

| Executive Summary3Interim and Long-Term Strategic Approaches4Strategic Goal—Near-Term Implementation of Text-to-9114Government Authority (Governance)4Jurisdictional Considerations6Liability Considerations6Technology Considerations7Interim SMS Text-to-911 Service Limitations and Concerns8County Planning and Options9Text-to-911 Platform Options10Security Considerations11PSAP Training11Public Education12County Considerations and Concerns13Statewide Funding Environment13Statewide Funding Estimates13Recommendations16Three Funding Alternatives16Approved Funding Process17Timeframe and Projected Schedule18Options Concerns18 | Table of Contents | |
|--|--|------|
| Interim and Long-Term Strategic Approaches | Executive Summary | 3 |
| Strategic Goal—Near-Term Implementation of Text-to-911. 4 Government Authority (Governance). 4 Jurisdictional Considerations 6 Liability Considerations 6 Technology Considerations 7 Interim SMS Text-to-911 Service Limitations and Concerns 8 County Planning and Options 9 Text-to-911 Platform Options 10 Security Considerations 11 PSAP Training 11 Public Education 12 County Considerations and Concerns 12 County Considerations and Concerns 13 Statewide Funding Environment 13 Statewide Funding Estimates 13 Recommendations 16 Three Funding Alternatives 16 Approved Funding Process 17 Timeframe and Projected Schedule 18 Overing Support 18 | Interim and Long-Term Strategic Approaches | 4 |
| Government Authority (Governance)4Jurisdictional Considerations6Liability Considerations6Technology Considerations7Interim SMS Text-to-911 Service Limitations and Concerns8County Planning and Options9Text-to-911 Platform Options10Security Considerations11PSAP Training11Public Education12County Considerations and Concerns12Statewide Funding Environment13Statewide Funding Estimates13Recommendations16Three Funding Alternatives16Approved Funding Process17Timeframe and Projected Schedule18Oppoing Support18 | Strategic Goal—Near-Term Implementation of Text-to-911 | 4 |
| Jurisdictional Considerations 6 Liability Considerations 6 Technology Considerations 7 Interim SMS Text-to-911 Service Limitations and Concerns 8 County Planning and Options 9 Text-to-911 Platform Options 10 Security Considerations 11 PSAP Training 11 Public Education 12 County Considerations and Concerns 12 County Considerations and Concerns 12 Statewide Funding Environment 13 Statewide Funding Estimates 13 Recommendations 16 Three Funding Alternatives 16 Approved Funding Process 17 Timeframe and Projected Schedule 18 Opering Support 18 | Government Authority (Governance) | 4 |
| Liability Considerations 6 Technology Considerations 7 Interim SMS Text-to-911 Service Limitations and Concerns 8 County Planning and Options 9 Text-to-911 Platform Options 10 Security Considerations 11 PSAP Training 11 Public Education 12 County Considerations and Concerns 12 County Considerations and Concerns 12 Statewide Funding Environment 13 Statewide Funding Estimates 13 Recommendations 16 Three Funding Alternatives 16 Approved Funding Process 17 Timeframe and Projected Schedule 18 Opering Support 18 | Jurisdictional Considerations | 6 |
| Technology Considerations 7 Interim SMS Text-to-911 Service Limitations and Concerns 8 County Planning and Options 9 Text-to-911 Platform Options 10 Security Considerations 11 PSAP Training 11 Public Education 12 County Considerations and Concerns 12 County Considerations and Concerns 12 Statewide Funding Environment 13 Statewide Funding Estimates 13 Recommendations 16 Three Funding Alternatives 16 Approved Funding Process 17 Timeframe and Projected Schedule 18 Oppoing Support 18 | Liability Considerations | 6 |
| Interim SMS Text-to-911 Service Limitations and Concerns 8 County Planning and Options 9 Text-to-911 Platform Options 10 Security Considerations 11 PSAP Training 11 Public Education 12 County Considerations and Concerns 12 County Considerations and Concerns 12 Statewide Funding Environment 13 Statewide Funding Estimates 13 Recommendations 16 Three Funding Alternatives 16 Approved Funding Process 17 Timeframe and Projected Schedule 18 Oppoing Support 18 | Technology Considerations | 7 |
| County Planning and Options 9 Text-to-911 Platform Options 10 Security Considerations 11 PSAP Training 11 Public Education 12 County Considerations and Concerns 12 Statewide Funding Environment 13 Statewide Funding Estimates 13 Recommendations 16 Three Funding Alternatives 16 Approved Funding Process 17 Timeframe and Projected Schedule 18 Opgoing Surport 18 | Interim SMS Text-to-911 Service Limitations and Concerns | 8 |
| Text-to-911 Platform Options 10 Security Considerations 11 PSAP Training 11 Public Education 12 County Considerations and Concerns 12 Statewide Funding Environment 13 Statewide Funding Estimates 13 Recommendations 16 Three Funding Alternatives 16 Approved Funding Process 17 Timeframe and Projected Schedule 18 Opgoing Surport 18 | County Planning and Options | 9 |
| Security Considerations 11 PSAP Training 11 Public Education 12 County Considerations and Concerns 12 Statewide Funding Environment 13 Statewide Funding Estimates 13 Recommendations 16 Three Funding Alternatives 16 Approved Funding Process 17 Timeframe and Projected Schedule 18 Oversing Support 18 | Text-to-911 Platform Options | .10 |
| PSAP Training 11 Public Education 12 County Considerations and Concerns 12 Statewide Funding Environment 13 Statewide Funding Estimates 13 Recommendations 16 Three Funding Alternatives 16 Approved Funding Process 17 Timeframe and Projected Schedule 18 Opening Support 18 | Security Considerations | .11 |
| Public Education 12 County Considerations and Concerns 12 Statewide Funding Environment 13 Statewide Funding Estimates 13 Recommendations 16 Three Funding Alternatives 16 Approved Funding Process 17 Timeframe and Projected Schedule 18 Opening Support 18 | PSAP Training | .11 |
| County Considerations and Concerns 12 Statewide Funding Environment 13 Statewide Funding Estimates 13 Recommendations 16 Three Funding Alternatives 16 Approved Funding Process 17 Timeframe and Projected Schedule 18 Opening Support 18 | Public Education | . 12 |
| Statewide Funding Environment 13 Statewide Funding Estimates 13 Recommendations 16 Three Funding Alternatives 16 Approved Funding Process 17 Timeframe and Projected Schedule 18 Opening Support 18 | County Considerations and Concerns | . 12 |
| Statewide Funding Estimates | Statewide Funding Environment | .13 |
| Recommendations 16 Three Funding Alternatives 16 Approved Funding Process 17 Timeframe and Projected Schedule 18 Opeoing Support 18 | Statewide Funding Estimates | .13 |
| Three Funding Alternatives 16 Approved Funding Process 17 Timeframe and Projected Schedule 18 Opening Support 18 | Recommendations | .16 |
| Approved Funding Process | Three Funding Alternatives | .16 |
| Timeframe and Projected Schedule | Approved Funding Process | .17 |
| Ongoing Support 18 | Timeframe and Projected Schedule | .18 |
| | Ongoing Support | .18 |

Statewide Text-to-911 Initiative

Page **2** of **47**

Executive Summary

In recognition that Next Generation 911 (NG-911) services are a few years away, the E911 Board and the Department of Management Services (DMS) have worked with the industry as part of a process to move forward on a critical short-term NG-911 component, the ability to provide text notifications to 911 Public Safety Answering Points (PSAPs). To advance text-to-911 efforts, the E911 Board and the department provide this planning resource to assist counties with their text-to-911 implementation.

This planning guide details the challenges, projects, and activities necessary for the implementation and operation of text-to-911 services. It contains many of the considerations to be addressed by county planners when implementing their text-to-911 systems.

The guide covers many of the elements of a successful county project plan including:

- Governance Structure
- Jurisdictional Considerations
- Liability Considerations
- Technology Considerations
- County Planning and Options
- Text-to-911 Platform Options
- Security Considerations
- PSAP Training
- Recommendations
- Three Funding Alternatives
- Funding Process
- Timeframe and Projected Schedule

At their July 2014 meeting, the E911 Board voted unanimously to support the deployment of text-to-911 ubiquitously in the state and encourage every county to begin planning and implementation. While the determination of the best way to handle text-to-911 is a county decision, it is critical to have a cohesive statewide initiative because sporadic implementations throughout Florida would be confusing.

To actively promote a statewide text-to-911 implementation, the E911 Board is providing financial support. The mechanics of the funding initiative and costs are defined in this guide. Once a county has determined their text control center provider, delivery method, and staffing for the text-to-911 service, they need to only submit the request for funding provided in Appendix 6.

The board has committed to review sustainability considerations for text-to-911 special funding based on next year's available spending authority, county needs, and service benefits. The county programs will be reviewed next year and information on the county funding needs will be requested for a complete understanding of the issues. The E911 Board will review options for the sustainability and ongoing operations until a statewide NG-911 routing system can be realized.

Statewide Text-to-911 Initiative

Page **3** of **47**

The board urges each county to use this guide and begin its implementation of a text-to-911 service no later than the end of May 2015. This provides sufficient time for the procurement of any auxiliary services, and regional implementations, consistent with the target of full statewide implementation by December 2015.

Interim and Long-Term Strategic Approaches

Due to the complexities and cost, full implementation of NG-911 is a long-term initiative. In the short-term, the critical public safety service of text-to-911 is being singled out for aggressive deployment since cellphones can send text messages but PSAPs cannot receive them.

Text-to-911 is under development by the major wireless carriers using interim and long-term approaches but both permit the single code "911" to be used as the emergency number for emergency messages to a PSAP. The interim approach uses a "best-effort" Short Message Service (SMS) implementation that is limited to the transmission of text only; however, even as an interim solution, it will work with enhanced 911 (E911) and NG-911 call-taking systems. The long-term solution, Multimedia Messaging Service (MMS), will allow for the simultaneous transmission of text, photos, video, and various other media formats in the NG-911 environment.

Strategic Goal – Near-term Implementation of Text-to-911

Assure sufficient funding and provide coordination, training, and technical assistance to promote and enable text-to-911 deployments throughout Florida.

Government Authority (Governance)

The E911 Board and the department provide unified leadership for E911 on state 911 issues through planning and coordination. To further improve E911 service statewide, the department assists the E911 Board in developing, implementing and managing grant programs for the counties. These programs assist counties with needed funding for E911 system maintenance, upgrades, and replacements. These efforts are also leading the way for the next generation of Internet Protocol (IP)-based 911 systems and pilot projects involving county and regional Emergency Services IP Network (ESInets).

The Secretary of DMS, or his or her designee, is designated as director of the statewide E911 system by subsection 365.171(5), Florida Statutes. The Office of the Secretary has varied duties and, as director, the Secretary has designated a statewide E911 coordinator to carry out the day-today activities of the E911 program. The director reviews and maintains oversight of all actions taken by the department and provides the final approval on all E911 related policy and fiscalmatters.

Statewide Text-to-911 Initiative

Page **4** of **47**

Statewide coordination of 911 and E911 services including the Emergency Communications Number E911 State Plan (State E911 Plan) is the responsibility of the department. The State E911 Plan is a statewide plan for implementing and maintaining E911 services, thereby establishing the framework for a statewide emergency E911 communications system. In developing the State E911 Plan, the department and county 911 coordinators use a continuous process of information exchange with the appropriate representatives from local governments and the industry, thereby incorporating a true statewide approach to E911 system planning. Representatives from each of

Florida's 67 counties and the 911 industry are involved in this process. The exchange of information assists in identifying new and innovative approaches to all aspects of the E911 system. For the purpose of carrying out the provisions of the State E911 Plan, the Secretary authorized the statewide E911 coordinator to coordinate the activities of the system with state, county, local and private agencies. In implementing the system, the statewide E911 coordinator consults, cooperates and coordinates with public safety agencies.

