PSAP Grant Program Grant Ranker

View Application--4--ESVA 9-1-1 - Grant Application

Grant Period: 2009

Tier: Strengthen current equipment and service delivery capability by upgrading existing wireless E-911 related equipment or services (**STRENGTHEN**)
Grant Program: Continuity and Consolidation **Grant Type:** Regional Initiative
Priority: Other (**OTHER**)

Primary PSAP Applicants:	Eastern Shore 9-1-1
Jurisdictions Served:	Town of Accomac Town of Belle Haven Town of Bloxom Town of Cape Charles Town of Cheriton Town of Eastville Town of Exmore Town of Hallwood Town of Keller Town of Melfa Town of Nassawadox Town of Onancock Town of Onely Town of Painter Town of Parksley Town of Saxis Town of Tangier Town of Wachapreague Accomack Northampton

Project Director:
James L. Collins, Jr.
9-1-1 Supervisor
23201 Front Street P.O. Box 337 Accomac, VA 23301
757-787-0910 (phone)
757-787-1044 (fax)
jcollins@esva911.org

Project Description:
The grant initiative includes various projects in the application. Several of the projects are designed for the continuity of operations of the 9-1-1 Center and others are considered an enhancement of services for the 9-1-1 Center. They range from energy/power projects to security enhancements for the 9-1-1 Center. In addition some of the projects include the sharing of data and resources between the Eastern Shore PSAP and the Town of Chincoteague PSAP.

Total Project Cost	$300,706.00
Amount Requested:	$300,000.00
Matching Funds:	$0.00
Additional Local Funds:	$0.00

Statement of Need:
The Eastern Shore of Virginia is a rural area without a strong tax-base to support large governmental capital outlays by government agencies. The area is dependent on the seafood, poultry, and farming industry as the major sources of income. These industries are dependent on the elements and natural forces for success and often this success varies considerably from year to year. The median household income in 2004 for Accomack County was $31,256 and $31,847 for Northampton County. This contrasts with the state average of $51,103 per household. In 2004, 14.9% of the population in Accomack County was below the national poverty level and 17.6% of the population in Northampton County was below the poverty level. This contrasts with a state average of 9.5% in 2004. This overall grant initiative includes various projects and the ability to fund these initiatives, without outside funding, is unlikely. These initiatives included in this application are needed. Projects, such as generator and transfer switch replacement, are crucial for the 9-1-1 Center's sustainability and others, such as the ability to forward ANI/ANI information to the law enforcement dispatch centers are potential public safety personnel and service issues.

Project Impact:
Each specific initiative is listed below with potential impacts on operational services. Addition of redundant features to the existing CPE equipment - A failure of these components would force operations into a backup mode without all 9-1-1 processing features until Verizon could obtain and replace defective components. If this were to occur during a critical operations period, such as a local emergency or disaster, the resulting effects on daily operations would be significant. Purchase, configure, and install a backup/redundant server for the ESVA 9-1-1 primary PSAP application and data/mapping server - The existing server supports CAD, mapping, and recording applications, all of which are critical to daily dispatch operations. Providing redundancy will significantly reduce the potential for downtime associated with failure of server components. Upgrading the existing server and network will help assure compatibility with redundancy and data housing and backup requirements. Provide ANI/ALI information for Sheriff's Offices and Virginia State Police through installation of display equipment and communications circuits/links to those offices - This would allow the transfer of ANI/ALI data to Sheriffs Office's and VSP from 9-1-1 trunks at the Eastern Shore 9-1-1 Center (Primary PSAP). 9-1-1 calls for law enforcement are received and transferred to dispatch points at the Sheriff's Offices and VSP via protocol. Establish 9-1-1 telephone system redundancy between Eastern Shore 9-1-1 and Chincoteague 9-1-1 - This redundancy would allow either 9-1-1 center to transfer the receipt of 9-1-1 telephone calls to the other center in the event of internal system failures, overloads, or forced evacuations of either facility. ESVA 9-1-1 will still need another backup or secondary PSAP because Chincoteague 9-1-1 is situated in a high-risk area for flooding and impact from hurricanes and other coastal storms; however, this will work for normal day-to-day operations and will serve the Town of Chincoteague for both day-to-day as well as local emergencies and disasters. Purchase an additional license and necessary computer hardware, software, configuration setup, and training for Chincoteague 9-1-1, enabling them to operate with the same CAD system as Eastern Shore 9-1-1 - Chincoteague is not currently equipped with CAD. Mapping and required data tables are common. Chincoteague would add additional unique data and share in regional management of the CAD system. Design, install, and implement interfaces that will support the transfer of ANI/ALI data from the tandem serving ESVA 9-1-1 and Chincoteague 9-1-1 to the tandem serving Worcester and Somerset Counties, Maryland, when a 9-1-1 call requires transfer between PSAP's in different LATA's - This would allow the transfer of ANI/ALI information when telephone calls are transferred to Somerset or Worcester County, Maryland. Purchase necessary hardware and software to support mapping/GIS functions relevant to 9-1-1 map layers (building footprint and contour layers) in jurisdictional GIS systems - This data would provide the ESVA 9-1-1 Center with accurate and complete topographic data for the Shore. Purchase and install additional channel recording capacity at ESVA 9-1-1 - Currently recording is restricted to primary radio channels and primary console positions. This would allow all radio frequencies, emergency phone lines, and console positions would be recorded independently. Purchase, configure, and install necessary telecommunications equipment to support Next Generation 9-1-1 - Currently the 9-1-1 Center is unable to receive non-traditional types of data. Generator/Transfer Switch – 9-1-1 Center - Operation of the 9-1-1

Center without commercial power is dependent upon the stationary generator at the 9-1-1 Center. Security of 9-1-1 Center – Additional security enhancements are needed for the 9-1-1 Center. Back-Up Communications - Provide and install independent backup dispatch communications console system to permit radio dispatching and paging of agencies and units served by ESVA 9-1-1 from their PSAP in the event the primary Motorola MCC5500 console system fails.

