



E-911 Services Board Meeting

General Business Meeting

March 12, 2015





Agenda

1. Call to Order
2. Approval of Minutes
3. NG9-1-1 Feasibility Study
 - Overview of the Study
 - Implementation Strategy and Detailed Plan
 - Board Action
4. Old Business
5. New Business
6. Public Comment
7. Adjourn



Overview of the NG9-1-1 Feasibility Study





Review of Project Drivers

- Retirement of the current analog network
- Carriers have begun a transition to IP-based telephony
- Traditional 9-1-1 service providers have announced their intention to exit the marketplace
- Shifts in consumers' expectations and behaviors
- Advances in technology



Feasibility Study Goals

- Provides multiple solutions for the design of a single, statewide IP-based 9-1-1 network
- Addresses system design, procurement, implementation, operation, and governance issues
- Develops a multi-phase effort to address generational technology issues
- Supports a long-term strategic approach to improve 9-1-1 service delivery



Statewide ESInet Benefits

- Speeds access to Text-to-911
- Enables enhanced redundancy / backup PSAP flexibility
- Improves interoperability / data sharing among PSAPs, especially for PSAP-to-PSAP call transfer
- Allows for efficiencies through centralized solutions and retiring of expensive, legacy technologies



Methodologies Employed

- PSAP Survey / Data Collection
- VITA Staff and Regional Coordinator Input
- Town Hall Meetings / 9-1-1 Community Input
- Policy Review
- External Reference Review



Operational Feasibility

- Concept of NG9-1-1 ready with purchases
- State contracts
- Multi-jurisdictional purchases
- Concept of a Regional Advisory Council introduced
- Standards and best practices for NG9-1-1
- Performance metrics
- Situational awareness and mission continuity plans



Technical Feasibility

- Current aspects of 9-1-1 service
- Motivators for NG9-1-1
- Key NG9-1-1 system components
- Conceptual network designs
- Network design considerations
- Public safety-grade considerations
- GIS considerations
- Communication Service Providers



Technical Feasibility

- One of the most time consuming efforts of moving to an NG9-1-1 system will be the preparation of GIS data
 - Used to provide location validation and routing of 9-1-1 calls to the appropriate PSAP
- Spatial Database Management System (SDBMS) & Geospatial Data Exchange (GDX)
- Synchronization of the MSAG with the GIS centerline and address point data



Technical Feasibility

- Fundamental question that needs to be answered before an ESInet can be constructed:
 - State-level ESInet, regional ESInets, or regional ESInets that interoperate with state-level ESInets, and other ESInets



Policy & Political Considerations

- Expanded role for state coordination and E-911 Services Board, as well as rulemaking (enforcement)
- Changes in Board representation
- Regional Advisory Council makes recommendations for rulemaking
- Elimination of cost recovery and transfers
- Sustainable funding model
- Enhanced role of Regional Coordinators



Economic Feasibility

- Until a final implementation plan has been determined, the true costs for an ESI-net solution and NG9-1-1 implementation will not be known
- Existing surcharges and taxes alone may no longer be adequate to fund both a legacy 9-1-1 system and a transition to next generation services



Implementation Strategy





Guiding Principles

- 9-1-1 is an essential, local/regional service
- Need to address ALL of 9-1-1 not just NG
- Full stakeholder engagement is needed
- Services must be not be degraded
- Economies need to be leveraged
- Doing nothing is NOT an option



Approach

- Report contains 141 recommendations
- Determined priority
- Identified those chronologically first
- Grouped into “themes”
- Estimated resources required
- Completion by July 1, 2016



Governance/Legislative

- Total of 57 recommendations
- 27 to be addressed in first year
- Decision maker education
- Explicit designation of 9-1-1 as essential and local service
- Role of the Board and Coordinator
- Not Board composition or Advisory Council
- Rulemaking Authority



Rulemaking

- More holistic and address the enforcement of standards
- Needs to be broader than NG9-1-1
- 9-1-1 rulemaking needs to focus on E-911 and NG9-1-1
- The Board should be responsible for enforcement to compel compliance



ESI Net Design/Pricing

- Total of 21 recommendations
- 3 to be address in the first year
- Requirements Definition
- Options Evaluation
- Request for Information



Best Practice/Standards

- Total of 10 recommendations
- 3 to be addressed in first year
- Identify and prioritize necessary best practices/standards for NG-911
- Areas of consideration
 - QA/QC for 9-1-1 system and Call Handling
 - Public Education
 - Training and certifications
 - EMD



Geospatial Foundation

- Total of 2 recommendations
- One to be addressed the first year
- NG-911 Data Standards
 - Road Centerline
 - PSAP Boundaries
 - Emergency Response Zones
 - Authoritative Boundaries
 - Address Points
- ALI/MSAG Analysis



PSAP Grant Program

- Total of 14 recommendations
- 8 to be addressed in the first year
- Require NG-911 Compatible Equipment
- Statewide Equipment Contracts
- Regional Encouragement
(CPE/CAD/Logging)



Funding

- Total of 29 recommendations
- None to be addressed in first year
- Sustainability
- Collection methodology
- Rate amount
- Fund transfers
- Formulas
- Need ESI Net design and pricing first



Detailed Plan





Governance/Legislative

- List of secondary PSAPs (Ops12A)
- Educational material for decision makers (Ops21B)
- Adoption of NG-911 Master Plan (Gov04E & FR03A)
- Establishment of Advisory Council
- Evaluation of legislation for modification
 - Board responsibility for all 9-1-1 service (Gov01A & Gov8A)
 - Board responsibility for ESI Net (Gov01B)
 - Closer compliance w/national guidelines (Gov01C)