The E911 Board is established under section 365.172, Florida Statutes, to administer the fee imposed under subsections (8) and (9), with oversight by DMS. These responsibilities include receiving revenues derived from the fee and distributing portions of such revenues to providers, counties, and the department. It advocates E911 issues related to system functions, features and operations to enhance 911 services in Florida. The E911 Board considers emerging technology and related cost savings for the benefit and safety of our residents and visitors. It provides coordination, support and technical assistance to counties to promote the deployment of advanced 911 and E911 systems in Florida. It also provides coordination, technical and financial support for educational opportunities related to Florida's E911 issues for the 911 communities. Revenues derived from the E911 fee are distributed each month to counties per section 365.173, Florida Statutes. The county commissions appropriate the funds collected and interest earned for E911 purposes.

With text-to-911, SMS text is being incorporated into the E911 service. In paragraph 365.172(2)(bb), Florida Statutes, the voice communications services definition¹ includes communications services as defined² in subsection 202.11(1), Florida Statutes. These definitions provide for the transmission, conveyance, or routing of voice, data, audio, video, or any other information or signals, through the use of any technology, which provides access to E911 services.

The Federal Communication Commission (FCC) is encouraging state-level governance of the development and deployment of NG-911³. This state-level governance is seen as the way to successfully transition to statewide NG-911 and eventually lead to the implementation of a national 911 system.

¹ Voice communications services is a two-way voice service, through the use of any technology, which actually provides access to E911 services, and includes communications services, as defined in section <u>202.11</u>, Florida Statutes. Orders and rules adopted by the Federal Communications Commission require these services to be included in the provision of E911 services.

² Communications services means the transmission, conveyance, or routing of voice, data, audio, video, or any other information or signals, including video services, to a point, or between or among points.

³ The Federal Communication Commission, in its Feb. 27, 2013, Report to Congress, "Legal and Regulatory Framework for Next Generation 911 Services," recommended state action on NG-911. It said, "Local and state public safety authorities should retain their primary responsibility for the deployment and configuration of 911 and NG911 services, but Congress should encourage states to establish or empower state 911 boards or similar state-level governance entities to provide technical and operational expertise necessary for the development and deployment of NG911."

Statewide Text-to-911 Initiative

Jurisdictional Considerations

The State E911 Plan establishes the Board of County Commissions in each county as the responsible fiscal agent. In Florida, the county E911 systems are under the direct control of the 67 Boards of County Commissioners. Each county board designates a county 911 coordinator to act as the single point of contact for the department and the PSAPs, and to coordinate effective delivery of E911 services in the county.

This plan details the efforts for a statewide implementation of text-to-911; however, this cannotbe accomplished without the counties' implementation efforts. The counties are the appropriate 911 service governing authority to provide the authorization for their PSAP(s) to accept text-to-911. Sample provider notification letters for this authorization with the service provider contact information are available from board staff for the county 911 coordinators. The wireless service provider's receipt of the county's request to receive the texts starts the provider's six-month implementation period.

The board encourages regional and multi-county approaches and cooperation; however, these will require mutual aid agreements in accordance with paragraph 365.171(4)(c), Florida Statutes, and the State E911 Plan to accept text-to-911 messages for the geographic area and for all PSAPs that the joint venture would serve.

Liability Considerations

Indemnification and limitation of liability is detailed in subsection 365.172(11), Florida Statutes for 911 and E911 services. The NET 911 Improvement Act of 2008 and the Next Generation 9-1-1 Advancement Act of 2012 provided parity to traditional and non-traditional 911 and NG-911 service providers. The FCC is also reviewing the liability protection issues for all parties on the subject of sufficient liability protection.

In addition to the issue of sufficient liability protection, there is the concern about the liability if the counties do not implement text-to-911. While the Department of Justice (DOJ) is considering revisions to the Title II Americans with Disabilities Act (ADA) regulations, there has been no further action on its Advanced Notice of Proposed Rulemaking comments. Based on the DOJ comments⁴ in the FCC Deployment of Text-to-911 and other Next Generation 911 Applications Further Notice of Proposed Rulemaking (FNPRM), it is likely that DOJ will issue future requirements. There were notable issues in the DOJ response, including:

- ... "under § 35.161(a) of the current title II regulation, PSAPs must, at a minimum, use TTYs
 or other equally effective telecommunications systems to communicate with individuals with
 hearing and speech disabilities."
- ..."PSAPs are required under the existing title II regulation to accept TTY calls from persons with disabilities, even if they originate as SMS calls, subject to the established defenses of fundamental alteration and undue financial and administrative burdens."
- "If title II entities choose to accept SMS calls from individuals with disabilities through an IP system, the Department would consider that as using an equally effective telecommunications system; thus, such entities would be in compliance with § 35.161(a)."
- I. ⁴ FCC response from DOJ at <u>http://apps.fcc.gov/ecfs/document/view?id=7022129201</u>

Statewide Text-to-911 Initiative

Page **6** of **47**

With the provisioning of an interim SMS text-to-911 capability by the service providers, even if it is voluntary, there is a legal concern if the counties do not chose to accept text-to-911 from the carriers.

Technology Considerations

Enhanced 911 cellular services are usually routed based on the cell site and sector location, and the call includes the number identification with a means to query the identification of the cell tower.

While the SMS text-to-911 messaging is similar to Wireless Phase I, SMS uses the centroid of the cell sector for routing.

Cell sector coverage does not follow County or jurisdictional boundaries. The interim SMS text-to-

911 will need to have transfer capabilities to adjacent PSAPs to redirect the text messages if they are not routed to the appropriate PSAP. Without transfer capabilities, adjacent counties will need to establish policies for handling 911 text messages intended for their neighboring counties.

The wireless carriers are using Text Control Centers (TCCs) to process messages from the 911 text message sender to the appropriate PSAP. The TCCs are using NG-911 core functions to deliver the interim SMS text-to-911. Multiple carriers now deliver text messages to individual PSAP using a single TCC provider. Text Control Center providers currently route text messages to the other TCC providers. They are working to resolve interoperability issues so they can provide message transfers to each other. Recently the TCC providers have issued service notifications that they are offering integration of multiple carrier connectivity and a single delivery method for all carrier SMS messages to the PSAPs.

Statewide Text-to-911 Initiative

Page **7** of **47**



Interim SMS Text-to-911 Service Limitations and Concerns

The text messaging service provided by wireless providers in their texting offerings is SMS service. Short Message Service uses a store and forward process that provides no assurance to the sender or to the recipient that their messages are delivered⁵ and timely. The message has a 160-character limit and can be broken up for delivery; therefore, the characters in the message may be received out of order, which can cause confusion. Additional concerns that need to be part of the public education include:

- Text-to-911 messaging does not at this time support photos, videos, or multiple recipients.
- Unlike 911 voice calls, SMS is considered a "best-effort service," which does not provide any
 priority for the delivery of 911 text messages; critical 911 text messages are handled in
 exactly the same fashion as routine text messages.
- The service is not part of the wireless voice services required to provide E911 Phase I and Phase II location services; coarse location information is available.

⁵ Some TCC text-to-911 Web browser services now report provisioning of a delivery confirmation capability.

Statewide Text-to-911 Initiative

Page **8** of **47**

- Text-to-911 messaging is not supported when the subscribers are roaming (not on their home network).
- Language translation capability and limitations.
- Provider service is required; non-service initialized devices are not supported.

County Planning and Options

In Florida, the State E911 Plan prefers and requires county-oriented service. It is up to the county whether there is a single PSAP or multiple PSAPs in the county. It is also up to the county if text-to-911 is answered at one or multiple PSAPs.

In order for service providers to begin deployment of text-to-911 service for a PSAP, the county has to inform the provider that they are technically ready to receive 911 text messages and to specify the format of the messages. Each county should:

- Review all available text-to-911 information and alternatives for all PSAPs in the county.
- Determine the capability of the PSAP's call processing system equipment to accept text-to-911 and any needed upgrades.
- Determine how network connectivity and related security will be provided. Options include the DMS MyFloridaNet (MFN) network, or utilization of an existing county network.
- Review the transfer capabilities of the TCC provider's platform options.
- If the Web browser capability is being requested, verify the Microsoft Internet Explorer, Firefox or Chrome version and whether separate computers and monitors are required, orif existing E911 system workstations have Web browser capability.
- Develop a county implementation plan based on the text messaging implementation method before issuing a request for text-to- 911 services.

Detailed information and documents on text-to-911 resources and implementation planning are available from the National Emergency Number Association at <u>www.nena.org/text-resources</u>. They have provided an Information and Planning Guide⁶ and included a PSAP questionnaire that is available as NENA's Appendix C⁷. As recommended in the State E911 plan for enhanced 911 Wireless Phase I or II services, it is recommended that the request letter be sent by registeredmail because the letter serves to establish the start date for the carrier implementation process.

The National Emergency Number Association provides detailed information on implementation and testing. It has provided carrier implementation and test plans for reviewing and coordinating the steps needed for text-to-911 implementation. The TCC and service providers will coordinate the start date with the county coordinator based on the request letter. The coordinator should review the testing plans and provide any county specific testing procedures needed. The county coordinator and the providers need to review and agree to the schedule for testingneeds.

Statewide Text-to-911 Initiative

Page **9** of **47**

http://c.ymcdn.com/sites/www.nena.org/resource/resmgr/Docs/SMS_Text_Info_and_Planning.pdf

⁷ <u>http://www.nena.org/resource/resmgr/Docs/IPG Appendix C.docx</u>

The National Emergency Number Association has also provided information for ongoing operations, including information on alternate and default routing plan management. It also provides information for maintaining contact information for the carriers and the TCC providers. As part of this initiative, the TCC contact information will be located and maintained on the E911 website by the board staff, along with the existing wireless service provider information.

Text-to-911 Platform Options

The county has various options for the PSAP's implementation of text-to-911 until the state moves to a statewide NG-911 system. The county will need to determine which option works best for its PSAPs. These options include:

Platform Option #1, SMS to PSAP TTY

Under this option, SMS text-to-911 messages are converted to TTY and sent to the selective router currently used for voice and TTY calls. The text message conversion to TTY is provided at the text control center. The PSAP would receive the message over the existing TTY equipment. The PSAP equipment would query the Automatic Location Identification (ALI) database for the cell tower centroid location of the 911 text message sender.

An item of concern is that each text-to-911 message session utilizes a 911 trunk until the individual text messaging session ends. With the current capacity of 911 trunks at Florida's smaller PSAPs, the trunks could be overloaded depending on the number of text-to-911 messages. Additional trunk capacity may be needed and may affect the local exchange carriers' selective router capacity.

Platform Option #2, SMS to Web Browser

This option provides for text message receipt at a PSAP using a Web browser furnished by the wireless service carrier/Text Control Center provider, which is installed by the county at one or more PSAP call taker stations. Text-to-911 is implemented either with a separate computer workstation or through the existing call taking workstations, depending on the PSAP call taking manufacturer and equipment provider.

Different web services may vary between TCC providers. The Alliance for Telecommunications Industry Solutions (ATIS) text-to-911 standard provides for a TCC to TCC interface that can serve as an aggregation point for all of the carriers. The TCC aggregation interface allows a single user interface for a common text-to-911 service for the 911 public safety telecommunicators.

Web browsers are available through two connection methods. The first uses Internet connectivity, which would be required on a 24-hour, seven-days-a-week basis for each connected workstation. This option utilizes a DMS MFN connection, or a commercial Multiprotocol Label Switching (MPLS) network which provides the transport from the text control center provider. The IP-based text messaging traverses the network to capable PSAPs for the call taking equipment with the TCC's Web browser.

Statewide Text-to-911 Initiative

Page **10** of **47**

Platform Option #3, SMS to PSAP IP/SIP (i3 ESInet)

This option provides for text message receipt at a PSAP using a standardized text-to-911 Session Initiation Protocol (SIP)/ Message Session Relay Protocol (MSRP) conforming protocol or the NENA i3 protocol. The text message is sent from the wireless service carrier/text control center provider, over the DMS MFN or a commercial MPLS network, which provides the message to IP-text-messaging-capable PSAPs, which then provide it to the call-taking equipment. For statewide implementation, this can be done with IP circuits to one or more TCC provider's gateways.