Consequence of Not Receiving:
Local funding is not available for projects requested to be funded in this initiative. Potentially, not funding some of the projects could result in a disruption of 9-1-1 service and ability to dispatch emergency services.

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?: Yes

Comprehensive Project Description:
Included is a description of the initiatives included in the project application: 1. Add redundant backup features to the existing Plant Vesta 9-1-1 telephone system at Eastern Shore 9-1-1 (ESVA 9-1-1). The current customer premises equipment is equipped with the basic telephone system components and modules, but there is no redundancy built in for the majority of critical operational components. A failure of these components would force operations into a backup mode without all 9-1-1 processing features until Verizon could obtain and replace defective components. If this were to occur during a critical operations period, such as a local emergency or disaster, the resulting effects on daily operations would be significant. 2. Purchase, configure, and install a backup/redundant server for the ESVA 9-1-1 primary PSAP application and data/mapping server. The existing server supports CAD, mapping, and recording applications, all of which are critical to daily dispatch operations. Providing redundancy will significantly reduce the potential for downtime associated with failure of server components. Upgrade the existing server and network to assure compatibility with redundancy and data housing and backup requirements. 3. Provide ANI/ALI information for Sheriffs Offices and VSP through installation of display equipment and communications circuits/links to those offices. This would allow the transfer of ANI/ALI data to Sheriffs Offices and VSP from 911 trunks at the Eastern Shore 9-1-1 Center (Primary PSAP). 9-1-1 calls for law enforcement are received and transferred to dispatch points at the Sheriff's Offices and VSP via protocol. 4. Establish 9-1-1 telephone system redundancy between Eastern Shore 9-1-1 (PSAP serving Accomack and Northampton Counties) and Chincoteague 9-1-1 (PSAP serving Town of Chincoteague). This redundancy would allow either 9-1-1 center to transfer the receipt of 9-1-1 telephone calls to the other center in the event of internal system failures, overloads, or forced evacuations of either facility. ESVA911 will still need another backup or secondary PSAP because Chincoteague 9-1-1 is situated in a high-risk area for flooding and impact from hurricanes and other coastal storms; however, this will work for normal day-to-day operations and will serve Chincoteague for both day-to-day as well as local emergencies and disasters. 5. Purchase an additional license and necessary computer hardware, software, configuration setup, and training for Chincoteague 9-1-1, enabling them to operate with the same CAD system as Eastern Shore 9-1-1. Configure interconnection to server at ESVA 9-1-1. Chincoteague is not currently equipped with CAD. Mapping and required data tables are common. Chincoteague would add additional unique data and share in regional management of the CAD system. 6. Design, install, and implement interfaces that will support the transfer of ANI/ALI data from the tandem serving ESVA 9-1-1 and Chincoteague 9-1-1 to the tandem serving Worcester and Somerset Counties, Maryland, when a 9-1-1 call requires transfer between PSAP's in different LATA's. 7. Purchase necessary hardware and software to support mapping/GIS functions relevant to 9-1-1 map layers in jurisdictional GIS systems. Purchase any essential GIS data enhancements uniquely required for improvement of 9-1-1 call management. Specifically the two projects are proposed – 1. Building Footprint Update – As part of the 2007 Virginia Base Mapping Program, the state is allowing localities to optionally purchase building footprint data for their localities. This data would provide an up-to-date structural footprint layer for the Eastern Shore, 2. Contour Data – As part of the 2007 Virginia Base Mapping Program, the state is allowing localities to optionally purchase elevation data for their localities. This data would provide the ESVA 9-1-1 Center with accurate and complete topographic data for the entire shore. 8. Purchase and install additional channel recording capacity at ESVA 9-1-1. Currently recording is restricted to

primary radio channels and primary console positions. Ideally, all radio frequencies, emergency phone lines, and console positions would be recorded independently. The specific request includes a thirty-six channel Digital Logging Recording System with AIT Turbo Drive, basic Public safety Application Package, two additional Scenario Replay Licenses and Recording Solution Protection Package. This includes two additional licenses to provide reviewing access to Supervisors. 9. Purchase, configure, and install necessary telecommunications equipment to support Next Generation 9-1-1. Initial efforts should include the ability to receive pictures and video from wireless devices (such as cellular phones) in the 9-1-1 Center. Integration with existing systems is preferred. 10. Generator/Transfer Switch – 9-1-1 Center – Current generator is about twenty years old and numerous problems have been encountered over the last year with the functionality of the generator and transfer switch. Operation of the 9-1-1 Center without commercial power is dependent upon the stationary generator at the 9-1-1 Center. Includes purchase of a generator rated at 70kw (240 three-phase delta configuration), 400 amp transfer switch (three phase delta), installation, gas company connection, and electric company connection. 11. Enhance security of 9-1-1 Center – cameras, access, reinforced doors/locks, electronic controls, etc. 12. Provide and install independent backup dispatch communications console system to permit radio dispatching and paging of agencies and units served by ESVA 9-1-1 from their PSAP in the event the primary Motorola MCC5500 console system fails. This would also allow for configuration of alternate circuits between the consoles at the PSAP and the radios located remotely at the tower sites. Consoles would be configured for full coverage dispatching and paging on key frequencies. This would also allow the third operator position (currently phone operations only) to operate radio dispatching during critical events.

