

## PSAP Grant Program Grant Ranker

# View Application--45--NG 911 Pilot Project, Phase Two

**Grant Period:** 2009

**Tier:** Strengthen current equipment and service delivery capability by upgrading existing wireless E-911 related equipment or services (**STRENGTHEN**)

**Grant Program:** Enhancement **Grant Type:** Regional Initiative

**Priority:** NG-911 (**NG**)

**Primary PSAP Applicants:** Martinsville - Henry County 9-1-1

**Jurisdictions Served:** Henry  
Martinsville

### **Project Director:**

Wes Ashley

Director

Martinsville-Henry County 911 Center P.O. Box 7, Collinsville, VA 24078

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### **Project Description:**

The Martinsville-Henry County 911 Center received a grant in the amount of \$197,000 from the Virginia E-911 Wireless Services Board for FY '08 for the initial implementation and installation of the infrastructure necessary to bring about NG911 for the first time in the Commonwealth of Virginia, as a "pilot" project. A number of technology agencies, localities, and departments have been involved in the project as we work through its many facets as we evolve into one proven technology. It is anticipated that the infrastructure for this project will be in place and ready for testing by mid spring 2008. I will refer to the infrastructure portion of the overall project as "phase one", which will bring the IP capability for NG911 into the PSAP. In order for "phase two" to be completed and NG911 realized in Virginia, the project will also require IP capable CPE equipment. Our new FY '09 grant project is fairly un-complicated compared to the current implementation, installation, and testing of the infrastructure as described elsewhere in this grant request. It must be pointed out that phase one will not confirm that the end goal has been reached until phase two is in place, which is the purpose of this grant. We will be purchasing IP capable CPE equipment for our current seven positions, completing the pilot project, following successful testing and live cutover.

**Total Project Cost** \$300,000.00

**Amount Requested:** \$300,000.00

**Matching Funds:** \$0.00

**Additional Local Funds:** \$0.00

### **Statement of Need:**

The Martinsville-Henry County 911 Center is committed to this pilot project, to determine if the IP

infrastructure described elsewhere in this application will perform as described. In addition, once the FY'08 IP infrastructure is completed in a few months and the FY '09 CPE equipment is installed and proven to work as a public safety class installation, then we will be able to exercise some other options such as performing as "backup" to PSAPs and vice-versa. Note: The two independent localities served by the Martinsville-Henry County 911 Center are not in a financial position to fund these pilot projects, however, the lack of local funding in no way hinders our fortitude and our forward thinking philosophy.

### **Project Impact:**

The project, as first envisioned, and agreed upon, will not include additional operational expenses, such as the tariff database costs. Operational services, however, would move beyond the antiquated 911 infrastructure now in service, to the more robust, capable, and forward thinking NG911. It is anticipated that a monthly recurring maintenance service contract may increase in costs with the installation of this new technology.

### **Consequence of Not Receiving:**

Simply put, the possibility of the Martinsville-Henry County 911 Center, as well as other PSAPs in the Commonwealth of Virginia, using this pilot project for future NG911, cannot be fully adjudged with out the end-to-end testing and acceptance that IP capable CPE equipment will provide.

**Part of Long Term or Strategic Plan?:** No

**Likelihood of Completion Unfunded?:** 0%

**Other Available Funding Sources?:** No

**Percent of Grant Funding Requested To Total Funding Cost?:** 100%

**Is Project Locally Sustainable?:** No

### **Comprehensive Project Description:**

Our PSAP is currently engaged in the development of a Next Generation 911 System and we are currently, FY '08, working toward a comprehensive ALI management solution that provides more control over ALI data provisioning and features such as on demand querying capabilities, customization of ALI display formats, real-time error correction and ad hoc customized reporting that supports wireline, wireless and VoIP calls. In addition, we are also seeking network-based selective routing to overcome the current limitations of the legacy operational standards. Several key requirements of this new NG911 system will include: IP and application-based framework for delivering highly reliable, robust, secure, and efficient emergency services