Security Considerations

Security threats to 911 system operations are not new to the public safety community. With IP technology involved in NG-911, cybersecurity is fundamental for protection of the 911 networks and systems to ensure continuity of operations. Also, the same privacy and confidentiality issues present in legacy system calls are present with the text-to-911 service for both the carriers and the public safety agencies.

A secure statewide network designed to prevent security breaches must be a primary consideration when designing and implementing the interim text-to-911 solution. The selected solution should ensure that there are provisions for secure internet connections for any Web server traffic. Intrusion prevention systems should be inherent in the network design and architecture.

With the existing wireless service provider and text control center providing security on their systems, the security concerns to the text message are typically at the caller's entry point, the IP transport and at the PSAP. Public safety answering point security processes should be established or reviewed if already incorporated in their Standard Operating Procedures.

The enterprise network security offered by DMS's MFN includes a professionally managed and maintained advanced security solution and appliances to safeguard the enterprise. In addition to the security features included in the system, all MFN provisioned 911 circuits would utilize a Virtual Private Network strategy to isolate 911 calls from other network traffic. Any alternative commercial network should incorporate similar security features.

PSAP Training

With the implementation of text-to-911, training is another key ingredient to the successful implementation of this new service. The 911 Public Safety Telecommunicators will need Standard Operating Procedures (SOPs) to define the characteristics and limitations of the system and the processes and procedures required to deal with text-to-911 messaging. The message handling and processing can be similar to current TTY SOPs. The National Emergency Number Association has developed and released call taking training resources that are available on its resources website at http://www.nena.org/?page=textresources

Statewide Text-to-911 Initiative

Page **11** of **47**

Public Education

Education and notification is critical with this "best effort service" to inform the citizens of the concerns and limitations when compared to existing enhanced 911 voice service.

The E911 Board is developing a webpage on the Statewide Interim Text-to-911 Initiative to be posted on the Florida E911 website. This page includes the E911 Board's Strategic Initiative report, links to subscriber educational information, an implementation map (updated monthly) indicating statewide implementation progression of text-to-911, and county and service provider information and updates.

The FCC is coordinating public education and resources and has made them available at <u>http://www.fcc.gov/encyclopedia/best-practices-implementing-text-911</u>. These are being developed by NENA, APCO and the FCC.

County coordinators should work with the local deaf, hard of hearing, and speech disability communities to assist users with their educational needs to assure a complete understanding of the text-to-911 service and limitations. The NENA website provides valuable educational information at http://www.nena.org/?page=textresources.

County Considerations and Concerns

Since text-to-911 is not currently mandated, there is an option to not implement text-to-911 capabilities at the PSAPs. However, it is in the best interest of the public and public safety agencies to have direct contact with persons needing emergency assistance.

There are a large number of stipulations on SMS service and the service will present a number of difficulties for rapid emergency response compared to the existing enhanced 911 services provided by voice only communications. With the number of text message users, an interim solution is needed until NG-911 can be implemented statewide.

Several Florida counties are in the process of requesting text-to-911 services from the wireless carriers. Other counties have expressed concerns implementing text-to-911, referencing system impacts, financial and operational issues. With this session's legislation on prepaid attempting to be "revenue neutral," the county 911 coordinators have expressed concerns that there is the potential for there to be a loss of revenue. They are concerned that any financial impact would be detrimental to existing enhanced 911 services and impede additional services. The county 911 coordinators suggested that the E911 Board consider operational and financial impacts for each PSAP prior to making a statewide decision.

The coordinators cited two major system issues: first, the record keeping and public records requirements that will necessitate text-to-911 data collection that may not exist in most Florida PSAPs; second, that text-to-911 would require upgrades to their existing E911 and NG-911 equipment. Training is the main operational issue cited as a concern.

Statewide Text-to-911 Initiative

Page **12** of **47**

Statewide Funding Environment

A major concern regarding the implementation of NG-911 initiatives is the funding required for statewide implementation. Section 365.172, Florida Statutes, provides for the collection of a capped 50 cent fee for each subscriber of wireless, VoIP, and local access lines. The state collects all fees and the department disburses them based on the E911 Board's allocation and pro-rata disbursement approval. The E911 fee revenues have only been able to pay for 56 percent of the E911 allowable expenditures. This is the extent of any allowable surcharge for the provision of E911 services statewide, either at the state or local level.

Each year, the E911 Board reviews cost recovery proposals from wireless service providers. Those requests are for reimbursement for actual costs incurred to provide E911 services. The majority of the wireless service providers are not currently requesting text-to-911 costs. This year, proposals only included one reimbursement request for text-to-911. The costs being requested for fiscal year 2014-15 are for the location service connectivity to the TCC from the database providers.

The E911 Board has developed grant programs to assist counties with upgrading, enhancing and maintaining their PSAP equipment and networks. Since 2008, the E911 Board has awarded over \$60 million to the counties for replacement, upgrades, enhancements and NG-911 equipment. The program includes:

- The E911 State Grant Program providing funding to assist Florida's counties in deploying new E911 and NG-911 systems; and
- The E911 Rural County Grant Program providing funding to help resolve disparities in the statewide 911 system. Funding from the Rural County Grant Program provides equipment and maintenance for E911 systems.

Statewide Funding Estimates

The following diagram illustrates the two IP Platform Options for text-to-911 implementation. The diagram and the narrative within this section are intended to provide county decision makers with a perspective on the E911 Board's commitment for statewide funding of text-to-911. The figures used for this illustration and the narrative correspond to Platform Option #3.

Statewide Text-to-911 Initiative

Page **13** of **47**



While each county will determine which PSAP or PSAPs are enabled with text capabilities, the E911 Board's funding model allots a single T1 circuit for each primary and each secondary PSAP. As shown in the table below, that represents a total of 215 T1 circuits. While two circuits are recommended for redundancy, only one circuit is allotted funding within the reimbursement model. The counties utilizing other PSAPs or other counties should provide alternate routing and backup.

| PSAP Types | Quantity | Number of Call-Taking Positions | | | | |
|-----------------|----------|------------------------------------|--|--|--|--|
| Primary PSAPs | 162 | 1,470 | | | | |
| Secondary PSAPs | 53 | 270 | | | | |
| Backup PSAPs | 33 | 287 | | | | |
| Statewide Total | 247 | 2,027 | | | | |

Statewide Text-to-911 Initiative

Page 14 of 47

Based on the T1 circuit pricing established in the DMS MFN contract for a Metro Ethernet local loop access, the rates are \$390.23 for the port, plus \$155.02 for the T1 local loop, plus \$66.84 for the router for a monthly total of \$612.09 per circuit. Since the model funds 215 T1 circuits, the yearly total is estimated to be \$1,579,192 per year ((A)+(A)).

Additional non-recurring circuit provisioning costs are estimated to be \$100,000 due to the location of some PSAPs. When a County requests reimbursement the County must get a quote from SUNCOM on the non-recurring construction cost.

In addition, two circuits are required from each TCC service provider if connections are required to the DMS MFN network (shown as **B** in the diagram and chart). These will be long-haul circuits and the required bandwidth will be dictated by the number of call-taking workstations involved in the system. The TCC circuits to DMS MFN network connections were approved as direct board expenditures. Text Control Center circuit connectivity (shown in dashed line) to other service provider networks are considered service provider costs and are the responsibility of the text messaging service providers. Additional service provider costs are not fundable through this initiative. Funding is limited to the county funding model approved in this plan.

| | | | ESInet Circuit | Cost | | |
|---|--|----------|--------------------|----------|------------|---|
| | Circuit Use | Quantity | Connectivity | Cost/mo. | Cost/yr. | Total Cost per Year for all PSAPs |
| A | Max. 2 MB Metro E Local Loop Access | 162 | Primary PSAPs | \$612.09 | \$7,345.08 | \$1,189,903 |
| A | Max. 2 MB Metro E Local Loop Access | 53 | Secondary PSAPs | \$612.09 | \$7,345.08 | \$389,289 |
| | Non recurring initial construction | | | | | \$100,000 |
| В | TCC service provider MFN connections | | | | | Dependent on TCC(s) and or Providers |
| | Total Metro Ethernet Circuits Statewide | | | | | \$1,679,192 |

The costs for the integrated TCC provider proprietary solution for statewide implementations are dependent on the provider's fee structure, the number of PSAPs, and the number of call-taking workstations. The E911 Board's funding model is based on a cost of \$45 per month per call-taking workstation within each primary and each secondary PSAP. The estimated cost for statewide implementation of 1,740 workstations is \$78,300 per month, which is \$939,600 per year for the integration of all text-to-911 services (C+C).

Additional non-recurring provisioning costs are estimated at \$1,500 per site, for a total of \$322,500 per year.

Statewide Text-to-911 Initiative

Page **15** of **47**

| | PSAP and Workstation Connectivity Estimate | | | | | | | | | | | |
|--|--|--|----------|----------|--------------------------------------|--|--|--|--|--|--|--|
| Item | Quantity | Connectivity | Cost/mo. | Cost/yr. | Total Cost per Year for all PSAPs | | | | | | | |
| C Workstation connections | 1,470 | Primary PSAPs Call- Taking Positions | \$45 | \$540 | \$793,800 | | | | | | | |
| C Workstation connections | 270 | Secondary PSAPs Call-Taking Positions | \$45 | \$540 | \$145,800 | | | | | | | |
| Non-recurring initial PSAP connection 215 | | Total PSAPs | | \$1500 | \$322,500 | | | | | | | |
| D Total Statewide | | | | | \$1,262,100 | | | | | | | |

This is a high-end estimate which includes all circuits ((A) plus PSAP call taking positions ((D)) The total of \$2,941,292 per year represents full statewide implementation of text-to-911 Platform Option #3. The estimate is based on the lowest cost provided from TCC's and vendors.

Recommendations

- 1. Coordinate regional implementations. Coordinated input between counties can assist users with an understanding of the availability of operational text-to-911 not only in their county but for traveling in surrounding counties. Coordination also assists wireless service providers with their implementation and testing efforts.
- 2. Utilize a secure statewide infrastructure comprised of DMS MFN circuits or similar commercial network. This would provide 911 text service as a precursor to NENA i3 NG-911, enabling counties to begin network implementation and develop an understanding of the complexities of NG-911 including network security, service and maintenance issues. This understanding is essential for a statewide next generation environment handling 911 requests for service.
- 3. Determine the best option for implementation of a text-to-911 service no later than the end of May 2015. This should provide sufficient time for the procurement of any needed auxiliary services and allow time for any regional implementation plans for better citizen coverage to complete statewide implementation by December 2015.
- 4. Utilize Platform Option #3. The determination of the best way to handle text-to-911 is a county decision.

Three Funding Alternatives

Appendix 4 includes a comparison of the text control center's features and services. Using that information, the E911 Board reviewed TCC options as it considered statewide funding models and implementation of the various TCC services. The E911 Board also reviewed each of the three text-to-911 Platform Options and developed these three funding alternates.

Statewide Text-to-911 Initiative

Page **16** of **47**

- Funding model for Option #1 involves the utilization of the carriers' TTY option and the PSAP's existing 911 circuits (specific to those used to provide TTY capabilities to the PSAP). This option requires limited additional funding. Text transmission costs may involve any additional trunks required to support text messaging using TTY delivery.
- Funding model Option #2 involves the utilization of the carriers' web browser options, the
 provision of the Internet service, and workstations supplied by the counties. This option
 requires limited additional funding. Text transmission costs may involve Internet access
 network circuits and the potential for additional workstation(s) to support text messaging
 using Web browser delivery.
- 3. Funding model for Option #3 involves utilization of the text control center's service and ESInet network circuits to provide text messaging to a PSAP using a Web browser, a standardized text-to-911 Message Session Relay Protocol, or the NENA i3 standard. Textto-911 platform option #3 is being considered as a precursor to statewide NG-911 services. In support of the strategic goal of near-term implementation of text-to-911, this funding model funds IP circuits for primary and secondary PSAPs.

