

9-1-1 Coordination Board Meeting - Agenda

**Cedar Shore Resort – Missouri Winds Room
1500 Shoreline Drive, Oacoma, SD 57365**

August 11, 2011 – 10:00 AM Central

- I. Call to Order and Roll Call
- II. Adoption of August 11, 2011 Agenda
- III. Approval of July 14, 2011 Meeting Minutes
- IV. Public Comment
- V. Discussion on potential 9-1-1 emergency surcharge legislation
- VI. Discussion on potential point-of-sale collection legislation
- VII. Discussion and potential board action on proposed administrative rules regarding radio equipment and addressing/street signage
- VIII. Discussion on state 9-1-1 plan draft outline
- IX. Discussion on County/Municipality 9-1-1 fund balances
- X. Discussion on 9-1-1 Coordination Fund balance
- X. Subcommittee Reports
 - i. Technical Subcommittee
 - ii. Operations Subcommittee
 - iii. Legislative Subcommittee
 - iv. Funding Subcommittee
 - v. Nominating Subcommittee
- XI. Coordinator's Report
- XII. Other Business
- XIII. Adjourn

To make additional arrangements, please contact Michael S. Houdyshell, 9-1-1 Coordinator, South Dakota Department of Public Safety, at 605.773.2691.

South Dakota 9-1-1 Coordination Board

Meeting Minutes for July 14, 2011 – 2:00 PM Central (DRAFT)
Via Teleconference
Public Listening Location – 118 W. Capitol Ave., Pierre, SD 57501
South Dakota Department of Public Safety

Board members present: Barthel, Carmon, Falken, Haines, Rufledt, Sawvell, Serr, Turman

Board members absent: Jaeger, Sebert, Turbak

Staff present: Michael Houdyshell (9-1-1 Coordinator, DPS Attorney)

Others present: Paul Schueth, Edie Jenniges, Leah Rafferty, Greg Brooks

I. Call to Order & Roll Call

Meeting called to order at 2:00 PM by Chairperson Rufledt. Roll was taken and a quorum was present.

II. Approval of Agenda

Motion to approve agenda.

Moved by: Carmon Second by: Turman

Substitute Motion to amend agenda by Rufledt.

Discussion: Rufledt moved that Section X of the agenda be amended to include the Funding Subcommittee and Nominating Subcommittee.

Conclusion: Substitute Motion carried unanimously (by roll call vote).

III. Approval of April 11-12, 2011 Meeting Minutes

Motion to approve meeting minutes.

Moved by: Falken Second by: Haines

Discussion: None

Conclusion: Motion carried unanimously (by roll call vote).

IV. Public Comment

None

V. Discussion and potential board action on the Board's report, "9-1-1 Funding in South Dakota: Current Status and Future Challenges"

Houdyshell briefed the members on the final draft of the Board's report on surcharge collection in South Dakota and indicated the report was ready for approval and distribution to the Governor's office and the legislature.

Motion to approve Board's report, "9-1-1 Funding in South Dakota: Current Status and Future Challenges."

Moved by: Carmon Second by: Barthel

Discussion: Serr asked the other board members whether information on when South Dakota's neighboring states increased their surcharges should be included in the report. The members discussed this and decided it was good information to have available, but probably not needed in the report at this time. Barthel asked whether Houdyshell knew why expenditures were down significantly in 2010 as compared to 2009. Houdyshell said he would do some research of the financial reports to determine whether this discrepancy can be explained and will report back to the Board.

Conclusion: Motion carried unanimously (by roll call vote).

VI. Update on 9-1-1 surcharge issue/potential legislation

Houdyshell gave an update on the surcharge issue and explained that there was no official direction from the Governor's office as of yet. He will continue to be in contact with Governor's staff regarding the issue.

Rufledt briefed the Board on his recent meeting with Senator Tieszen. The senator is interested in bringing a surcharge increase bill during the next legislative session. According to Rufledt, Senator Tieszen would be in favor of a modest increase to the surcharge at this time.

VII. Discussion on point-of-sale legislation

Houdyshell briefed the Board on the current state of point-of-sale collection of the surcharge on prepaid wireless service. Several states have enacted legislation requiring retailers to collect the surcharge at the time of the sales transaction to ensure all potential 9-1-1 system users are paying the applicable surcharge.