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

Included is a brief statement (related to interface and compatibility) of the initiatives included in the application: 1. Includes the addition of redundant back-up features to the Plant Vesta 9-1-1 telephone system already housed in the 9-1-1 Center. 2. The back-up redundant server would support the current server (supporting CAD, mapping and recording applications). 3/4/6/9. Includes using NG 9-1-1 technology alongside already housed legacy 9-1-1 equipment. 5. OSSI CAD is used by the ESVA 9-1-1 Center and the addition of the Chincoteague PSAP will involve minimal compatibility concerns. 7. Minimal interface or compatibility concerns. 8. Minimal interface or compatibility concerns. 10. Generator and transfer switch replacement will require coordination with various parties (electricians, power company, other PSAP's, etc.). 11. Minimal interface or compatibility concerns. 12. Minimal interface or compatibility concerns.

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

Although long-range future plans are not currently formalized in a strategic plan, the continued continuity of 9-1-1 and dispatch services for both counties served by the Eastern Shore of Virginia PSAP are paramount. In addition, the continued improvement and enhancement of operations at the 9-1-1 Center are a priority. A large variable towards continuity and enhancements is dictated from funding from outside sources, such as grants. All initiatives included in this application promote the continuity and enhancement of 9-1-1 and dispatch operations for the ESVA 9-1-1 PSAP.

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

All initiatives included in the application support PSAP readiness and operations. Specifically the gradual step towards Next-Generation Technologies (3, 4, 6, and 9) is included in the project request. Other initiatives in the application are necessary to support overall operations, such as recording capabilities and a reliable generator and transfer.

Budget and Budget Narrative:

The overall operating budget for the Eastern Shore of Virginia 9-1-1 Commission (2007-2008) is $805,432. This includes over 60% of the budget related to personnel expenditures. The source of funding for 9-1-1 operations originates from local contributions (from Accomack and Northampton counties), the wireless board, and the state Communications Tax (contributed from each county). The failure of the state Communications Tax (replacing the 9-1-1 tax) to generate expected revenue resulted in a budget shortfall (revenue) for the 2006-2007 fiscal year. A potential budget shortfall (revenue) is projected for the 2007-2008 fiscal year as well. The abilities of the localities to increase contributions to 9-1-1 Center operations is extremely limited. 1. Addition of redundant features to the existing CPE equipment - The current customer

premises equipment is equipped with the basic telephone system components and modules, but there is no redundancy built in for the majority of critical operational components. A failure of these components would force operations in a backup mode without all 9-1-1 processing features until Verizon could obtain and replace defective components. If this were to occur during a critical operations period, such as a local emergency or disaster, the resulting effects on daily operations would be significant – $15,000 (no quote provided – based on expected costs) 2. Purchase, configure, and install a backup/redundant server for the ESVA 9-1-1 primary PSAP application and data/mapping server - The existing server supports CAD, mapping, and recording applications, all of which are critical to daily dispatch operations. Providing redundancy will significantly reduce the potential for downtime associated with failure of server components - $6,640 (quote provided - Dell) 3. Provide ANI/ALI information for Sheriffs Offices and VSP through installation of display equipment and communications circuits/links to those offices. Additionally necessary hardware at each law enforcement dispatch center will need to be purchased for the display of ANI/ALI information – Currently law enforcement calls are transferred to the appropriate law enforcement agency without ANI and ALI data - $100,000 (quote provided - Intrado) 4. Establish 9-1-1 telephone system redundancy between Eastern Shore 9-1-1 and Chincoteague 9-1-1 – This redundancy would allow either 9-1-1 center to transfer the receipt of 9-1-1 telephone calls to the other center in the event of internal system failures, overloads, or forced evacuations of either facility - $100,000 (quote provided - Intrado) 5. Purchase an additional license and necessary computer hardware, software, configuration setup, and training for Chincoteague 9-1-1, enabling them to operate with the same CAD system as Eastern Shore 9-1-1 – The Chincoteague PSAP is not currently equipped with CAD and lacks the ability to perform necessary functions if needed - $27,749 (quote provided - OSSI) 6. Design, install, and implement interfaces that will support the transfer of ANI/ALI data from the tandem serving ESVA 9-1-1 and Chincoteague 9-1-1 to the tandem serving Worcester and Somerset Counties, Maryland, when a 9-1-1 call requires transfer between PSAP's in different LATA's – Currently calls transferred to a neighboring PSAP in Maryland do not receive ANI/ALI data - $100,000 (quote provided - Intrado) 7. Purchase necessary hardware and software to support mapping/GIS functions relevant to 9-1-1 map layers in jurisdictional GIS systems – Current mapping layers does not include the building footprint update or contour data - $68,549 (quote included - state) 8. Purchase and install additional channel recording capacity at ESVA 911 - Currently recording is restricted to primary radio channels and primary console positions. Ideally, all radio frequencies, emergency phone lines, and console positions would be recorded independently - $31,673 (quote included - Applied Equipment) 9. Purchase, configure, and install necessary telecommunications equipment to support Next Generation 9-1-1 – The 9-1-1 Center is currently unable to receive pictures and video from callers - $100,000 (quote included - Intrado) 10. Generator – 9-1-1 Center – Current generator is about twenty years old and numerous problems have been encountered over the last year with the functionality of the generator - $28,000 (no quote provided - based on expected costs) 11. Security of 9-1-1 Center – Additional security enhancements are needed for the 9-1-1 Center - $11,597 (no quote provided - based on expected costs) 12. Provide and install independent backup dispatch communications console system to permit radio dispatching and paging of agencies and units served by ESVA911 from their PSAP in the event the primary Motorola MCC5500 console system fails. Estimated cost of equipment and installation is $11,500, but may vary based on proposals and options. The use of competitive procurement, in accordance with Commission policy, when multiple vendors are available to offer proposals for specified projects and procurements will be utilized (quotes included in application are for pricing estimates).