The functionality to record 911 text messages, and to facilitate PSAP-to-PSAP transfers of text messages, are considered basic system requirements. They are, therefore, apportioned in the funding model for the solution selected for Option #3.

The funding model for Option #3 is based on the lowest provisioning costs provided in the TCC provider solution's in Appendix 4.

Approved Funding Process

As a part of the text-to-911 deployment, the E911 Board will provide funding through a special disbursement for the actual costs of the IP circuits up to the amount estimated in this planning guide. System hardware is not funded through this special disbursement. Funding is limited to Funding Model Option #2 through an IP network and Funding Model Option #3.

The E911 Board is continually reviewing the needs of the counties as part of the grant program development. For counties not able to meet the expense of E911 system hardware and upgrades, the E911 Board has developed a 2014 E911 State Grant Program for system upgrades. Until the PSAPs can be upgraded to utilize a text-to-911 IP solution, the counties should determine the best alternative to provide text-to-911 messaging capabilities in their counties. When the county PSAP is ready to accept text messages, the county can submit the request for text-to-911 service from the wireless service providers.

Text-to-911 services, and the related circuits, all need to be procured through the county purchasing system. The exact cost for each county will depend on the text-to-911 option selected by the county, the vendor selected, and the number of PSAPs handling text-to-911 messages. Costs will also depend on the number of workstation positions.

The maximum amount payable to each county is to be based on the county's delivery design and position needs of the PSAP(s) for text-to-911 provisioning. The actual disbursement is to be limited

Statewide Text-to-911 Initiative

Page **17** of **47**

to the lesser amount of the actual costs or the maximum calculated amount. County system i3 PSAP equipment upgrade costs will need to be requested through the E911 State Grant Program.

The counties are required to get quote for the non-recurring initial construction costs from SUNCOM and this cost will be compared to the actual cost and the lesser of the two will be awarded.

When a county has determined the TCC provider, delivery method, and positions for the text-to-911 service, the county should submit a request form provided in Appendix 6, which details the special disbursement amount for the county's text-to-911 delivery model. The E911 Board will calculate the maximum special disbursement based on the funding model. The county text-to-911 disbursement will be processed after the actual costs have been determined.

Timeframe and Projected Schedule

The timeframe and projected schedule for development, procurement, and installation of statewide text-to-911 is dependent on numerous issues including county implementation, E911 Board funding, technical issues and typical procurement issues.

The following timeline shows past and projected activities through December 2015.



Ongoing Support

In addition to the funding assistance for the statewide text-to-911 initiative, the E911 Board has tasked staff with providing coordination, training, and technical assistance in an effort to assist the counties in their implementation of text-to-911.

Additional wireless providers are beginning to offer their subscribers interim SMS text-to-911 services. The E911 Board tasked the staff to verify that the new providers are following the same parameters and providing similar services through the TCCs. Service provider contact information will be maintained on the Florida E911 website.

Statewide Text-to-911 Initiative

E911 Board

Statewide Text-to-911 Initiative Plan

Appendix 1

Text-to-911 Background

Statewide Text-to-911 Initiative

Page **20** of **47**

The FCC, industry and public safety organizations have been working to enable consumers to send texts to 911 PSAPs. Through a cooperative wireless service provider and public safety association agreement, and subsequent Federal Communication Commission⁸ (FCC) regulatory action, text messaging to 911 is available through SMS interim text-to-911 services. Currently, these services are recommended for immediate implementation but have not been mandated.

The FCC established the Emergency Access Advisory Committee, which recommended SMS text be used to provide interim text messaging to 911 since SMS was already used for the service provider's text service. In December 2010, the FCC issued a Notice of Inquiry on NG-911 and conducted a comprehensive proceeding to address NG-911. The FCC extended reply comments until February 2012, on ways to examine and accelerate text-to-911 development and the deployment of NG-911 systems. The FCC examined different approaches for short-term and long-term options⁹ for sending texts to 911.

On Dec. 6, 2012, the four largest wireless carriers AT&T, Verizon, Sprint Nextel, and T-Mobile USA, with the National Emergency Number Association (NENA) and the Association of Public Safety Communications Officials (APCO) submitted an agreement¹⁰ where the carriers volunteered to offer their subscribers interim SMS text-to-911 services by May 15, 2014, established with certain parameters:

- · Limited to the wireless provider's existing SMS "best-effort service" capabilities;
- Implemented using the three digit short code "911";
- Available on subscriber's home wireless network with no roaming capability;
- Based on the ATIS industry standard¹¹ solution, which was subsequently completed in March 2013;
- PSAP implementations based on a letter requesting to receive text messages. This request starts a provider implementation period that is not to exceed six months based on:
 - The PSAP letter indicating the delivery method and that they are ready to receive 911 text messages; and
 - The appropriate governing authority has specifically authorized the PSAP to accept textto-911 messages.

On Dec. 13, 2012, the FCC issued a Further Notice of Proposed Rule Making (FNPRM) seeking comments on the bounce-back issue. This function provides the 911 text sender a message advising the user to use another public safety contact method indicating that text is not currently available. It also included other issues including:

- Public education on the capabilities, limitations and availability of text-to-911; and
- When possible encourage the use of existing voice 911 services.

⁸ The Federal Communications Commission Web page covering text-to-911 is http://www.fcc.gov/encyclopedia/bestpractices-implementing-text-911

Short Message Service (SMS), IP-based Messaging, Real time text (RTT)

¹⁰See Appendix 2 - <u>AT&T, Verizon, Sprint Nextel and T-Mobile USA, NENA & APCO Agreement</u>

¹¹ In March 2013, ATIS and TIA released the Joint Native SMS-to-9-1-1 Requirements and Architecture Specification. The subsequent ATIS/TIA Implementation Guidelines document for ATIS/TIA J-110-STD was released in November 2013.

The ATIS technical standard detailed the architecture of Text Control Centers (TCC) and the PSAP delivery methods for the text-to-911 service along with processes and procedures used to support PSAPs.

The FCC's, May 2013, Text-to-911 Report and Order established bounce-back requirements on covered text providers. By June 30, 2013, the bounce-back message had been implemented by the four largest wireless carriers. The FCC required the remaining carriers to implement bounce-back messages by Sept. 30, 2013.

The FCC's second FNPRM¹² on text to 911 was published, and on Aug. 8, 2014 they adopted rules for all wireless carriers and certain IP-based text providers to provide text-to-911 availability by the end of December 2014. The provider implementation period would be six months, based on the request for service letter from the county. The FCC's second Report and Order and third FNPRM¹³ also seeks information on text to 911 future capabilities, roaming, and enhanced location information.

In addition, the current FCC Communications Security, Reliability and Interoperability Council Working Group is working on recommendations including testing, standard operational procedures, and security best practices.

In 2013, AT&T Mobility, Verizon, T-Mobile and Sprint provided text-to-911 capability presentations to the E911 Board. Text control center providers and 911 call-taking equipment manufacturers, including TeleCommunication Systems, Intrado and Cassidian, provided text-to-911 presentations to the E911 Board for an understanding of the technical abilities and challenges.

AT&T, Verizon, Sprint, and T-Mobile have developed contracts with text control center providers to provide texts to the 911 PSAPs. Methods include text-to-TTY interface, IP Web browsers, and IP gateway solutions, which were released for installation in May 2014. The information from the text control center provider's IP gateway and service delivery options have been released; howeverall of the features are not currently available. Technical connectivity issues, existing county 911 equipment limitations and projections of county equipment upgrade needs and funding are continually changing. This report addresses the basic requirements for the statewide initiative.

AT&T and Sprint have selected Intrado as their TCC provider. Verizon and T-Mobile have selected TCS as their TCC provider. There have been concerns raised on the text control centers' interoperability and interconnection that should be addressed. In addition, at least one provider has voiced concerns on the text-to-TTY option because of numerous issues, including that it couldblock 911 voice calls since TTY utilizes the same 911 trunking system (see Appendix 8).

Statewide Text-to-911 Initiative

Page **22** of **47**

¹² Federal Register at <u>http://www.gpo.gov/fdsys/pkg/FR-2014-03-05/pdf/2014-04731.pdf</u>

¹³ FCC Commission Document at <u>http://www.fcc.gov/document/fcc-adopts-text-911-rules</u>

E911 Board

Statewide Text-to-911 Initiative Plan

Appendix 2

AT&T, Verizon, Sprint Nextel and T-Mobile USA, NENA & APCO Agreement

Statewide Text-to-911 Initiative

8____



December 6, 2012 Chairman Julius Genachowski Commissioner McDowell Commissioner Clyburn Commissioner Rosenworcel Commissioner Pai Federal Communications Commission 445 12th Street S.W. Washington, DC 20554

> Re: In the Matter of Facilitating the Deployment of Text-to-911 and Other Next Generation 911 Applications, PS Docket No. 11-153; and In the Matter of Framework for Next Generation 911 Deployment, PS Docket No. 10-255.

Dear Chairman Genachowski and Commissioners McDowell, Clyburn, Rosenworcel and Pai:

The undersigned signatory text-message service providers have agreed to voluntarily offer their subscribers text-based emergency communication services, in accordance with the Alliance for Telecommunications Industry Solutions ("ATIS") industry standard solution (currently expected to be completed in the first quarter of 2013), to requesting public safety answering points ("PSAPs"). As a step towards a comprehensive Next Generation 9-1-1 ("NG9-1-1") system, this voluntary framework for a text-to-9-1-1 solution provides near-term opportunities to meet the emergency communications and individuals who are deaf, hard of hearing or speech impaired. This framework also accommodates the service providers' need to respond to the rapid evolution of the telecommunications marketplace by deploying whatever successor technologies are deemed appropriate by the service provider to satisfy current and future requirements of the text-to-9-1-1 service.

This voluntary commitment reflects discussion with the signatories and public safety stakeholders, and is intended to reflect and incorporate much of the important work undertaken by public safety, disabilities and industry stakeholders through the Emergency Access Advisory Committee ("EAAC"). As the wireless provider signatories have advised the Commission and the EAAC, SMS is a store-and-forward messaging technology that was never designed nor deployed to provide any time-sensitive, mission-critical service.¹

see, FCC EAAC, Resolution regarding Text Messaging to 911 (adopted March 30 2012) (recommending Text Messaging to

Statewide Text-to-911 Initiative

8_

¹ Facilitating the Deployment of Text-to-911 and Other Next Generation Applications, Framework for Next Generation911 Deployment, Notice of Proposed Rulemaking, FCC 11-134 ¶ 53 (Sept. 22, 2011); see also, Text Messages in a PSAP Environment, APCO Emerging Technologies (rel July 30, 2012) available at <u>http://psc.apcointl.org/wp-</u> <u>content/uploads/APCO-Emerging-Tech-Text-to-911-Final1.pdf</u> and Texting to 9-1-1: Examining the Design and Limitations of SMS, 4G Americas (October 2010) available at http://www.4gamericas.org/documents/SMS% 20to% 20911% 20White% 20Paper% 20Final% 20October% 202010.pdf, but

9-1-1, at a minimum, via SMS); *and* Presentation of EAAC Working Group 1, Text-to-911 Solutions to 911 Interim to NG911 (Sept. 14, 2012) (outlining key assumptions about Pre-NG911 Interim Text to 911).

Consistent with these parameters, this commitment is being offered through the provision of an interim "best-efforts service" to meet the near term objective of providing a text-based emergency communications until the comprehensive NG9-1-1 system (e.g. ESINet) is developed, deployed and adopted by the wireless industry, public safety community and public.

The terms of this commitment cover only the text-messaging services provided by the signatories. They do not extend to text-messaging applications provided by third parties..