Motion to refer the point-of-sale issue to the Funding and Legislative Subcommittees for further study.

Moved by: Haines Second by: Serr

Discussion: None

Conclusion: Motion carried unanimously (by roll call vote).

VIII. Discussion on proposed administrative rules regarding radio equipment and addressing/street signage

The Board discussed the two proposed administrative rules that were originally considered at the April 11, 2011 meeting. Haines refreshed everyone's memory of the suggested revisions to the rules. Houdyshell will incorporate the suggested revisions into the proposed rules and have them available for Board action at the meeting scheduled for August 11, 2011.

IX. Subcommittee Reports

Technical subcommittee co-chair Carmon provided the Board with an overview of his recent attendance at the national NENA convention in Minneapolis. Board members discussed additional technical expertise and input on the NG9-1-1 portion of the State 9-1-1 Plan that will be drafted by the subcommittee. Carmon also briefed the Board on the subcommittee's May 2011 meeting wherein potential legislation to address MLTS and 9-1-1 was discussed. The subcommittee will be studying the issue in more detail before offering any suggestions to the Board as a whole.

The chairs of the Operations, Legislative, Funding, and Nominating subcommittees all reported no activity since the prior Board meeting.

X. Coordinator's Report

- i. State 9-1-1 Plan outline: Houdyshell explained that he is working on preparing an outline for the Board's consideration at the next meeting.
- ii. Rules compliance: Houdyshell stated that outreach to PSAPs/counties with rules compliance issues will be ongoing.
- iii. 2010 financial reporting: Houdyshell noted that the 2010 financial reporting was complete and there was a vast improvement in compliance in comparison to 2009.
- iv. 2011 Annual Report: Houdyshell reported that the 2011 Annual Report is a work in progress and should be ready for submission (along with the surcharge report) by mid-August.

XI. Other Business

None

Motion to Adjourn

Moved by: Serr Second by: Turman

Motion carried unanimously

Meeting adjourned at 3:46 PM

DRAFT

DRAFT LANGUAGE FOR POTENTIAL ADMINISTRATIVE RULES (July 2011)

1) Radio Equipment

"9-1-1 surcharge funds may be used to pay for radio communication equipment in a PSAP that allows dispatchers to page and communicate with emergency responders. Such equipment may include: back room radio equipment and racks, central electronics banks, radio software, desktop radio consoles, radio computers and servers, control station radios, control station antennas and cables, mobile radios used by the dispatch center as control station or base station radios, portable radios used in the dispatch center for backup purposes, and repeaters or paging terminals used by the dispatch center as primary voice, data or paging repeaters for the purpose of dispatching emergency responders to calls for service. 9-1-1 surcharge funds may be used to pay dispatch connectivity costs to such repeaters and paging terminals. 9-1-1 surcharge funds may not be used to purchase radio communication equipment or systems for emergency responders or other city or county agencies. Prohibited equipment may include: portable and mobile radios, pagers, cell phones, mobile data terminal and related equipment, automatic vehicle location (AVL) systems and related equipment, pyramid radios or systems, radio towers, and equipment shelters."

2) Addressing and Street Signs

"9-1-1 surcharge funds may be used to pay the initial one-time costs associated with a county or municipality issuing physical addresses for the purpose of implementing Enhanced 9-1-1 to include: street name signs, map books, and addressing-related wages. 9-1-1 surcharge funds may not be used to pay for on-going maintenance costs related to addressing, street name signs or map books after Enhanced 9-1-1 has been implemented. "

SD STATEWIDE 9-1-1 PLAN DRAFT OUTLINE (FOR DISCUSSION PURPOSES ONLY)

General Outline

- Overview and Background of 911 in South Dakota
- Current 911 Environment in SD
 - Legislation and regulation
 - Program and System Structure
 - Technology
 - Economics and Funding
- Future 911 Environment in South Dakota
 - Legislation and regulation
 - Program and System Structure
 - Technology
 - Funding
- Goals and Objectives
- Plan Maintenance and Updates
- Resource Allocation

Next Gen 9-1-1 Plan Draft Outlines (to be consolidated/condensed)

Outline 1 (Carmon)