Ongoing Expenses:

The source of long-term funding will come from present and additional agreements and contracts (using current operating budget sources) with various vendors and the counties served. Many of these are already in place and will need to be continued or revised.

Evaluation:

Evaluation of each initiative. 1. Addition of redundant features to the existing CPE equipment - The specific measure to evaluate the performance is the successful ability of the backup equipment to function as a redundancy to the existing CPE equipment. 2. Purchase, configure, and install a backup/redundant server for the ESVA 9-1-1 primary PSAP application and data/mapping server - The specific measure to evaluate the performance is the successful ability of the backup server to function as a redundancy to the existing server, including supporting CAD, mapping, and recording applications. 3. Provide ANI/ALI information for Sheriffs Offices and VSP through installation of display equipment and communications circuits/links to those offices – Part of the NG 9-1-1 (Intrado) proposal – Successful performance will be determined by the

ability to transfer the necessary ANI/ALI information to the appropriate law enforcement dispatch centers. 4. Establish 9-1-1 telephone system redundancy between Eastern Shore 9-1-1 and Chincoteague 9-1-1 – Part of the NG 9-1-1 (Intrado) proposal – Successful performance determined by the ability of each PSAP to have 9-1-1 redundancy with each center. 5. Purchase an additional license and necessary computer hardware, software, configuration setup, and training for Chincoteague 9-1-1, enabling them to operate with the same CAD system as Eastern Shore 9-1-1 – Successful performance determined by the Chincoteague PSAP having the ability to monitor and utilize the current OSSI CAD in the ESVA 9-1-1 PSAP. 6. Design, install, and implement interfaces that will support the transfer of ANI/ALI data from the tandem serving ESVA 9-1-1 and Chincoteague 9-1-1 to the tandem serving Worcester and Somerset Counties, Maryland, when a 9-1-1 call requires transfer between PSAP's in different LATA's – Currently calls transferred to a neighboring PSAP in Maryland do not receive ANI/ALI data. Evaluation based on neighboring PSAP validation. 7. Purchase necessary hardware and software to support mapping/GIS functions relevant to 9-1-1 map layers in jurisdictional GIS systems – The successful inclusion of building footprint layers and contour data to the mapping included through the OSSI CAD. 8. Purchase and install additional channel recording capacity at ESVA 911 – Successful performance determined by the ability to record all radio frequencies, emergency phone lines, and console positions independently. 9. Purchase, configure, and install necessary telecommunications equipment to support Next Generation 9-1-1 – Successful performance determined by the ability of the ESVA 9-1-1 Center to receive non-traditional information (such as cellular text and/or photos, alarm notifications, third party call notifications). 10. Generator – 9-1-1 Center – Successful performance determined by the proper functioning of the generator and transfer, specifically the automatic starting of the generator (upon losing commercial power) and the automatic transfer of power from the generator to the building. 11. Security of 9-1-1 Center – Additional security enhancements are needed for the 9-1-1 Center – Successful performance includes appropriate enhancements to the security of the PSAP. 12. Provide and install independent backup dispatch communications console system to permit radio dispatching and paging of agencies and units served by ESVA911 from their PSAP in the event the primary Motorola MCC5500 console system fails - Successful performance of back-up communications is necessary. The Commission will utilize surveys as well as vendor and consultant reports to review the performance of these initiatives.

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

All initiatives included in the project application are goals of the ESVA 9-1-1 PSAP. They are designed to promote continuity of operations or enhancement of operations. A close examination of the specific initiatives show some are immediate goals, such as to have a reliable generator (and transfer mechanism) for the 9-1-1 Center. Others could be considered intermediate or long term goals, such as enhancing the security of the PSAP and establishing a back-up/redundancy with the Chincoteague PSAP.

What measures will be used to determine outcomes?:

Various measures will be required to determine outcome. Specific measures will be developed by ESVA 9-1-1 staff working with various/appropriate vendors for each initiative. The Commission will utilize surveys as well as vendor and consultant reports to review the performance of these initiatives and project outcomes.