The signatories make the following voluntary commitments:

- Text-to-9-1-1service would be made available by May 15, 2014, although carriers may choose to implement such a service prior to that date. Once a carrier begins offering a Text-to-9-1-1 solution, valid PSAP requests for Text-to-9-1-1 service will be implemented within a reasonable amount of time of receiving such request, not to exceed six months. A request for service will be considered valid if, at the time the request is made: a) the requesting PSAP represents that it is technically ready to receive 9-1-1 text messages in the format requested; and b) the appropriate local or State 9-1-1 service governing authority has specifically authorized the PSAP to accept and, by extension, the signatory service provider to provide, text-to-9-1-1 service (and such authorization is not subject to dispute).
- 2) Beginning no later than July 1, 2013, the four signatory service providers will voluntarily provide quarterly progress reports to the FCC, NENA, and APCO summarizing the status of the deployment of a national Text-to-9-1-1 service capability. Once a service provider is able to deploy service for capable PSAPs on a national basis, it would no longer be required to provide these status reports.
- 3) Consistent with the draft ATIS Standard for Interim Text-to-9-1-1 service, the PSAPs will select the format for how messages are to be delivered. Incremental costs for delivery of text messages (e.g. additional trunk groups to the PSAP's premises required to support TTY delivery) will be the responsibility of the PSAP, as determined by individual analysis.
- 4) The signatory service providers will implement a '9-1-1' short code that can be used by customers to send text messages to 9-1-1.
- 5) Before the deployment of Text-to-9-1-1, the signatory service providers will implement a bounce-back (auto-reply) message to alert subscribers attempting to text an emergency message to instead dial 9-1-1 when Text-to-9-1-1 is unavailable in that area. The signatory service providers will implement the bounce-back (auto-reply) message by June 30, 2013.
- 6) The signatory service providers will meet these commitments independent of their ability to recover these associated costs from state or local governments.

an emergency message to instead dial 9-1-1 when Text-to-9-1-1 is unavailable in that area. The signatory service providers will implement the bounce-back (auto-reply) message by June 30, 2013.

- 7) The signatory service providers will meet these commitments independent of their ability to recover these associated costs from state or local governments.
- 8) The signatory service providers (whether individually or through a third party) will work with APCO, NENA, and the FCC to develop an outreach effort to set and manage consumer expectations regarding the availability/limitations of the Text-to-9-1-1 service (including when roaming) and the benefits of using voice calls to 9-1-1 whenever possible, and support APCO and NENA's effort to educate PSAPs on Text-to-9-1-1 generally.
- 9) A voluntary SMS-to-9-1-1 solution will be limited to the capabilities of the existing SMS service offered by a participating wireless service provider on the home wireless network to which a wireless subscriber originates an SMS message. SMS-to-9-1-1 will not be available to wireless subscribers roaming outside of their home wireless network. Each implementation of SMS-to-9-1-1 will be unique to the capabilities of each signatory service provider or it's Gateway Service Provider.

Pursuant to Section 1.1206 of the Commission's rules, 47 C.F.R. § 1.1206, this letter is being electronically filed via ECFS with your office and a copy of this submission is being provided to the meeting attendees. Please direct any questions to the undersigned.

Respectfully Submitted,

/s/ Terry Hall APCO International

/s/ Robert W. Quinn, Jr. AT&T

/s/ Barbara Jaeger NENA- The 9-1-1 Association /s/ Charles W. McKee Sprint Nextel

/s/ Kathleen O'Brien Ham **T-Mobile USA**

/s/ Kathleen Grillo Verizon

Statewide Text-to-911 Initiative

E911 Board

Statewide Interim Text-to-911 Initiative Plan

Appendix 3

County Implementation and Transition Information

Statewide Text-to-911 Initiative

Page **27** of **47**

| | | | County T | ext-to-91 | 11 Inforr | nation List | ting (date N | Jov. 11, 2014) |
|--------------|---|--------------------------------|---|--|-----------------|---------------------------------------|-----------------------|---|
| COUNTY | SMS to PSAP TTY | TI SMS to Web Browser | EXT-TO-911 O _l SMS to CPE Web Browser | ptions SMS to PSAP MSRP | TCC Provider | Date (Anticipated Request) | Date (Anticipated) | Comments |
| Alachua | | | | | TCS | | | All providers connected (4) |
| Baker | <u> </u> | | | | | | <u> </u> | |
| Вау | | <u> </u> | ' | <u> </u> | | | | Awaiting CPE system upgrade |
| Bradford | | | ✓ | | | | | |
| Brevard . | ' | | | | Intrado | ļ' | ¹ | ļ' |
| Broward | ' | | | ✓ | | | ' | |
| Calhoun | | | ✓ | | | | | |
| Charlotte | ' | | ' | | | | ' ــــــ ' | Awaiting CPE system upgrade |
| Citrus | | | | | <u> </u> | · · · · · · · · · · · · · · · · · · · | ' | |
| Clay | | | | | | | | All providers connected (4) |
| Collier | | | | | TCS | | | All providers connected (4) |
| Columbia | | ✓ | | | TCS | | | All providers connected (4) |
| Desoto | Ē' | ✓ | | | | ' | · [| |
| Dixie | ' | | ' | | <u> </u> | | ' | |
| Duval | | | | | TCS | Jun 1, 2016 | Oct, 2016 | Awaiting information |
| Escambia | ├ ───' | | ' | | ↓ I | ·' | ' | <u> </u> |
| Flagler | ' | | ' | | <u> </u> | | <u> </u> ' | Possible SMS to PSAP MSRP |
| Franklin | | | | | | | | |
| Gadsden | · ' | | | | | | | Reviewing early June |
| Gilchrist | <u> </u> | | | | | ' | | Reviewing |
| Glades | ' | | ' | | <u> </u> | | ' | |
| Gulf | | | | Image: A state of the state | | | | |
| Hamilton | I ' | | | | | | | |
| Hardee | Image: A start of the start of | | | | | | ¹ | Based on surrounding counties |
| Hendry | <u> </u> | <u> </u> | | <u> </u> | | | · | |
| Hernando | | | | | | | May, 2016 | |
| Highlands | ' | | | | | | ! | |
| Hillsborough | Image: A start of the start of | [| | [| [I | | [' | Future SMS to PSAP MSRP Option |
| Holmes | · <u> </u> | | | | | | [] | |
| Indian River | <u> </u> | ✓ | | | | | I | |
| Jackson | Į' | Í | · [' | Í | <u>[]</u> | - ' | [' | No future plans |
| Jefferson | ' | | | | ļ] | ļ' | ļ' | |
| Latayette | └── ′ | | ' | | | t' | ¹ | Possible Smart911 |
| Lake | <u>├───</u> ' | | | | + | t' | ' | |
| Lee | ' | + | | + | ++ | | + | <u> </u> |
| Levy | | | | | тся | | | |
| Liberty | ✓ | | | | | | | |
| Madison | | | | | | | 1 | Future dependent on other county transfers |
| | | | Statewid | e Text-to-9 | 11 Initiativ | e | F | Page 28 of 47 |

| Con | nmented [LD1]: | | |
|-----|-----------------|--|--|
| | | | |
| Con | nmented [LD2]: | | |
| Con | nmented [LD3]: | | |
| Con | nmented [LD4]: | | |
| Con | nmented [LD5]: | | |
| Con | nmented [LD6]: | | |
| Con | nmented [LD7]: | | |
| Con | nmented [LD8]: | | |
| Con | nmented [LD9]: | | |
| Con | nmented [LD10]: | | |
| Con | nmented [LD11]: | | |
| Con | nmented [LD12]: | | |
| Con | nmented [LD13]: | | |

Commented [LD14]:

| Commented [LD15]: | |
|-------------------|--|
| | |
| Commented [LD16]: | |
| | |
| Commented [LD17]: | |
| | |
| Commented [LD18]: | |
| | |
| Commented [LD19]: | |
| | |
| Commented [LD20]: | |
| | |
| Commented [LD21]: | |
| 6 (LU DOO) | |
| Commented [LD22]: | |
| Commented [LD23]: | |
| Commented [LD24]: | |
| | |

| | | Cou | inty Text-t | o-911 Ir | nformati | ion Listir | 1g (date Nov | . 11, 2014) |
|------------|-----------------------|--------------------------|------------------------------|------------------------|----------|---------------|-----------------|--|
| | | TEXT-TO- | 911 Options | | TCC | Data | Data | |
| COUNTY | SMS to PSAP TTY | SMS to Web Browser | SMS to CPE Web Browser | SMS to PSAP MSRP | Provider | Requeste d | Anticipate d | Comments |
| Manatee | ✓ | | | | | | | Future SMS to PSAP MSRP Option |
| Marion | ~ | | | | | | | Possible SMS to PSAP MSRP Optio |
| Martin | | ✓ | | | | | | Future SMS to PSAP MSRP Option |
| Miami-Dade | ✓ | | | | | | | Future SMS to PSAP MSRP Option |
| Monroe | | | | | | | | |
| Nassau | ✓ | | | | | | | Future integrate into the call taking equipment |
| Okaloosa | | | | | | | | |
| Okeechobee | | | | | | | | |
| Orange | ✓ | | | | | | | |
| Osceola | | | | | Intrado | | | |
| Palm Beach | | | | | | | | |
| Pasco | | | | | Introde | | Int. 2010 | |
| Pinellas | | | | <u></u> | Intrado | | Jul, 2016 | |
| Polk | ✓ | | | | | | | |
| Putnam | | | | | | | | Waiting on the State initiative |
| Santa Rosa | | | | ✓ | Intrado | | | |
| Sarasota | | | | ✓ | | | May, 2016 | |
| Seminole | ✓ | | | | | | | Future SMS to PSAP MSRP Optio |
| St. Johns | | | | | | | Aug, 2016 | |
| St. Lucie | | | | | Intrado | | Apr, 2016 | |
| Sumter | ? | | | ? | | | | Reviewing |
| Suwannee | ✓ | | | | | | | |
| Taylor | | | | | 1 | | | |
| Union | ✓ | | | | | | | |
| Volusia | | | | | | | | |
| Wakulla | | | | | Tec | | | Discussing with County Admin. |
| Walton | | | | | 16 | | | Devil 1 |
| wasnington | | | | | | | | Reviewing |

| Commented [LD25]: | |
|-------------------|--|
| Commented [LD26]: | |
| Commented [LD27]: | |
| Commented [LD28]: | |
| | |
| Commented [LD29]: | |
| Commented [LD30]: | |
| | |
| Commented [LD31]: | |
| Commented [LD32]: | |
| Commented [LD33]: | |
| | |
| Commented [LD34]: | |
| Commented [LD35]: | |
| Commented [LD36]: | |
| | |
| Commented [LD37]: | |
| Commented [LD38]: | |
| Commented [LD39]: | |
| | |
| Commented [LD40]: | |
| Commonted [D41] | |
| commented [LD41]: | |
| Commented [LD42]: | |
| | |

| Complete IP Connectivity | | |
|---------------------------------|----------------------------------|-----------------------------|
| Complete (All Listed Carriers) | | |
| Installation in Progress | | |
| Awaiting Provider Scheduling | | |
| Requested (All Listed Carriers) | | |
| 8 | Statewide Text-to-911 Initiative | Page 29 of 47 |