1. Establishment of a statewide, dedicated, managed Next Generation Emergency 9-1-1 (NG911)
2. The NG911 must be IP-enabled, fail safe, and redundant. The network must allow PSAP's to work together cooperatively in ways that are transparent to the callers.
3. Desired NG911 System Capabilities: delivery of text messages, videos, pictures and other data, from cellular phones to a PSAP via the NG911 network. Ability to deliver telematics data such as from automobiles, health alarms or other emergency detection systems direct to PSAP via the NG911 network. Enhanced support for VoIP calls. Pre-validated location info delivered with the 9-1-1 call. Robust and automatic emergency rerouting of 9-1-1 calls when one PSAP is inoperable or busy. All calls and data automatically routed to the correct PSAP. Allows interface to other public safety systems, databases, NCIC/NLETS, RMS, hospital, jail, courts or other relevant systems. Speeds up the delivery of 9-1-1 calls to PSAP's. Cost and operational efficiencies gained through use of standard CPE and interfaces. Rapid adaptability to new and emerging technologies.
 - a. Redundant and robust servers must be strategically placed within the NG911 network to host the statewide CPE and NG911 applications. The servers may be located at a service provider's data center or at an agency site. The entire NG911 network and all equipment and applications must have an operational continuity availability of at least 99.999% at the component level. A minimum of two geographically diverse data centers are called for. Each must be capable of handling the entire call volume of the system.

- b. Open or non-proprietary telecommunications, messaging, image and video protocols and standards will need to be supported.
4. Outline for deployment of statewide NG911 system:
- a. Identification of funding
 - b. Identification of participating entities
 - c. Preparation, distribution and analysis of the RFP responses
 - d. Award to successful NG911 system provider
 - e. Negotiations for performance terms
 - f. Initial installation and testing
 - g. Initial PSAP connection and testing
 - h. Coordination Board approval for "go live"
 - i. Continuation of deployment
 - j. Enhanced NG911 state training and certification for 9-1-1 Dispatchers and for responders, as well as public education.
 - k. Periodic review of current standards and best practice
5. Possible methods to fund the NG911 System:
- A. Existing 9-1-1 surcharge increased
 - B. Secure Federal Funding through grants or programs
 - C. Secure State funding for start-up costs
 - D. Work with network providers to establish statewide averaged costs
 - E. Allow the state to charge a separate or a percent of the increased 9-1-1 surcharge just to pay for the NG911 system and the State 911 office
6. Findings/Needs:
- a. Ensure sustainable PSAP funding model
 - b. Implement cost effective purchasing of 911 equipment statewide
 - c. Require MLTS to provide ANI/ALI
 - d. Implement statewide GIS/ALI database
 - e. Continue grant fund program
7. NG911 requirements
- a. Voice and data must be delivered at one time
 - b. Each PSAP shall be operated to maximize efficiencies
 - c. Each PSAP shall meet state standards and requirements for access
 - d. Each provider shall be responsible for meeting the requirements including ALI, MSAG validation, selective routing
 - e. All data and voice from the IP cloud to the PSAP will be IP based, via SIP
 - f. PSAP's will have to meet state requirements for access, firewall, level of service, CPE capability
 - g. There will need to be a router, firewall, etc. between the originating border control and the terminating border control of the IP cloud and PSAP
 - h. Local governmental agencies will continue to retain control over their respective emergency response functions,