Open, "standards-based" architecture that provides extensive management capability and modular extensibility Quick and effective development and deployment of new applications with minimal or no impact on users or their operational activities Connectivity to both legacy emergency networks and to non-traditional networks such as VoIP Access for additional data sources By late spring 2008, the Martinsville-Henry County 911 Center anticipates the installation of key components of equipment and software to accomplish the above, all of which is funded by a \$197,000 grant from the Virginia E911 Wireless Services Board. Our PSAP has worked many, many hours with other technology agencies such as VITA, NG, Intrado and Synergem, as well as other jurisdictions, to insure that our current goals are met. Regarding the success of this project, both Intrado and our PSAP is looking at Synergem as a neutral third party who will prepare and present independent reports regarding the level(s) of success after acceptance testing is complete. VITA and NG will be fully involved in evaluating acceptance testing as well. The ramifications of such a successful project could be far reaching across the Commonwealth of Virginia and beyond. To abridge the enormous undertaking of this project, I will summarize the current project as the culmination of research and installation of infrastructure that makes the goal of the new NG911 project possible. Our current solution is a new technology, one that blends voice, data, and other media types from a variety of sources to provide operational solutions that addresses identified needs such as economies of scale, maximizing data quality and minimizing misroutes, improve response times, ability to transfer 911 calls across LATAs, and transform selective routers (SRs) from chokepoints to gateways. Much of the above is currently unfolding as we speak, however, the second phase of this project that we propose to begin July 1, 2008, will be to replace current CPE equipment with equipment that is IP capable. In essence, we will be able to "set in motion" or otherwise complete the pilot project through the implementation and installation of IP hardware and software.

**What type of interface or compatibility solution will be used between existing equipment and/or software and that which you intend to purchase?:**

Because the current '08 grant project involves the installation of hardware and software that is bringing IP capabilities to the PSAP, the purchase of IP capable CPE equipment with FY '09 grant funds will permit end-to-end acceptance testing on a live NG911 solution. Then the impact across the Commonwealth could be realized for NG911.

**What is the overall relationship of your project to your PSAP or locality's established long-range future plans?:**

Public Safety, including fire, EMS, and law enforcement, and the overwhelming concern for our citizen's well being is at the forefront of this pilot project. We exist to serve, and if it is worth doing, it is worth doing right.

**How will the equipment purchased will support future technologies for PSAP readiness?:**

To prove NG911 technology works in a live environment and that the services provided will be all that is envisioned, and beyond.

**Budget and Budget Narrative:**

The Martinsville-Henry County 911 Center will purchase IP capable CPE Equipment that will mate to our current IP infrastructure project that is to be installed and tested in mid spring 2008. Two quotes to replace our seven positions have been obtained from Embarq, and are available to you for review. The highest quote is \$327,660.48. I fully expect negotiations between Embarq and Positron will yield a cost of no more than \$300,000.

**Ongoing Expenses:**

The likelihood of increased and recurring expenses will be for maintenance service contracts for the new CPE equipment, which, if reasonable, will be borne by Martinsville and Henry County 911 Center and a percentage will be paid for by the Wireless Board per our annual call volume percentage. That is yet to be determined because we will have at least two vendors that can service the equipment.

**Evaluation:**

The Martinsville-Henry County 911 Center will purchase IP capable CPE Equipment that will mate to our current IP infrastructure project that is to be installed and tested in mid spring 2008. Two quotes to replace our seven positions have been obtained from Embarq, and are available to you for review. The highest quote is \$327,660.48. I fully expect negotiations between Embarq and Positron will yield a cost of no more than \$300,000.

**What are the short term, intermediate, and/or long-term outcomes desired for this project?:**

The short-term and long-term desired outcomes are the same, that the pilot project will help PSAPs across Virginia have confidence in NG911 infrastructure and can benefit from its stability, performance and possible costs saving, especially in the long-term.

**What measures will be used to determine outcomes?:**

All of the stakeholders agree on the performance testing criteria as well as live NG911 testing. Stakeholders would include the number of entities mentioned elsewhere in this grant request, such as VITA, the Wireless Board, Synergem, Intrado, Embarq, Verizon, Positron, and Plant CML, in addition to the end users, the PSAPs.

**How will data be collected and how will evaluations be conducted?:**

Synergem a private consulting firm, with considerable expertise on board, will be the primary collector and evaluator of tests performed, as over-seen by the several key stakeholders such as the PSAPs, VITA, etc.

**How will data be presented?:**

Synergem will prepare written and oral, professional and technical, presentations regarding whether or not the required benchmarks were met, as a result of acceptance testing. The results of such tests should be of interest to all PSAPs in the Commonwealth.