E911 Board

Statewide SMS Text-to-911 Initiative

Appendix 4

Text Control Center and Provider Comparisons

Statewide Text-to-911 Initiative

Page **30** of **47**

| | | Intra | do | | TCS | | | AGENT | 511 | IN | digital |
|--|--|--|---|----------------|------------------|--------------------------|----------------|-----------------|------------------|--------------|------------------|
| Features and Services | | rrietary Service | Date Availabl e | irrier Service | rrietary Service | Date Availabl e | ırrier Service | rietary Service | Date Availabl | tary Service | Date Availabl |
| | TCC's Ca | TCC's Prop | Qtr./Year | TCC's Ca | TCC's Prop | Qtr./Year | TCC's Ca | TCC's Prop | Qtr./Year | Proprie | Qtr./Year |
| AT&T 911 TCC Text Message Carrier Service | \boxtimes | \boxtimes | Now | \boxtimes | \boxtimes | Now | | \boxtimes | | \boxtimes | Now |
| Sprint 911 TCC Text Message Carrier Service | \boxtimes | \boxtimes | Now | \boxtimes | \boxtimes | Now | | \boxtimes | | \boxtimes | Now |
| T-Mobile 911 TCC Text Message Carrier Service | | \boxtimes | Now | \boxtimes | \boxtimes | Now | | \boxtimes | | \boxtimes | Now |
| Verizon 911 TCC Text Message Carrier Service | | | Now | | | Now | | | | | Now |
| Easy Addition of New Carriers | \boxtimes | \boxtimes | Now | \boxtimes | \boxtimes | Now | | \boxtimes | | | Now |
| Carrier and TCC Aggregation | \boxtimes | \boxtimes | Now | \boxtimes | \boxtimes | Now | | \boxtimes | | \boxtimes | Now |
| ATIS/J-STD-110 Compliant | \boxtimes | \boxtimes | Now | \boxtimes | \boxtimes | Now | | \boxtimes | | | Now |
| NENA i3 Compliant | \boxtimes | \boxtimes | Now | \boxtimes | \boxtimes | Now | | \boxtimes | | \boxtimes | Now |
| Migration availability to NG911 | \boxtimes | \boxtimes | Now | \boxtimes | \boxtimes | Now ⁴ | | \boxtimes | | \boxtimes | Now |
| Single user interface with Uniform User Experience | | | Now | | \boxtimes | Now | | | | | Now |
| Text Logging Support | | \boxtimes | Now | | \boxtimes | 1Q/ 2015 ⁵ | | \boxtimes | | | Now |
| Text Messaging available through the ACRD port | \boxtimes | \boxtimes | Now | \boxtimes | \boxtimes | Now ⁶ | | | | | Note 1 |
| Text Messaging Transcript Recording through TCC provisioning | \boxtimes | \boxtimes | Now | \boxtimes | \boxtimes | Now | | \boxtimes | | | Now |
| Language Translation | T p tran the of G to | esting wi roviders slation s Intrado eneral A be dete | th two of text ervices in lab. Date vailability rmined | | \boxtimes | 4Q/ 2014 ³ | | × | | | Now ² |
| Aggregated Reporting – 2014 | | \boxtimes | Now | | \boxtimes | 4Q/ 2014 | | \boxtimes | | | Now |
| Uniform Features/Roadmap | \boxtimes | \boxtimes | Now | | \boxtimes | Now | | \boxtimes | | | Now |
| Coordination with County on Location Method and routing integration | | | Now | | \boxtimes | Now ¹ | | | | | Now |
| Preprogrammed text response messages with freeform typing capabilities | | \boxtimes | Now | | | Now | | | | | Now |
| Multiple Simultaneous text sessions with queue management | \boxtimes | \boxtimes | Now | | \boxtimes | Now | | \boxtimes | | | Now |
| Security and Log-in Control | \boxtimes | \boxtimes | Now | \boxtimes | \boxtimes | Now | | \boxtimes | | \boxtimes | Now |
| Ability to initiate outbound text for silent/abandoned call | Road of ge to be depe stan | dmap iter eneral av e determ endent o dards | m, date ailability ined and n | | × | 3Q/ 2015 | | | | | Now |

* ACDR - Automatic Call Detail Record

Statewide Text-to-911 Initiative

Page **31** of **47**

| | | Intra | do | | TCS | i | | AGENT | 511 | IN | digital |
|---|--------------|----------------|-----------------------------------|--------------|-----------------|-----------------------|--------------|----------------|-------------------|-------------|------------------|
| | r Service | ary Service | Date Availabl e | r Service | ary Service | Date Availabl e | r Service | ary Service | Date Availabl | Service | Date Availabl |
| Features and Services | TCC's Carrie | TCC's Propriet | Qtr./Year | TCC's Carrie | TCC's Propriet: | Qtr./Year | TCC's Carrie | TCC's Propriet | Qtr./Year | Proprietary | Qtr./Year |
| PSAP audible indication of 911 text message | × | × | Now | \boxtimes | X | Now | | X | | × | Now |
| arrival PSAP visual indication of 911 text message | | | Now | | | Now | | | | | Now |
| arrival | | | Now | | X | Now | | | | | Now |
| | | 2 | 14044 | 1 | 2 | 11010 | | | | | NOW |
| Delivery Methods | | | | | | | | | | | |
| TTY Delivery | \boxtimes | \boxtimes | Now | \boxtimes | \boxtimes | Now | | | | \boxtimes | Now ³ |
| Web Portal Separate Station Delivery | \boxtimes | \boxtimes | Now | \boxtimes | \boxtimes | Now | | \boxtimes | | \boxtimes | Now |
| Web Portal Existing CPE Workstation Delivery | \boxtimes | \boxtimes | Now | \boxtimes | X | Now ² | | X | | \boxtimes | Now |
| 13 Existing CPE Workstation Delivery | \boxtimes | \boxtimes | Now | \boxtimes | \boxtimes | Now ⁴ | | \boxtimes | | \boxtimes | Now |
| Upgrade path between methods | \boxtimes | \boxtimes | Now | \boxtimes | \boxtimes | Now | | \boxtimes | | \boxtimes | Now |
| | | | | | | | | | | | |
| List any Additional Services provided: | | | | | | | | | | | |
| Alternate routing if primary PSAP is out of service/not able to answer | | | Now | \boxtimes | \boxtimes | Now | | \boxtimes | | | Now |
| Smart911 [™] Integration | \boxtimes | \boxtimes | Now | \boxtimes | \boxtimes | Now ⁷ | | | Note ¹ | | |
| ECaTS™ Reporting Support | | | Now | | \boxtimes | Now | | \boxtimes | 3Q/ 2014 | \boxtimes | Now ¹ |
| Time of Day/Day of Week Session Management | | | Now | \boxtimes | \boxtimes | Now | | | Note ² | | |
| Text Session Threshold Management | \boxtimes | \boxtimes | Now | \boxtimes | \boxtimes | Now | | \boxtimes | | \boxtimes | Now |
| Deny List | \boxtimes | \boxtimes | Now | \boxtimes | \boxtimes | Now | | \boxtimes | | \boxtimes | Now |
| | | \boxtimes | As NENA release | | \boxtimes | 3Q/ 2015 | | \boxtimes | | | |
| | | | i3 | | | | | \boxtimes | | | |
| Simple CPE integration | \boxtimes | \boxtimes | Now | | | | | \boxtimes | | | |
| CAD/recorder API | | | Per NENA specific a tion | | | | | | | | |
| CT notification/"not available" | \boxtimes | \boxtimes | Now | | | | | \boxtimes | | | |
| Custom 'end of dialog' message to the public caller | | | Now | | | | | \boxtimes | | \boxtimes | Now ⁴ |
| Dialog segment timer and session safety timer | | | In i3 solutio n only | | | | | \boxtimes | | \boxtimes | Now |
| CAD / Mapping integration | \boxtimes | \boxtimes | 1Q15 | | | | | \boxtimes | | \boxtimes | Now ⁵ |
| Custom routing by handset number | \boxtimes | \boxtimes | Now | | | | | \boxtimes | | \boxtimes | Now |

Statewide Text-to-911 Initiative

Page **32** of **47**

| | | Intrac | lo | | TCS | | | AGENT | 511 | IN | digital |
|---|-----------------------|---------------------------|---------------------------------|-----------------------|---------------------------|----------------------------|-----------------------|---------------------------|----------------------------|---------------------|----------------------------|
| Features and Services Continued | TCC's Carrier Service | TCC's Proprietary Service | Qtr./Year Date Availabl P | TCC's Carrier Service | TCC's Proprietary Service | Qtr./Year Date Availabl | TCC's Carrier Service | TCC's Proprietary Service | Qtr./Year Date Availabl | Proprietary Service | Date Qtr./Year Availabl |
| GIS integration (compliant GIS vendors) | \boxtimes | \boxtimes | Now | | | | | | | \boxtimes | Now |
| Built in convenience map display | \boxtimes | \boxtimes | Browser version | \boxtimes | \boxtimes | Now | | \boxtimes | | \boxtimes | Now |

TCS (List)

- 1. Routing is NENA i3 compliant and TCS will work with the counties to ensure text messages are being routed as desired.
- 2. Depends on CPE vendor browser version and availability.
- 3. First release to be Spanish only, other languages to be added to future releases.
- The TCS TCC is fully NENA i3 compliant and currently the only TCC fully integrated to an ESInet (INdigital in the State of Indiana).
- 5. We interpret this requirement to be the i3 Recorder API to a local logging vendor. Today, the TCS Carrier Service allows for the generation of a CSV file that can be loaded into a local logging system.
- 6. Available for MSRP implementations today.
- 7. Additional charge for Smart911[™] will apply for EMedia service.
- 8. Dependent upon carrier's ability to provide location.

AGENT511 (List)

- 1. Offer our own registration portal.
- 2. Unsure what this means.

INdigital (List)

- 3. Call details and content are available using RS-232, IP XML or export to .pdf
- 4. Activity reporting and call investigation is available from the Network PSAP Toolkit (NPTK) in late 2Q-'14 on a local, county or statewide basis.
- 5. TTY delivery does not support:
 - a. outbound text initiated by the PSAP;
 - b. inter-agency transfers that are not supported by the underlying 911 system service provider; or
 - c. ACDR or other exports listed in note 1 (above).
- 6. End of dialog messaging is sent to the public caller when the text session times out or is ended by the PSAP. Custom messages can be at the state, county or PSAP level.
- 7. CAD mapping integration supports industry standard RS-232 or XML interfaces provided by the CAD / Mapping vendor.

Statewide Text-to-911 Initiative

Page 33 of 47

| | | Intrado | | | TCS | | | AGENT5 | 11 | INdig | ital |
|--------------------------------------|-----------------------|---|-----------------------------|-----------------------|--|-----------------------------|-----------------------|---------------------------|----------------------------|--|----------------------------|
| Features and Services | TCC's Carrier Service | TCC's Proprietary Service | Qtr./Year Date Available | TCC's Carrier Service | TCC's Proprietary Service | Qtr./Year Date Available | TCC's Carrier Service | TCC's Proprietary Service | Qtr./Year Date Availabl | Proprietary Service | Date Qtr./Year Availabl |
| Service Costs* | | | | | | | | | 7/1/14 | | |
| Cost per PSAP - Recurring | | | | | | | | | 7/1/14 | | |
| Cost per PSAP - Non-recurring | | 1-4 Positions \$1,250 5-10 Positions \$3,250 11+ Positions \$9,500 | | | \$1,500 | | | \$5,000 | | \$1,500 and Other Listed Service | Note 1 |
| Cost per workstation - Recurring | | 1-4 Positions \$125 5-10 Positions \$325 11+ Positions \$950 | | | Basic GEM, TTY, or i3 Complimentary for all PSAPs EMedia Service \$175/PSAP/mo. Up to 5 seats \$340/PSAP/mo. 6-10 Seats (additional seats as low as \$32.50 per month based on volume) | | | \$1,200 | | \$45 | |
| Cost per workstation - Non-recurring | | | | | \$0 | | | | | \$520 | |
| * Not including IP network cost | | | | _ | | | | | | | |

Pricing Notes (List any conditions)

Intrado (List)

- Prices are list price. Larger volumes of positions, such as the state wide deployments are subject to further discounts as already discussed with the state and presented as confidential per position costs.

TCS (List)

- Pricing assumes the services will be made available on a statewide basis.
- EMedia Service pricing includes advanced reporting through ECaTS and access to language translation services through
- Language Line.
- Pricing does not include applicable taxes.
- Translation Services \$6 per minute.