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

As each initiative included in the application is specifically developed, specific performance measures will be developed by ESVA 9-1-1 staff. The evaluation of the product/service provided will be developed and conducted by ESVA 9-1-1 staff. Additionally, the Commission will utilize surveys as well as vendor and consultant reports to review the performance of these initiatives.

How will data be presented?:

As determined by ESVA 9-1-1 staff and the appropriate vendor, evaluation data will be presented.

Attachments

Intrado Proposal.doc
Cost - GIS Requests.htm
Applied Digital Solutions - Equipment Quote.pdf
OSSI Proposal.pdf

Dell Computer - Saved Quote Information 1002976529375.htm

APPLIED DIGITAL SOLUTIONS
Custom Recording & Analytic Technology
210 Townepark Circle
Suite 102
Louisville, KY 40243
Tel: 502-253-0134
Toll Free: 866-389-0911
Fax: 480-247-5270

EQUIPMENT QUOTE

Date	Quote #
12/07/07	SKDSQ1372

Prepared by	Stacey Stover
Sales Rep	Todd Ewald

Prepared For:
Eastern Shore E-911
Jamie Collins
23201 Front Street
Accomac, VA 23301
United States
Phone: (757) 787-0910
Fax: (757) 787-1044
E-mail: jcollins@esva911.org

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Accomac, VA 23301
United States
Phone: (757) 787-0910
Fax: (757) 787-1044
E-mail: jcollins@esva911.org

Proposed Work: 36 channel Digital Logging Recording System with AIT Turbo Drive, basic Public safety Application Package, two additional Scenario Replay Licenses and Recording Solution Protection Package.

PRODUCTS

Item #	Qty	Description	Price	Ext. Price
NCF3B-36	1	36 Channel NiceCall Focus III Digital Recording System	$21,500.00	$21,500.00
Analog4	9	4 Channel Analog Interface		
CA03	2	Open leads cable for up to 24 channels, 5m long	$150.00	$300.00
NCF3-NAP-SRU	2	Scenario Replay, Single User License	$1,000.00	$2,000.00
NCF3-BAS-PACK	1	Public Safety Basic Application Pack	$1,000.00	$1,000.00
NCF3-AIT-T-1-COM	1	Single AIT Turbo drive - 4800 hours total	$1,500.00	$1,500.00
REC-PROT	1	Digital Recorder Protection Plan Includes Line Conditioning UPS and Database Memory Backup	$950.00	$950.00
	Products SubTotal			$27,250.00

SERVICES

Implementation Services	$4,087.50
1 Year Extended Warranty (8x5)	$1,635.00
Services SubTotal	$5,722.50

Project Subtotal: $32,972.50

Initials

Other Considerations

Freedom Trade In	($1,500.00)

Shipping:	$200.00
Grand Total:	$31,672.50

Prepaid Maintenance Options

(The amounts checked below will be added to the Grand Total of this quotation)

☐ Years 2 through 5 - 8x5 $13,023.67

☐ Years 2 through 5 - 24x7 $16,279.59

Customer Approval:

Approved by: _____ Approved Date: _____

Title: _____ Purchase Order Number _____

Please provide a copy of your company's purchase order along with the signed quotation and fax to 480-247-5270.

We appreciate your business and we look forward to serving you!

Terms & Conditions:

1. Price quotations are valid for 30 days.
2. Payment Terms: Due Upon Receipt
3. New installations automatically include a 90 day labor and 1 year parts warranty.
4. Applicable taxes will be charged extra.
5. Delivery: CFR-Factory
6. Estimated Delivery: 4 weeks ARO
7. Physical location must be provided at time of quotation.
8. Customer must supply and maintain the proper audio, AC, and data inputs to the system's physical location.
9. Customer is responsible for supplying the necessary LAN and telephony switch components to interface with the recording system.
10. Customer is responsible for maintenance of all cable and wiring associated with this equipment.

Initials _____

From: Hornbaker, Lyle [Lyle.Hornbaker@vita.virginia.gov]
Sent: Tuesday, December 11, 2007 10:59 AM
To: Flournoy, Jeff
Cc: Blankenship, Stuart
Subject: RE: [Possible SPAM] RE: Information (Costs) Needed

Jeff

Pricing	Bldgs	Flat fee per jurisdiction	
	Contours	$36/Tile	Tiles are 5000'x5000'

Jurisdiction	Tiles	Bldgs	Contours
Accomack	787	$18,046.00	$28,332.00
Northampton	463	$5,503.00	$16,668.00

Let me know if you have other questions.

Lyle

From: Jeffrey Flournoy [mailto:jflournoy@esva911.org]
Sent: Tue 12/11/2007 9:54 AM
To: Hornbaker, Lyle
Subject: [Possible SPAM] RE: Information (Costs) Needed

Yes that is correct, Accomack and Northampton Counties…Although Chincoteague (town located in Accomack) has their own PSAP, we include their GIS information in our 9-1-1 Center's information. Thanks and please let me know if there are any additional questions.