## Attachments

[Henry County VA - BUDGETARY PRICING new Patriot system less CommandPOSTs 11-19-07.xls](#)

[Henry County VA - BUDGETARY PRICING new Viper system with HGAC pricing 11-19-07.xls](#)



# Price Sheet

## Voice / Data Systems

Customer: E911 Henry County 911  
 3300 Kings Mountain Road  
 -  
 Collinsville, VA 24078-0007

Pricing is Valid Until: January 18, 2008

Description of Work to be Performed: Positron VIPER Budgetary quote - HGAC discount applied

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- 
- 
- Ott07048-02

Prices shown on this page represent nonrecurring charges for items as described. These prices do not include recurring or nonrecurring charges for taxes, duties, tariffs, telecommunication services, or professional services such as Centurion Maintenance or Managed Network Services.

*Equipment pricing shown is based upon direct sale accompanied by new Centurion Maintenance contract on same.*

Description	Quantity	Unit Price	Extended Price
Positron VIPER	-	-	-
Positron CAMA Gateway Shelf	2	734.57	1,469.14
Positron CAMA Interface Module	6	1,995.93	11,975.58
Positron Primary Backroom Server	1	2,960.51	2,960.51
Positron Primary VoIP Soft Switch	1	2,441.12	2,441.12
VoIP FXO Gateway - 8 Ports for Admin Lines	2	1,847.53	3,695.06
24 Port Switch with QoS	2	957.15	1,914.30
7' VIPER IT Cabinet	1	4,162.52	4,162.52
Backroom Position Access License	8	1,476.55	11,812.40
PBX Access License - Per Workstation	7	957.15	6,700.05
Power Supply (-48V DC)	2	1,031.36	2,062.72
Positron Secondary Backroom Server	1	2,960.51	2,960.51
Positron Secondary VoIP Soft Switch	1	2,441.12	2,441.12
Positron VIPER Enabling Kit	7	1,743.66	12,205.62
-	-	-	-
Power 911 Software	-	-	-
Power 911 Version 5.0 Client Access License (CAL)	7	7,416.10	51,912.70
Power 911 Server Access License	7	1,480.25	10,361.75
Power 911 Media	1	7.42	7.42
IWS Underlying System Software - Workstation	7	455.00	3,185.00
IWS Underlying System Software - Server	1	3,310.93	3,310.93
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
Power IWS Hardware	-	-	-
IWS G2 Workstation Computer (No Monitor)	7	2,099.95	14,699.65
19" LCD Monitor	7	923.98	6,467.86
IWS G2 Server (5 to 15 positions)	1	4,647.89	4,647.89
IWS G2 Server Tape Backup System (P911)	1	4,066.91	4,066.91
IWS G2 Server Redundant Disk Array (5-15 positions) (P911)	1	2,785.93	2,785.93
Power MIS 4.0 - G2 Basic Server (with Monitor)	1	2,939.93	2,939.93
-	-	-	-
-	-	-	-
-	-	-	-
IWS G2 Workstation Computer (w/ 17" CRT)	1	2,379.94	2,379.94
IWS Workstation Uninterruptible Power Supply (UPS)	7	818.99	5,732.93
IWS G2 Uninterruptible Power Supply (UPS)	1	1,336.98	1,336.98
-	-	-	-
Installation	-	-	-
Backroom Staging - up to 8 positions (Viper)	1	4,081.63	4,081.63
Positron IWS Staging - up to 8 positions (P911)	1	4,081.63	4,081.63
Installation Services	5	2,040.82	10,204.10
Installation - Living Expense Per Day	7	272.11	1,904.77

