverage.
  - A: We hear you but how will the state pay for the required coverage?
  - A: FirstNet is not saying that we are not providing coverage in the white spaces (reference to the RFP coverage map for OH), you need to tell us what's important and where you need coverage
  - A: FN is not performing a green field build out, we plan to leverage commercial carriers
- Q: Does FN expect a single user fee nationwide?
  - A: Not sure, that is based on the partners we attract through the RFP
- CAD data can provide perspective on where the calls for service differ from the FN draft coverage maps
- FirstNet and Ohio closing remarks, meeting adjourned