Jeff Flournoy
Director - ESVA 911 Center
Center - 757-787-0911
Office - 757-787-0909

-----Original Message-----
From: Hornbaker, Lyle [mailto:Lyle.Hornbaker@vita.virginia.gov]
Sent: Tuesday, December 11, 2007 9:41 AM
To: Blankenship, Stuart; Flournoy, Jeff
Subject: RE: Information (Costs) Needed

Hi Jeff

Stu sent me your request to answer. I need to know which jurisdictions you would like to cover. I assume Accomack and Northampton but I want to verify.

Lyle Hornbaker
Local Government Manager
Virginia Information Technologies Agency
Integrated Services Program

Commonwealth Enterprise Solutions Center
11751 Meadowville Lane
Chester, Virginia 23836
(804) 416-6202 (voice)
(804) 416-6353 (fax)

lyle.hornbaker@vita.virginia.gov

From: Jeffrey Flournoy [mailto:jflournoy@esva911.org]
Sent: Tuesday, December 11, 2007 9:11 AM
To: Blankenship, Stuart
Subject: [Possible SPAM] Information (Costs) Needed

Mr. Blankenship,

Good morning. I am working on potential projects (listed below) to be funded by the state PSAP grant for the Eastern Shore 9-1-1 Center. I was provided these ideas as potential enhancements to our service by Jamie Christensen with Worldview Inc. He indicated you or your agency would be able to provide potential costs for these items. The grant application is due in the near future and I am looking for a general idea of costs for the requests. Any help you are able to provide is appreciated. Thank you.

1. **Building Footprint Update** – As part of the 2007 Virginia Base Mapping Program, the state is allowing localities to optionally purchase building footprint data for their localities. This data would provide an up-to-date structural footprint layer for the Eastern Shore.
2. **Contour Data** – As part of the 2007 Virginia Base Mapping Program, the state is allowing localities to optionally purchase elevation data for their localities. This data would provide the ESVA 911 Center with accurate and complete topographic data for the entire shore.

Jeff Flournoy
Director - ESVA 911 Center
Center - 757-787-0911
Office - 757-787-0909

[Possible SPAM] -- Virginia Information Technology Agencies' (VITA's) SPAM prevention system has flagged this
message. Many parameters are considered when determining if an e-mail is possible SPAM. If this message
is from a known and trusted source, you may disregard this warning, otherwise this message may contain unwanted
or objectionable material. For questions or concerns, please contact the VCCC Help Desk at vccc@vita.virginia.gov
or (804)786-3932.
[Possible SPAM] -- Virginia Information Technology Agencies' (VITA's) SPAM prevention system has flagged this
message. Many parameters are considered when determining if an e-mail is possible SPAM. If this message
is from a known and trusted source, you may disregard this warning, otherwise this message may contain unwanted
or objectionable material. For questions or concerns, please contact the VCCC Help Desk at vccc@vita.virginia.gov
or (804)786-3932.

From: DellOnlineSales@Dell.com
Sent: Monday, December 03, 2007 2:08 PM
To: jflournoy@esva911.org
Subject: Dell Computer - Saved Quote Information 1002976529375

E-QUOTE

This requisition for computer equipment from Dell Inc. has been sent to you from bsmith@co.accomack.va.us. An E-Quote has been saved in their name at the Dell Online Store for you to review and approve. This E-Quote will be held for 60 days to allow for completion of the order.

Shipments to California:
For certain products, a State Environmental Fee Of Up to $10 per item may be applied to your invoice beginning January 1, 2005. Prices in your cart do not reflect this fee. For more information refer to URL: http://www.dell.com/environmentalfee

Shipments to Alberta, Canada:
For certain products, a Provincial Environmental Fee will be applied to your invoice. Prices in your online order do not reflect this fee. For more information refer to URL: http://www.dell.ca/canadaenvironmentalfee

Sender Message:

To retrieve this E-Quote:

1. Log on to your Premier page for Accomack County, Virginia: Contract VA-030801
2. Click into your online store.
3. Select "Retrieve" E-Quote from the top section of the page.
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Description

PowerEdge Energy Smart 1950 III -New!
Date & Time: December 03,2007 1:07 PM CST

SYSTEM COMPONENTS

PowerEdge Energy Smart 1950 III -New! Qty 1

Dual Core Intel® Xeon® 5148LV, 4MB Cache, 2.33GHz, 1333MHz FSB,ES, Windows Server® 2003 R2, Standard Edition with SP2, Includes 5 CALs Unit Price $6,640.22

