

MCM Consulting Group, Inc.

Public Safety Consulting and Training

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Sen. Lisa Baker
Senate Box 203020
Harrisburg, PA 17120-3020
Room: 172 Main Capitol

October 16, 2012

Sen. Timothy J. Solobay
Senate Box 203046
Harrisburg, PA 17120-3046
Room: 15 East Wing

Chairwoman Baker, Chairman Solobay, members of the Committee, my name is Michael McGrady and I am the President of MCM Consulting Group, Inc., my firm is the consultant for the Northern Tier Regional Telecommunications Project that encompasses 9 Counties in North Central and Northwest Pennsylvania.

With me is Michael McAllister, Mike is the Director of the Elk County Office of Emergency Services and Chairman of the North Central Emergency Response Group.

We are here today to provide you information on a Regionalization of Technology project (Northern Tier Regional NG911 Capable Telecommunications project) that is currently taking place today.

Overview

In January of 2011 six counties (Cameron, Clarion, Clearfield, Elk, Jefferson and McKean) located in the Northwest Central area of the Commonwealth of Pennsylvania requested that MCM Consulting Group, Inc. (MCM) assist them in replacing their legacy era 911 telephony switches due to the counties receiving end of life notifications from the telephony switch manufacturer (Cassidian Communications).

Upon review of the current county 911 telephony systems, MCM quickly realized that the current systems had a lack of redundancy, were not interconnected and not Next Generation 911 (NG911) capable. Additionally, the counties could not transfer 911 calls between counties with ALI or ANI. In essence, the counties were functioning as individual silos.

MCM also reviewed the telephone networks for the individual counties and identified that their networks were not Next Generation (IP) capable and that the counties were being overcharged for a number of items in their networks and recommended other cost saving measures for the counties to implement. Again, the counties were functioning as silos with their individual 911 networks (ALI database, cama trunks, selective routers, etc.).

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In March of 2011 MCM obtained budgetary estimates for new NG911 capable telephony systems for the individual counties to submit with their wireless funding applications. In May of 2011 the Pennsylvania Emergency Management Agency (PEMA) approved the funding for the individual counties but only funded 83.9% of the requested amount due to more requests for funds than was available in fund.

MCM met collectively with the counties in May of 2011 and recommended the counties explore the feasibility of a regional NG911 capable telephony project to improve operational efficiencies, increase survivability of their systems & networks and reduce capital, annual maintenance and network cost. This concept initially encompassed the six counties of the Northwest Central Pennsylvania Emergency Response Group but grew to include three counties (Crawford, Forest and Warren) from the North West Pennsylvania Emergency Response Group.

MCM conducted additional research on regional NG911 Capable telephony systems and invited four vendors (Cassidian, Positron/Intrado, Solacom and Zetron) to provide product presentations and demonstrations for counties.

MCM and the counties narrowed the four vendors to the top two (Cassidian and Positron/Intrado) and requested additional information and ultimately budgetary pricing from both vendors. After review of the additional information and budgetary pricing, the counties agreed that Cassidian offered the best solution for the counties.

MCM then conducted research on the available IP capable networks in the region (Verizon, Windstream and Zito Media) and recommended Zito Media to the counties due to their vast network, willingness to work with the counties, fiber diversity to each PSAP and lower cost.

The design of the system includes a Cassidian Geo-Diverse Patriot NG911 capable telephony system, with one NG911 capable switch (Side A) being located in Elk County's new 911 Center, which will serve the counties that are located in Windstream territory and the other NG911 capable switch (Side B) located in the Clearfield County 911 Center, which will serve the counties located in Verizon territory. Each switch is capable of running the entire network in the event of a failure of the other side (A or B).

The NG911 capable switches will be connected via a private 500 mbps IP network (Zito Media) and each 911 Center will have a redundant 100 mbps IP connection to each server. The network will ride on a redundant 10 GB IP ring (please see the attached engineering diagram).

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All of the end office trunks from each county will be directed to the Verizon Tandems to add redundancy to the system, resulting in tremendous cost savings for the counties served by Windstream by eliminating Windstream's selective routers. From the tandems, one half of the counties 911 trunks will be connected to the Side A switch and one half will be connected to the Side B switch, adding additional diversity to the network. To reduce cost, non-emergency and administrative lines will connect to the individual county workstations at the PSAP level.

MCM created an Invitation for Bids (IBF) for the telephony switch and received six requests for the IBF and four competitive bids for the equipment. MCM finalized the contract for the IP network and implementation of the network to run concurrent with the installation of the NG911 capable telephony system.

While the IP network was initially designed for the regional NG911 capable telephony project, this robust system is also capable of providing transport and connectivity for systems including but not limited to, Computer Aided Dispatch, Graphical Information Systems, Radio (RIOS), Emergency Management functions, including interfacing with a State-wide ESInet.

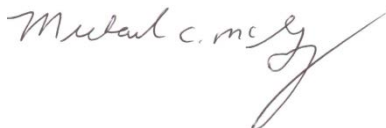
Listed below is a brief timeline for the project. Please see Appendix A for more detailed system information:

- January/June 2011 – Assessment.
- June/December 2011 – System Design.
- January 2012 – Pricing & Funding Options.
- January 2012 – PEMA Presentation.
- February 2012 – March 2013 Implementation.

The Northern Tier Regional NG911 Telecommunications project is a prime example of counties and regions migrating from the individual silo model to working together to create a regional network and improving technology and operations while saving cost.

We would be glad to answer any questions that you may have.

Best Regards,



Michael C. McGrady

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