AGENT511 (List)

- Attached pricing only applies to Florida.
- Pricing is list annual price and is subject to discounts such as consolidated and regional agencies.
- Training and secondary/back-up positions are nominal cost.
- Pricing includes all services currently and planned availability.

INdigital (Listed Other Services) (Excel cost Spreadsheet available on request)

- Pricing valid for Florida. Network connectivity variable, presumed to be MFN where available.

PSAP NRC installation cost is proposed as a 'not to exceed', but could vary depending on network equipment.

- Pricing levels present a discount that assumes statewide availability.
- Dedicated workstation and additional network equipment is available but not expected to be needed.
- 1. Service detail:
 - Inbound sessions includes aggregation and support for all compliant carriers, GIS based routing to the PSAP's satisfaction.

b. Outbound sessions – includes 'disposable', DOS protected SMS numbers; unlimited text dialogs; custom numbers if needed.

Statewide Text-to-911 Initiative

Page **34** of **47**

- c. CAD/MAP spill includes all industry standard interfaces, installation and ongoing hardware maintenance.
- d. Toolkit MIS reporter includes federated logins with the texTTY platform, state/regional/county/local user roles.
 e. Text Director admin panel includes custom call routing Web interface, session threshold control overflow plan control.

f. Admin number text – includes text TO and FROM any legacy 10 digit landline; toll free; or crime stoppers number. (Listed Other Services)

- Outbound sessions: \$65
- CAD/MAP spill: \$25
- Toolkit MIS reporter: \$50
- Text Director admin panel: \$50
- Admin text (per number): \$150

Internal and External Transfer Capabilities (Carrier Service)

Intrado

| Carrier Service 911 Text Message Internal and External Transfer Capabilities | ττγ | Web Portal Separate Station Delivery | Web Portal Existing CPE Workstation Delivery | 13 MSRP Existing CPE Workstation Delivery | Other Text Control Centers ** |
|---|-------------|---|---|--|-------------------------------------|
| TTY Delivery | \boxtimes | | | | |
| Web Portal Separate Station Delivery | \boxtimes | | \boxtimes | \boxtimes | |
| Web Portal Existing CPE Workstation Delivery | \boxtimes | | \boxtimes | | |
| 13 Existing CPE Workstation Delivery | \boxtimes | \boxtimes | \boxtimes | \boxtimes | |

** List others

Intrado (List)

Transfers are to external agencies on the same TCC for current deployments.

TCS

| Carrier Service 911 Text Message Internal and External Transfer Capabilities | ΤТΥ | Web Portal Separate Station Delivery | Web Portal Existing CPE Workstation Delivery | 13 MSRP Existing CPE Workstation Delivery | Other Text Control Centers ** |
|---|-------------|---|---|--|-------------------------------------|
| TTY Delivery | \boxtimes | | | | |
| Web Portal Separate Station Delivery | \boxtimes | \boxtimes | \boxtimes | | |
| Web Portal Existing CPE Workstation Delivery | \boxtimes | \boxtimes | \boxtimes | | |
| 13 Existing CPE Workstation Delivery | | | | | |

AGENT511

| Carrier Service 911 Text Message Internal and External Transfer Capabilities | ΤТΥ | Web Portal Separate Station Delivery | Web Portal Existing CPE Workstation Delivery | 13 MSRP Existing CPE Workstation Delivery | Other Text Control Centers ** |
|---|-----|---|---|--|-------------------------------------|
| TTY Delivery | | | | | |
| Web Portal Separate Station Delivery | | | | | |
| Web Portal Existing CPE Workstation Delivery | | | | | |
| 13 Existing CPE Workstation Delivery | | | | | |

Internal and External Transfer Capabilities (Proprietary Service)

Statewide Text-to-911 Initiative

Page **35** of **47**

| Intrado | | | | | |
|---|-------------|---|---|--|-------------------------------------|
| TCC's Proprietary Service 911 Text Message Internal and External Transfer Capabilities | ττγ | Web Portal Separate Station Delivery | Web Portal Existing CPE Workstation Delivery | 13 MSRP Existing CPE Workstation Delivery | Other Text Control Centers ** |
| TTY Delivery | \boxtimes | | | | |
| Web Portal Separate Station Delivery | \boxtimes | | \boxtimes | \boxtimes | |
| Web Portal Existing CPE Workstation Delivery | \boxtimes | | \boxtimes | \boxtimes | |
| I3 Existing CPE Workstation Delivery | \boxtimes | | \boxtimes | \boxtimes | |

** List others (or any required conditions or standards requirements other than ATIS/J-STD-110) per delivery method.

Intrado (List)

Transfers are to external agencies on the same TCC for current deployments.

TCS

| TCC's Proprietary Service 911 Text Message Internal and External Transfer Capabilities | ττγ | Web Portal Separate Station Delivery | Web Portal Existing CPE Workstation Delivery | I3 MSRP Existing CPE Workstation Delivery | Other Text Control Centers ** |
|---|-------------|---|---|--|-------------------------------------|
| TTY Delivery | \boxtimes | | | | |
| Web Portal Separate Station Delivery | \boxtimes | \boxtimes | \boxtimes | \boxtimes | \boxtimes |
| Web Portal Existing CPE Workstation Delivery | \boxtimes | \boxtimes | \boxtimes | | \boxtimes |
| 13 Existing CPE Workstation Delivery | \boxtimes | | \boxtimes | | \boxtimes |

** List others (or any required conditions or standards requirements other than ATIS/J-STD-110) per delivery method.

Notes:

Transfer to other TCCs is dependent upon standards and connectivity to TCCs. General availability to be determined. MSRP transferring dependent upon CPE vendor involvement. General availability to be determined. -

-

Statewide Text-to-911 Initiative

Page **36** of **47**

| AGENT511 TCC's Proprietary Service 911 Text Message Internal and External Transfer Capabilities | ΠΥ | Web Portal Separate Station Delivery | Web Portal Existing CPE Workstation Delivery | 13 MSRP Existing CPE Workstation Delivery | Other Text Control Centers ** |
|---|----|---|---|--|-------------------------------------|
| TTY Delivery | | | | | |
| Web Portal Separate Station Delivery | | | | | |
| Web Portal Existing CPE Workstation Delivery | | | | | |
| 13 Existing CPE Workstation Delivery | | | | | |

** List others (or any required conditions or standards requirements other than ATIS/J-STD-110) per delivery method.

AGENT511 (List)

This table is dependent on carrier TCC and other conditions. Transfers internally (to us) are always possible. To others, depends.

| INdigital | | | | | |
|---|-------------|---|---|--|-------------------------------------|
| INdigital's Proprietary Service 911 Text Message Internal and External Transfer Capabilities | ττγ | Web Portal Separate Station Delivery | Web Portal Existing CPE Workstation Delivery | I3 MSRP Existing CPE Workstation Delivery | Other Text Control Centers ** |
| TTY Delivery | \boxtimes | | | | |
| Web Portal Separate Station Delivery (see note) | | | \boxtimes | \boxtimes | \boxtimes |
| Web Portal Existing CPE Workstation Delivery | | | \boxtimes | \boxtimes | \boxtimes |
| I3 Existing CPE Workstation Delivery | | \boxtimes | \boxtimes | \boxtimes | \boxtimes |
| Text dialog transfer with global dialog history (see note 1) | | \boxtimes | \boxtimes | | \boxtimes |

** List others (or any required conditions or standards requirements other than ATIS/J-STD-110) per delivery method.

1.

- a. Text-to-911 transfer with full dialog history is available in Q-3 '14 between PSAPs on the INdigital texTTY platform.
- b. Text-to-911 transfer from a PSAP served by one TCC to a PSAP served by another TCC will be available when the industry transfer standard is adopted (no date certain).

Statewide Text-to-911 Initiative

Page **37** of **47**

E911 Board

Statewide Text-to-911 Initiative Plan

Appendix 5

Webpage Development

Statewide Text-to-911 Initiative

Page **38** of **47**

Florida Enhanced 911

Since 1973, the State of Florida has been updating and building advanced technology statewide emergency number "911" systems, implemented by the counties, to serve its citizens and visitors in emergency situations. In 2007, the Wireless 911 Board transitioned to the E911 Board for enhanced 911 (E911) services.

Established statewide in May 1997, 911 was enhanced with Wireline E911 services to obtain the 911 caller's telephone number and address in all 67 counties on Sept. 20,2005. Enhancements for Wireless E911 Phase I service, obtaining the 911 caller's call back number and the location of the serving cell site, and Phase II, obtaining the location information (latitude and longitude) provided for the 911 cellular callers, were completed in March 31, 2008.

An interim method for 911 test messaging is becoming available through SMS text-to-911 services. Counties are currently working on technical, funding and deployment issues in an effort to provide statewide text-to-911. See Statewide Text-to-911 for the latest update on deployment status.

Statewide Text-to-911 Initiative

Statewide E911 Coordination

E911 Legislative and Rule Resources

Florida E911 Plan

E911 Board

E911 Board Information E911

Grant Information Service

Providers Information

911 Coordinators Meetings and Presentations

E911 Implementation Maps

Statewide Text-to-911 Initiative

Page **39** of **47**



E911 Board

Statewide Text-to-911 Initiative Plan

Appendix 6

NENA Implementation Information

Statewide Text-to-911 Initiative

Page **41** of **47**

National Emergency Number Association (NENA)

Planning and Implementation Information

The National Emergency Number Association (NENA) has established a Web page on planning and implementation of SMS text-to-911 service. It is located at URL http://www.nena.org/?page=textresources and it includes various links on the resources and issues, including:

- An Interim SMS Text-to-911 Information and Planning Guide at URL http://c.ymcdn.com/sites/www.nena.org/resource/resmgr/Docs/SMS Text Info and Planning.pdf
- A Carrier Questionnaire (Appendix C) at URL <u>http://www.nena.org/resource/resmgr/Docs/IPG_Appendix_C.docx</u>
- A Request for Service Letter (Appendix D) at URL <u>http://www.nena.org/resource/resmgr/Docs/IPG_Appendix_D.docx</u>
 - Carrier Implementation and Testing information (Appendix F) at URL <u>http://www.nena.org/resource/resmgr/Docs/Interim_SMS_Text_Appx_F.docx.</u>
- Carrier Points of Contact information at URL http://www.nena.org/resource/resmgr/Docs/Points_of_contact_for_SMS_t.docx.
- PSAP training materials at URL <u>http://www.nena.org/?text_training_docs</u>.
- A media and public information document on Questions and Answers about Text-to-911_at URL http://www.nena.org/resource/resmgr/docs/QA on Text to 9-1-1 FINAL.docx.
- A media document on Text-to-911 Media Tips at URL http://c.ymcdn.com/sites/www.nena.org/resource/resmgr/Docs/Text_to_911_Media_Talking_Po.pdf.