Catalog Number: **84 W1675ES_MLK**

Module	Description	Product Code	Sku	Id
PowerEdge 1950	Dual Core Intel® Xeon® 5148LV, 4MB Cache, 2.33GHz, 1333MHz FSB,ES	19523E	[223-4842]	1
Operating System	Windows Server® 2003 R2, Standard Edition with SP2, Includes 5 CALs	3R23SE	[420-7118]	11
Additional Processors	Dual Core Intel® Xeon® 5148LV, 4MB Cache, 2.33GHz, 1333MHz FSB	2PL23	[311-6705]	2
Memory	4GB 667MHz (4x1GB), Dual Ranked DIMMs, Energy Smart	4G4E6D	[311-6954]	3
TCP/IP Offload Engine Enablement	Broadcom TCP/IP Offload Engine Not Enabled	NTOEKEY	[430-1748]	6
PCI Riser	Riser with 2 PCIe Slots	PCIE	[320-4648]	7
Primary Hard Drive	146GB 10,000 RPM Serial Attached SCSI 3GBps Hard Drive, 2.5-inch, Hot Plug	146A125	[341-4732]	8
Primary Controller	SAS 6/iR Integrated Controller	SAS6I	[341-5782]	9
Mouse	No Mouse Option	NOMSE	[310-0024]	12
Network Adapter	Dual Embedded Broadcom® NetXtreme II 5708 Gigabit Ethernet NIC	OBNIC	[430-1762]	13
CD/DVD Drive	24X IDE CD-RW/DVD ROM Drive for PowerEdge Servers, All OS	CDRWDVD	[313-3918]	16
Bezel	Rack Bezel	RBEZEL	[313-3937]	17
Backplane	1x4 Backplane for Energy Smart Chassis with 2.5-inch Hard Drives	1X425HE	[311-6958]	18
Operating System Addition	5-pack of Windows® Server 2003 User CALs (Standard or Enterprise)	W2K3U05	[420-5609]	19
Documentation	Electronic Documentation and OpenManage CD Kit	EDOCS	[310-7962]	21
2nd Hard Drive	146GB 10,000 RPM Serial Attached SCSI 3GBps Hard Drive, 2.5-inch, Hot Plug	146A125	[341-4732]	23
2nd Controller	PERC6E SAS RAID			

and HBAs	Controller, 2x4 Connectors, External, PCIe 256MB Cache	P6E256	[341-5842]	24
Tape Backup Software	Symantec Backup Exec System Recovery Server Edition Protection Suite	BESRVR	[420-6496]	25
Hard Drive Configuration	Integrated SAS/SATA No RAID, SAS 6/iR Integrated	6SS	[341-5774]	27
Chassis Configuration	Rack Chassis w/Sliding Rapid/Versa Rails and Cable Management Arm,Universal	RPVERSA	[341-3090]	28
Hardware Support Services	3Yr BASIC SUPPORT: 5x10 HW-Only, 5x10 NBD Onsite	U3OS	[960-7292][960-7322][970-3410][984-1519][984-1528]	29
Installation Support Services	No Installation Assessment	NOINSTL	[900-9997]	32
Power Supply	Non-Redundant Power Supply	NRPS	[310-7455]	36
OS Partitions	20GB Microsoft OS Partition Override	20GBPAR	[420-4080]	37
4th Hard Drive	146GB 10,000 RPM Serial Attached SCSI 3GBps Hard Drive, 2.5-inch, Hot Plug	146A125	[341-4732]	51
3rd Hard Drive	146GB 10,000 RPM Serial Attached SCSI 3GBps Hard Drive, 2.5-inch, Hot Plug	146A125	[341-4732]	54
				TOTAL:$6,640.22

Sub-total	**$6,640.22**
Total Price	**--**

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Eastern Shore of Virginia
9-1-1 Center
Intelligent Emergency Network
Technical Proposal

intrado®

Intelligent Emergency Network™

prepared for

Eastern Shore of Virginia 9-1-1 Center

December 18, 2007

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Open Records Act Request

Customer will immediately advise Intrado in writing of any Open Records Act type of requests as it may relate to this proposal or any information contained herein.

Evaluation Purposes Only

Intrado's evaluation herein is based on its 9-1-1 knowledge and expertise, but is dependent upon information provided to Intrado on behalf of the Customer. As such, the information contained herein is intended for Customer evaluation purposes only.

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1. EXECUTIVE SUMMARY

1.1. Introduction

As citizens move toward telecommunication technologies that transcend the fixed wireline model, policy and operational changes are needed to help keep 9-1-1 delivery a success. The Eastern Shore of Virginia 9-1-1 Center can continue to meet citizen's evolving 9-1-1 expectations and protect the Center from technical obsolescence by upgrading to Next Generation 9-1-1 (NG 9-1-1), which enables your network to expand beyond traditional 9-1-1 services. An NG 9-1-1 network facilitates new life saving applications, eliminates single points of failure, and supports new technology access and new data types allowing interoperability between public safety answering points (PSAPs).

In support of the Eastern Shore of Virginia 9-1-1 Center strategic direction, Intrado is very pleased to provide this NG 9-1-1 proposal for an Intrado® Intelligent Emergency Network™, a fully managed solution offering emergency call delivery and data management services over an Internet Protocol (IP) network. The Intelligent Emergency Network infrastructure was designed to work with existing legacy equipment and is integrated, operated, and maintained to the public safety class standards demanded of a life-critical application. Intelligent Emergency Network lays a foundation for the development and implementation of innovative applications and services that will advance the capabilities of public safety communications and eliminate many of the challenges.

To enhance operational efficiencies for the call taker and the PSAP manager and extend interoperability through the entire chain of public safety entities, the Eastern Shore of Virginia 9-1-1 Center requires a new technology that blends voice, data, and multi-media from a variety of trusted sources. This technology must get the right data to the right user at the right time during an emergency and facilitate data delivery beyond the call taker to the first responder.

1.2. Need for NG 9-1-1

In the Eastern U.S. the 2005 Atlantic hurricane season brought to light many of the limitations of the current analog E9-1-1 circuit switched system in regard to disaster recovery. There are certainly numerous examples of power-packed storms that have taken many lives, destroyed homes and knocked out power for thousands.