Installation - Travel Fee	1	1,700.68	1,700.68
-	-	-	-
-	-	-	-
Cutover Assistance	-	-	-
Cut-over assistance	1	4,081.63	4,081.63
Installation - Living Expense Per Day	3	272.11	816.33
Installation - Travel Fee	1	1,700.68	1,700.68
-	-	-	-
Training	-	-	-
P911 End User Training (per day)	2	2,040.82	4,081.64
P911 Administrator Training (per day)	2	2,040.82	4,081.64
Training - Living Expense Per Day	6	272.11	1,632.66
Training - Travel Fee	1	1,700.68	1,700.68
-	-	-	-
Power MIS Software	-	-	-
Power MIS 4.0 Software & Documentation	1	687.81	687.81
Power MIS 4.0 Data License	7	628.46	4,399.22
Additional Backup EXEC Server Agent	1	444.49	444.49
Additional Backup EXEC SQL Agent	1	1,511.27	1,511.27
IWS Underlying System Software - Workstation	1	455.00	455.00
IWS G2 Server - Configuration & Software	1	3,310.93	3,310.93
-	-	-	-
VIPER Critical Spares Kit	-	-	-
Positron CAMA Gateway Shelf	1	734.57	734.57
Positron CAMA Interface Module	1	1,995.93	1,995.93
Positron Primary Backroom Server	1	2,960.51	2,960.51
VoIP FXO Gateway - 8 Ports for Admin Lines	1	1,847.53	1,847.53
24 Port Switch with QoS	1	957.15	957.15
Power Supply (-48V DC)	1	1,031.36	1,031.36
Positron VIPER Enabling Kit	1	1,743.66	1,743.66
-	-	-	-
-	-	-	-
VIPER Software Evergreen -Warranty + 4 Years	1	31,042.86	31,042.86
Power 911 Software Evergreen - Warranty + 4 Years	1	28,218.84	28,218.84
Power MIS Software Help Desk - Warranty + 4 Years	1	3,319.88	3,319.88
IWS Hardware Help Desk - Warranty + 4 Years	1	2,469.80	2,469.80
-	-	-	-
misc. materials; wire, blocks etc.	1	2,099.95	2,099.95
-	-	-	-
Site Survey	-	-	-
Site Survey	1	2,040.82	2,040.82
Site Survey - Living Expense Per Day	3	272.11	816.33
Site Survey - Travel Fee	1	1,700.68	1,700.68
-	-	-	-
SUBTOTAL: Gross Material Price .....		\$	314,493.13
SUBTOTAL: Gross Discount .....		\$	-
Net Material Price .....		\$	314,493.13
Labor (Includes Project Management if not shown separately below) .....		\$	10,972.80
Project Management .....		\$	-
Shipping .....		\$	2,194.55
TOTAL PRICE .....		\$	327,660.48



Patriot Stats	-	-	-
PAT STATS DATA CLCTN LIC	9	213.06	1,917.54
PAT STATS VIEW SW LIC	1	745.72	745.72
PAT STATS SPT 3YR NPCML	-	-	-
PAT STATS SPT 5YR NPCML	7	165.85	1,160.95
GENERIC WKSTN CONFIG FEE	1	304.88	304.88
-	-	-	-
Patriot Installation Services	-	-	-
FIELD ENG-PRIMARY	232	121.95	28,292.40
PROJECT MGT-SECONDARY	64	121.95	7,804.80
-	-	-	-
Patriot Training	-	-	-
SENTINEL PATRIOT AGENT	24	152.44	3,658.56
SENTINEL PATRIOT ADMIN	6	457.32	2,743.92
TRAVEL EXPENSE	1	650.00	650.00
DAILY TRAINER EXPENSE	3	369.51	1,108.53
-	-	-	-
Patriot Monitor	-	-	-
PAT MNTR VIEW SW LIC	2	4,386.52	8,773.04
PAT AGT MNTR LIC	7	939.97	6,579.79
PAT MNTR SPT 3YR NPCML	-	-	-
PAT MNTR SPT 5YR NPCML	2	3,414.63	6,829.26
-	-	-	-
Recommended Spares	-	-	-
SWITCH 24-PORT 1U	1	659.23	659.23
PAT FXO GATEWAY 8PORT	1	1,925.06	1,925.06
PAT FXS GATEWAY 8PORT	1	1,685.69	1,685.69
4-CHANNEL, PCI SOUND CARD	1	686.80	686.80
PAT 3.0 SENT HARDWARE	1	2,005.27	2,005.27
-	-	-	-
misc. materials; wire, blocks etc.	1	1,879.94	1,879.94
-	-	-	-
Value Incentives	-	-	-
PlantCML Loyalty program	9	(2,439.02)	(21,951.18)
SUBTOTAL: Gross Material Price .....			\$ 334,570.71
SUBTOTAL: Gross Discount .....			\$ (21,951.18)
Net Material Price .....			\$ 312,619.53
Labor (Includes Project Management if not shown separately below) .....			\$ 9,835.20
Project Management .....			\$ -
Shipping .....			\$ 2,027.47
TOTAL PRICE .....			\$ 324,482.20