Statewide Text-to-911 Initiative

Page **42** of **47**

| Statewide | Text-to-911 | Initiative |
|-----------|-------------|------------|
| | | |

Page **43** of **47**

E911 Board

Statewide Text-to-911 Initiative Plan

Appendix 7

Text-to-911 Special Disbursement Submission Form

Statewide Text-to-911 Initiative

Page **44** of **47**

| Special Disburs | ement | Text-to-911 Req | uest | | County | | |
|---|---|---|---|------------------------------------|---|---|--|
| | | | | | Date | : | |
| Sinet Circuit Funding (Maxi | mum fund | ed costs based on DM | S State Contr | act P | ricing) | | |
| ltem | Quantity | Connectivity | Cost/Mth. | Cos | t/yr. | | Sub-total cost per year for all PSAPs |
| Circuit - Local Loop Access | Varies | Primary PSAP(s) | \$ 612.09 | \$ | 7,345.08 | | |
| - | | | | | | | |
| (Max. 2 MB Metro E) | | Drimony DSAD(c) | \$ 612.00 | c | 7 245 09 | c | |
| Local Loop Access | | Fillind y FSAF(S) | \$ 012.05 | 3 | 7,343.08 | 2 | - |
| Actual Local Loop Access | | Primary PSAP(s) | | s | - | \$ | - |
| Lesser of the two amounts | I | • | I | - | | \$ | - |
| Circuit - Local Loop Access | Varies | Secondary PSAP(s) | \$ 612.09 | S | 7,345.08 | | |
| - | | , | | | | | |
| (Max. 2 MB Metro E) | | | | | | | |
| Local Loop Access | | Secondary PSAP(s) | \$ 612.09 | \$ | 7,345.08 | \$ | - |
| Actual Local Loop Access | | Secondary PSAP(s) | | s | - | \$ | - |
| lesses of the two amounts | | | ļ | - | | c | |
| Lesser of the two amounts | | | | | | 2 | - |
| Circuit Non-recurring Initia | I Construct | tion Cost Allowables | | | | | |
| Non recurring initial | | | | TBD |) by | \$ | - |
| construction | | | | SUN | ICOM | | |
| Actual Non recurring initial | | | | | | Ş | - |
| construction | | | | | | | |
| Lesser of the two amounts | | • | | | | \$ | - |
| | | | | | | | |
| | | | | | Subtota | i c | |
| Text Aggregation Funding (| Mavimum | funded costs based o | n Initiative es | timat | Subtota | \$ | - |
| Text Aggregation Funding (| Maximum Quantity | funded costs based o | n Initiative es | timat | Subtota (e) t/Yr. | \$ | - Cost |
| Text Aggregation Funding (Item Text Aggregation Funding r | Maximum Quantity per connec | funded costs based o Connectivity ted call taking position | n Initiative es Cost/Mth. | timat Cos | Subtota æ) t/Yr. | \$ | - Cost |
| Text Aggregation Funding (Item Text Aggregation Funding p Maximum Text | Maximum Quantity per connec | funded costs based o Connectivity ted call taking position PSAPs Call-Taking | n Initiative es Cost/Mth. n S 45.00 | timat Cos | Subtota (e) t/Yr. 540.00 | s s | - Cost |
| Text Aggregation Funding (Item Text Aggregation Funding p Maximum Text Aggregation | Maximum Quantity per connec | funded costs based o Connectivity ted call taking position PSAPs Call-Taking Positions | n Initiative es Cost/Mth. n \$ 45.00 | timat Cos | Subtota te) t/Yr. 540.00 | S S | - Cost - |
| Text Aggregation Funding (Item Text Aggregation Funding p Maximum Text Aggregation Actual Text Aggregation | Maximum Quantity per connec | funded costs based o Connectivity ted call taking position PSAPs Call-Taking Positions PSAPs Call-Taking | n Initiative es Cost/Mth. n \$ 45.00 | timat Cos S S | Subtota (e) t/Yr. 540.00 | S S S | - Cost - |
| Text Aggregation Funding (Item Text Aggregation Funding p Maximum Text Aggregation Actual Text Aggregation | Maximum Quantity per connec | funded costs based o Connectivity ted call taking position PSAPs Call-Taking PSAPs Call-Taking Positions | n Initiative es Cost/Mth. n \$ 45.00 | timat Cos S S | Subtota (e) t/Yr. 540.00 | \$ \$ \$ \$ | - Cost - - |
| Text Aggregation Funding (Item Text Aggregation Funding p Maximum Text Aggregation Actual Text Aggregation Lesser of the two amounts | Maximum Quantity per connec | funded costs based o Connectivity ted call taking position PSAPs Call-Taking Positions PSAPs Call-Taking Positions | n Initiative es Cost/Mth. n \$ 45.00 | timat Cos S S | Subtota (e) t/Yr. 540.00 | \$ | - Cost - - |
| Text Aggregation Funding (Item Text Aggregation Funding p Maximum Text Aggregation Actual Text Aggregation Lesser of the two amounts Text Aggregation Funding p | Maximum Quantity per connec | funded costs based o Connectivity ted call taking positio PSAPs Call-Taking Positions PSAPs Call-Taking Positions | n Initiative es Cost/Mth. n \$ 45.00 | Cos S S | Subtota (2) t/Yr. 540.00 | \$ | - Cost - - |
| Text Aggregation Funding (Item Text Aggregation Funding p Maximum Text Aggregation Actual Text Aggregation Lesser of the two amounts Text Aggregation Funding p Non recurring initial | Maximum Quantity per connec | funded costs based o Connectivity ted call taking position PSAPs Call-Taking Positions PSAPs Call-Taking Positions | n Initiative es Cost/Mth. n \$ 45.00 | timat Cos S S | Subtota (2) (7) 540.00 - 1,500.00 | \$ \$ \$ \$ \$ \$ \$ | - Cost - - - |
| Text Aggregation Funding (Item Text Aggregation Funding p Maximum Text Aggregation Actual Text Aggregation Lesser of the two amounts Text Aggregation Funding p Non recurring initial construction | Maximum Quantity per connec per PSAP | funded costs based o Connectivity ted call taking position PSAPs Call-Taking Positions PSAPs Call-Taking Positions | n Initiative es Cost/Mth. s 45.00 | S S S | Subtota (e) t/Yr. 540.00 - 1,500.00 | \$ \$ \$ \$ \$ | - Cost - - - |
| Text Aggregation Funding (Item Text Aggregation Funding p Maximum Text Aggregation Actual Text Aggregation Lesser of the two amounts Text Aggregation Funding p Non recurring initial construction Actual initial non recurring | Maximum Quantity per connec per PSAP | funded costs based o Connectivity ted call taking position PSAPs Call-Taking Positions PSAPs Call-Taking Positions PSAPs PSAPs | n Initiative es Cost/Mth. n \$ 45.00 | S S S S | Subtota e) t/Yr. 540.00 - 1,500.00 - | s s s s s s s | - Cost - - - - - |
| Text Aggregation Funding (Item Text Aggregation Funding p Maximum Text Aggregation Actual Text Aggregation Lesser of the two amounts Text Aggregation Funding p Non recurring initial construction Actual initial non recurring construction | Maximum Quantity per connec per PSAP | funded costs based o Connectivity ted call taking positio PSAPs Call-Taking Positions PSAPs Call-Taking Positions PSAPs PSAPs PSAPs | n Initiative es Cost/Mth. n \$ 45.00 | timat Cos S S S S | Subtota e) t/Yr. 540.00 - 1,500.00 - | \$ \$ \$ \$ \$ \$ | - Cost - - - - |
| Text Aggregation Funding (Item Text Aggregation Funding p Maximum Text Aggregation Actual Text Aggregation Lesser of the two amounts Text Aggregation Funding p Non recurring initial construction Actual initial non recurring construction Lesser of the two amounts | Maximum Quantity per connec per PSAP | funded costs based o Connectivity ted call taking positio PSAPs Call-Taking Positions PSAPs Call-Taking Positions PSAPs PSAPs PSAPs | n Initiative es Cost/Mth. n \$ 45.00 | Cos S S S S S | Subtota (9) t/Yr. 540.00 - 1,500.00 - | 5 5 5 5 5 5 5 | - Cost - - - - - - |
| Text Aggregation Funding (Item Text Aggregation Funding p Maximum Text Aggregation Actual Text Aggregation Lesser of the two amounts Text Aggregation Funding p Non recurring initial construction Actual initial non recurring construction Lesser of the two amounts | Maximum Quantity per connec | funded costs based o Connectivity ted call taking position PSAPs Call-Taking Positions PSAPs Call-Taking Positions PSAPs PSAPs PSAPs | n Initiative es Cost/Mth. n \$ 45.00 | Cos S S S S | Subtota 2) t/Yr. 540.00 - 1,500.00 - Subtota | 5 5 5 5 5 5 5 5 5 | - Cost - - - - - - - - - |
| Text Aggregation Funding (Item Text Aggregation Funding p Maximum Text Aggregation Actual Text Aggregation Lesser of the two amounts Text Aggregation Funding p Non recurring initial construction Actual initial non recurring construction Lesser of the two amounts | Maximum Quantity per connec per PSAP | funded costs based o Connectivity ted call taking position PSAPs Call-Taking Positions PSAPs Call-Taking Positions PSAPs PSAPs PSAPs PSAPs | n Initiative es Cost/Mth. n \$ 45.00 | Cos S S S S S | Subtota 2) t/Yr. 540.00 - 1,500.00 - Subtota | 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 | - Cost - - - - - - - - - - |
| Text Aggregation Funding (Item Text Aggregation Funding p Maximum Text Aggregation Actual Text Aggregation Lesser of the two amounts Text Aggregation Funding p Non recurring initial construction Actual initial non recurring construction Lesser of the two amounts | Maximum Quantity per connec per PSAP | funded costs based o Connectivity ted call taking position PSAPs Call-Taking Positions PSAPs Call-Taking Positions PSAPs PSAPs PSAPs PSAPs dable item) Special Disbursement | n Initiative es Cost/Mth. n \$ 45.00 | Cos S S S S Vivised | Subtota () t/Yr. 540.00 - 1,500.00 - Subtota 5/16 | 5 5 5 5 5 5 5 5 5 5 5 5 | - Cost - - - - - - - - - - - |

Statewide Text-to-911 Initiative

Page **45** of **47**

E911 Board

Statewide Text-to-911 Initiative Plan

Appendix 8

TTY Text-to-911 Service Providers Concerns

Statewide Text-to-911 Initiative

Page **46** of **47**

T · Mobile

Thank you for your request letter for SMS to 9-1-1 services from T-Mobile. We look forward to working with you and your team on this important initiative. We understand your agency has selected to receive SMS messages via the TTY delivery method. We would like to discuss this option with you as we have reservations about the TTY deployment method. We feel it is important to bring these concerns to your attention prior to the start of the SMS to 9-1-1 deployment process.

There are a number of issues associated with SMS to 9-1-1 data delivery via TTY, most notably, the interference of incoming text messages. The use of TTY for SMS message delivery creates the possibility that the PSAP's incoming trunk groups will block due to competing congestion with live voice 9-1-1 calls. The text messages, which utilize the same circuit path between the Selective Router and the PSAP, could prevent citizens from having access to 9-1-1 services. In addition, the wireless customer texting to 9-1-1 has no ability to "end" the text session. In order to end the text session, the 9-1-1 operator must close the session. Not doing so will tie up an incoming circuit unnecessarily, which creates the potential for a citizen to be blocked from accessing 9-1-1. This will have the same effect on all calls or text attempts to reach the PSAP. Also, consumer texting habits are much different than TTY/TDD texting requirements. TTY/TDD service is not duplex; therefore, only one person can send a text at a time. Due to these differences, there is the potential for misunderstanding between the PSAP and the citizen in need of 9-1-1 services.

It is very important for the PSAP to have an IP connection to access the SMS to 9-1-1 administrative functions. This allows the PSAP to manage the SMS to 9-1-1 service via TTY. IP access for the TTY solution is included in the J-Standard 110 "Joint ATIS/TIA Native SMS to 9-1-1 Requirements and Architecture Specification" document. If the PSAP does not have IP management capabilities, there is the potential risk of text messages flooding the PSAP, which in turn, will block the 9-1-1 circuits. Without these administrative functions, the PSAP may be unaware that they have a 9-1-1 service impacting problem.

A PSAP with IP access can avoid the issues described above. Access to a web-client service for SMS to 9-1-1 services can be accomplished quickly. Both TCS and Intrado have similar web-client services available at no cost to the PSAP. If your PSAP is not currently receiving SMS to 9-1-1 service from another wireless carrier via the TTY method, we would suggest conducting a trial with T-Mobile using the TCS GEM client. Should you still decide to move forward with SMS to 9-1-1 via the TTY method, T-Mobile will have no problem making the adjustment. Our intent is to ensure the PSAP has reviewed all the options thoroughly and have taken the above considerations regarding Text to 9-1-1 via TTY into account.

We would be happy to have a discussion with you and your team regarding T-Mobile's SMS to 9-1-1 services. We appreciate the opportunity to work with your agency on this enhancement to wireless 9-1-1 services.

Statewide Text-to-911 Initiative