Governance/Legislative (Continued)

- Evaluation of legislation for modification (Continued)
 - State Coordinator roles/responsibilities (Gov02A&B, SO01A&B & SO02A)
 - Responsibilities of state agencies (Gov03A&B)
 - VITA responsibility to coordinate and collaborate with State and regional public sector entities (Gov04A)
 - Preserve and codify 9-1-1 as a locally managed service (Gov05A&B)
 - Board authority to make rules (Gov09A)
 - Establish 9-1-1 as an essential service (Gov14A&B)



Governance/Legislative (Continued)

- Evaluation of legislation for modification
(Continued)
 - Board authority to establish QA, standards, and rules for the 9-1-1 system (RM02A)
 - Board authority to establish QA, standards, and rules for call handling (RM03A)
 - Board authority to establish training requirements for 9-1-1 (RM04A)
 - Board authority to establish professional accreditation and certifications (RM05A)
 - Board authority to establish EMD (RM06A)



Governance/Legislative Approach

- Primarily assigned to Policy Committee
- Begin meeting in late March
- Monthly meetings thereafter
- At least two PSAP work sessions
- Outreach to other stakeholder groups
- Use MCP recommendations and other states as models for consideration
- Overall goal to have legislation drafted by August 1



Governance/Legislative Schedule

- Secondary PSAPs and Educational material completed by March 31
- First two committee meetings to address Board responsibilities
- First PSAP work session between these two meetings
- Third committee meeting to address responsibilities of staff & Advisory Council
- Second PSAP work session
- Last two meetings to consider draft legislation



ESI Net Design/Pricing

- Develop a design to reduce POI (Tech01A)
- Develop a list of common requirements for the ESI Net and NG9-1-1 services (Tech09A)
- Network requirements should be determined and a competitive ITB issued for network services (Tech11A)



ESI Net Design/Pricing Approach

- Use ISP Staff to develop requirements and conduct outreach
- Focus requirements gathering on ISP regions
- Conduct PSAP work session to validate regional requirements
- Issue RFI through VITA to determine market ability to meet requirements



ESI Net Design/Pricing Schedule

- Develop a common set of requirements based on early adopters by April
- Regional outreach meetings in May to determine/validate requirements
- PSAP work session in June to review statewide results
- Present results to Board in July
- Issue RFI in August/September
- Response due by November 1



Best Practice/Standards

- Comprehensive review of the necessary technical and operational standards for the NG9-1-1 system (SO5A)
- Ensure that the types of data collection the E-911 Services Board or VITA may need to manage the NG9-1-1 services is appropriate (Rec02A)
- Monitor compliance of any adopted standards for the 9-1-1 system, the PSAP, or call handling, adopted by the Board (Gov04B)



Best Practice/Standards Approach

- Seek volunteers for a work group
- Schedule monthly meetings of work group
- Task work group to:
 - Develop list of all technical and operational standards needed for NG-911
 - Prioritize that list
 - Begin developing those standards as best practices
 - Evaluate data collection needed for NG-911 and recommend changes



Best Practice/Standards Schedule

- Establish work group by April 30
- Conduct first meeting in May and schedule monthly meetings thereafter
- Develop the prioritized list of NG-911 standards by August 31
- Begin developing best practices to become standards by September 15



Geospatial Foundation

- ALI/MSAG Analysis (Tech15A)
- NG-911 Data Standards
 - Road Centerline
 - PSAP Boundaries
 - Emergency Response Zones
 - Authoritative Boundaries
 - Address Points



Geospatial Foundation Approach

- Manage through VGIN Coordinator
- Evaluate VITA service for analysis
- Established standard setting process
- High stakeholder involvement
- Leverage work in Associations and other states



Geospatial Foundation Schedule

- Conduct ALI/MSAG Analysis for 30 localities by September 1
- Analyze results to determine statewide implications
- Develop RCL data standard by August 1
- Develop PSAP boundaries standard by October 1
- Develop ESZ and address points by December 31



PSAP Grant Program

- Establish state contract for PSAP equipment (Ops04A)
- All call handling equipment should be NG-911 ready (Ops05A&B)
- Incentivize PSAP to act regionally when procuring NG9-1-1-ready CPE (Ops06A), CAD systems (Ops07A) and voice logging (Ops09A)
- Provide additional grant funding to PSAPs, especially those interested in pursuing regional approaches (FR09A)



PSAP Grant Program Approach

- Primarily assigned to PSAP Grant Committee
- Committee to develop CPE, CAD and voice logging requirements for statewide RFP
- Use VITA procurement authority to issue RFP
- Grant committee to discuss recommendations in context of FY2017 PSAP Grant Guidelines



PSAP Grant Program Schedule

- PSAP Grant Committee (PGC) to meet up to three times before May Board meeting
- Board adopts FY2017 guidelines in May
- PGC to meet monthly to develop PSAP equipment requirements
- Complete CPE in June
- VITA to issue RFP in July, award in September
- CAD and Logging handled sequentially



Board Actions





March 12 Actions

- Direct the PSAP Grant Committee to advance Study recommendations within the FY2017 PSAP Grant Guidelines
- Direct the Policy Committee to address Study recommendations for Governance and Legislative changes
- Direct Staff to begin work on ESI Net requirements and best practice development



Old Business





New Business





New Business

- PSAP Grant Committee
 - Meeting to be held after today's Board meeting
- Policy Committee
 - Appointment
 - Meeting Schedule
- Emergency Grant Requests
 - Fluvanna County
 - Shenandoah County



And In Conclusion

- Public Comment
- Adjourn
- Next meeting date is May 14th