- i. Including call receivers. Local jurisdictions will also retain responsibility for managing their respective Sags and GIS / mapping information
 - j. The NG911 project will foster the migration to the centralization of equipment and sharing of host equipment. That is, 9-1-1 calls will continue to be received locally, but the host equipment can be shared across multiple PSAP's or counties.
 - k. The State 9-1-1 Board will control access to the NG911 network
 - l. The State 9-1-1 Board will be responsible for the costs associated with the gateways and the clouds.
 - m. The State 9-1-1 Board will be responsible for the common CPE and data centers.
 - n. PSAP's counties should be responsible for their own local seats of CPE and for connectivity costs to the gateways or clouds
 - o. The NG911 network will permit connection to the existing E9-1-1 network and the public switched telephone network.
 - p. The State 9-1-1 Board will maintain standards for voice compression and quality of service
 - q. The State 9-1-1 Board requires diverse routing from the PSAP to the first point of presence in the IP network.
8. SD NG911 system will provide solutions to the following current PSAP challenges:
- a. 9-1-1 calls from foreign wireless callers (non-compatible cellular technology)
 - b. Lat Long Coordinates should automatically be updated and sent to PSAP if caller is moving
 - c. Lat Long coordinates of an IP address calling 9-1-1 must be determined and used to route the 9-1-1 call to the proper PSAP. Those coordinates should also be passed to the PSAP.
 - d. The name of the wireless customer and their home address must be provided with the ANI/ALI when they dial 9-1-1
 - e. 9-1-1 calls from MLTS must provide ANI/ALI and Lat Long of caller
 - f. A PDF type thumb-nail map showing the actual location of the caller should be available with all 9-1-1 calls in the event the SPAP cannot plot the caller's location to a map for whatever reason.
 - g. Uninitialized call phones – either ban them from being able to make a call to 9-1-1 or, make it so that they are temporarily made a part of that carriers network with a pseudo phone number that we can trace, call back, and locate via Lat Long.
9. Education and Information to be shared with all counties and cities currently operating a PSAP, about the potential for cost savings when contracting for PSAP services.

Suggested Plan Topics and Points (Rufledt) (for discussion purposes only)

1. (Iowa) Establishment of a statewide, dedicated, managed Emergency 9-1-1 Internet Protocol (IP) Network (E911IPnet)
 - a. The E911IPnet must be IP-enabled, fail safe, and redundant. The network must allow PSAPs to work together cooperatively in ways that the current system does not allow.
 - b. An IP based E911 network will allow PSAPs to receive call-related data directly from multiple data sources such as telematics service providers, wireless carriers, or internet based telephone service providers, rather than being restricted to accessing automatic location identification (ALI) databases only, as with the current E911 system. PSAPs must be able to share data over the network with one another and to other public safety groups and providers. Open or non-proprietary telecommunications, messaging, image and video protocols and standards will need to be supported.

2. (Iowa) Outline for deployment of statewide E911IPnet and NG911 system:
 - a. Identification of funding
 - b. Identification of participating entities
 - c. Preparation, distribution and analysis of the RFP responses
 - d. Award to successful E911IPnet system provider
 - e. Award to successful NG911 system provider
 - f. Negotiations for performance terms
 - g. Initial installation and testing
 - h. Initial PSAP connection and testing
 - i. State approval for "go live"
 - j. Continuation of deployment
 - k. Periodic review of current standards and best practice

3. (Kentucky) Desired NG911 System Capabilities: delivery of text messages, videos, pictures and other data, from cellular phones to a PSAP via the E911IPnet. Ability to deliver telematics data such as from automobiles, health alarms or other emergency detection systems direct to PSAP via the E911IPnet. Enhanced support for VoIP calls. Pre-validated location info delivered with the 9-1-1 call. Robust and automatic emergency rerouting of 9-1-1 calls when one PSAP is inoperable or busy. All calls and data automatically routed to the correct PSAP. Allows interface to other public safety systems, databases, NCIC/NLETS, RMS, hospital, jail, courts or other relevant systems. Speeds up the delivery of 9-1-1 calls to PSAPs. Cost and operational efficiencies gained through use of standard CPE and interfaces. Rapid adaptability to new and emerging technologies.

4. (Kentucky) Redundant and robust servers must be strategically placed within the E911IPnet to host the statewide CPE and NG911 applications. The servers may be located at a service providers data center or at an agency site. The entire E911IPnet and all equipment and applications must have an operational continuity availability of at least 99.999% at the component level. A minimum of three geographically diverse data centers are called for. Each must be capable of handling the entire call volume of the system.

5. (Kentucky) There must be Enhanced NG911 state training and certification for 9-1-1 Dispatchers and for responders, as well as public education.

6. (Michigan) Possible methods to fund the NG911 System:
 - A. The state collects all 9-1-1 surcharge and then distributes as follows (modified for SD by Ted):
 - 90.5% goes back to the counties via two manners; 1) 40% on an equal share basis per county, 2) 60% on a per capita basis
 - 7.75% to pay the equipment and network costs of the E911IPnet and NG9-1-1 system
 - 1.25% to administer the funds and fund the State 9-1-1 Coordination Board, State 9-1-1 Coordinator and staff
 - .5% to pay for NG911 dispatcher and responder training and public education
 - B. Allow the state to charge a separate 9-1-1 surcharge just to pay for the NG911 system and the State 911 office

7. (North Carolina) Findings/Needs:
 - Create sustainable PSAP funding model
 - Implement cost effective purchasing of 911 equipment statewide
 - Require MLTS to provide ANI/ALI
 - Grant State 9-1-1 Board the ability to pay for E911IPnet
 - Create NG911 process
 - Hire 911 technical & project management staff
 - Create central 911 data repository
 - Implement statewide GIS/ALI database
 - Establish grant fund for PSAP consolidation

8. (North Carolina) PSAP Standards (not in place in SD but needed)
 - "Two or more operator positions per PSAP, staffed continually by properly trained and certified 9-1-1 dispatchers"
 - "Instant playback devices or capability at each position for phone and radio traffic"
 - "A generator, preferably fueled by an independent source, capable of running all required PSAP technical, security, lighting, and HVAC systems at 100% load for a period not less than 72 hours."
 - "An uninterruptible power supply (UPS) system capable of running all technical, lighting and security devices in the PSAP at 100% capacity for a period of not less than 4 hours."
 - "A written emergency plan which addresses the failure of critical equipment and systems, including procedures for PSAP evacuation and for extended backup operation from an alternate facility. The alternate facility must be capable of handling the predicted call volume."

9. (Washington)
 - a. Voice and data must be delivered at one time
 - c. All carriers must connect to the states E911IPnet where analog signals will be converted to IP and calls will be routed to the proper PSAP
 - d. Each provider must provide its own access to the gateway and shall meet state standards and requirements for access
 - e. Each provider shall be responsible for all costs of connecting and meeting the requirements including ALI, MSAG validation, selective routing
 - f. All data and voice from the IP cloud to the PSAP will be IP based, via SIP
 - g. PSAPs will have to meet state requirements for access, firewall, level of service, CPE capability
 - h. There will need to be a router, firewall, etc. between the originating border control and the terminating border control of the IP cloud and PSAP

- i. The E911IPnet should be Multiple Protocol Label Switching (MPLS) or equivalent. Local governmental agencies will continue to retain control over their respective emergency response functions,
- j. Including call receivers. Local jurisdictions will also retain responsibility for managing their respective MSAGs and GIS / mapping.
- k. The NG911 project will foster the migration to the centralization of equipment and sharing of host equipment. That is, 9-1-1 calls will continue to be received locally, but the host equipment can be shared across multiple PSAPs or counties.
- l. The State 9-1-1 Board will need to control access to the E911IPnet
- m. The State 9-1-1 Board or Program Office should be responsible for the costs associated with the gateways and the clouds.
- n. The State 9-1-1 Board should also be responsible for the common CPE and data centers.
- o. PSAPs counties should be responsible for their own local seats of CPE and for connectivity costs to the gateways or clouds
- p. The E911IPnet must permit connection to the existing E9-1-1 network and the public switched telephone network.
- q. The State 9-1-1 Board should set standards for voice compression and quality of service
- r. The State 9-1-1 Board should require diverse routing from the PSAP to the first point of presence in the IP network.

10. SD NG911 system should provide solutions to the following current PSAP challenges:

- a. 9-1-1 calls from foreign wireless callers (non-compatible cellular technology)
- b. Lat Long Coordinates should automatically be updated and sent to PSAP if caller is moving
- c. Lat Long coordinates of an IP address calling 9-1-1 must be determined and used to route the 9-1-1 call to the proper PSAP. Those coordinates should also be passed to the PSAP.
- d. The name of the wireless customer and their home address must be provided with the ANI/ALI when they dial 9-1-1
- e. 9-1-1 calls from MLTS must provide ANI/ALI and Lat Long of caller
- f. A PDF type thumb-nail map showing the actual location of the caller should be available with all 9-1-1 calls in the event the SPAP cannot plat the callers location to a map for whatever reason.
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11. Education and Information to be shared with all counties and cities currently operating a PSAP, about the potential for cost savings when contracting for PSAP services.