Due to lack of geographic diversity, many of the PSAPs that were disabled by recent storms found that their backup PSAPs were also out of service. In addition, over burdened carriers were slow to reroute calls to PSAPs that did survive. Ultimately, in times of disasters, these inherent limitations and failures in the current E9-1-1 system prevent the public safety community from achieving their charter, which is to save lives and property.

An IP based, packet switched NG 9-1-1 system mitigates many of the limitations of the legacy 9-1-1 system. When enabled with a nationwide IP network for call routing and delivery, PSAPs have the ability to reroute calls to any PSAP on the network regardless of local access and transport area (LATA) or geopolitical boundaries. For example, should the Eastern Shore 9-1-1 Center be disabled by a hurricane, the Center will have the ability to log into their profile on the NG 9-1-1 solution platform and reroute all, or a portion of, incoming 9-1-1 calls to an unaffected PSAP, or to the Intrado Emergency Call Relay Center (ECRC) in Longmont, Colorado.

While NG 9-1-1 provides solutions for disaster recovery, there are day-to-day applications where an IP packet switched network can be utilized to solve inefficiencies of the current E9-1-1

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system. For instance, should one of the Eastern Shore 9-1-1 Center's neighboring PSAPs, which is not serviced by the same tandem servicing the Center, receive a misrouted wireless call of an overturned vehicle in another jurisdiction, the only way to transfer the call would be on a ten digit administrative line and not on a native 9-1-1 trunk. NG 9-1-1 solves this problem by allowing transfer of 9-1-1 calls to the correct PSAP on a native 9-1-1 line. Further, NG 9-1-1 would allow the neighboring PSAP's call taker to transfer all the notes that have been taken on the call prior to realizing the need to transfer to the Eastern Shore 9-1-1 Center.

The legacy E9-1-1 network has traditionally left much of the changes in the system outside the control of the PSAP, whether it is the need to reroute 9-1-1 calls in the case of a “bugout” or the ability to run reports on demand. The Intelligent Emergency Network solution from Intrado enables the PSAP to take greater control of their system and operations. For example, the routing solution allows the PSAP to pre-provision multiple calls, reroute disaster plans, and provides the ability to enact these plans real time from the PSAP.

1.3. Benefits of Intrado’s Intelligent Emergency Network

In today’s demanding PSAP environment, manual processes consume valuable personnel time that could be devoted to saving lives. The need for increased automation in the PSAP during periodic events or major emergencies further enforces the need to modernize. Key benefits of the Intelligent Emergency Network are:

- Continue to meet citizen's evolving 9-1-1 expectations
- Interoperability
- Survivability
- Reporting and Metrics
- Prevent technical obsolescence of 9-1-1 operations
- Maintain the integrity of the network
- Enable one-button call transfer to other public safety agencies including VA State Police with voice and data.
- Transfer calls irrespective of InterLATA boundaries.
- Provide the capability to implement a fully redundant backup PSAP.

1.3.1. Meeting 9-1-1 Expectations of the Eastern Shore Virginia Citizens

The Eastern Shore of Virginia’s citizens expect their 9-1-1 calls to go to the right PSAP in the event of an emergency and that the call taker will know who they are, where they are, and their telephone number in case the call is interrupted and they need to be re-contacted. They also expect to receive help from emergency responders, even in cases where the caller cannot convey their location and/or the nature of their problem or hear due to age, circumstances, or disability.

Intrado’s Intelligent Emergency Network can meet citizen expectations and alleviate the issues and challenges identified, positioning the Eastern Shore of Virginia 9-1-1 Center to effectively respond to the next generation of communication technologies as they become available. Intelligent Emergency Network provides on-demand report access to information within the 9-1-1 routing system and ALI database to support management decisions and improve

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operations. With over two decades of involvement in nearly every aspect of 9-1-1, Intrado understands that the NG 9-1-1 initiative needs to rapidly move the Eastern Shore 9-1-1 Center to a secure, efficient, and cost-effective emergency communication system.

1.3.2. Interoperability

With the Intrado Intelligent Emergency Network, interoperability is no longer contingent upon local equipment. The Eastern Shore of Virginia 9-1-1 Center can readily transfer and share emergency calls, as well as access specific information with an expanded set of authorized agencies, including first responders, neighboring PSAPs, medical facilities, and other public safety mutual aid agencies for improved emergency response. This includes the possibility of transferring calls across state boundaries, such as to Worcester County, MD as well as across the water to Virginia Beach or the other PSAPs that serve the Hampton Roads area.

Intelligent Emergency Network manages automatic retrieval and delivery of contextually relevant information to the communications center personnel and enables access to that same information by officers in the field. This supports event resolution more efficiently and enables interoperability with other PSAPs outside the Eastern Shore 9-1-1 Center's jurisdictions.

For example, if there are two counties on different systems and one is flooded in a disaster, the 9-1-1 network is working, but they cannot dispatch. They need an interoperable system so that when one is down, the other county can dispatch for the county that is flooded.

1.3.3. Survivability

An example of survivability is similar to the interoperability example above. A 9-1-1 communications center is flooded during a storm, but they can move their operations to their backup facility in a neighboring county that has similar resources. This backup center serves as their temporary communications center during the storm, and this move to the backup center is seamless due to the IP virtual connection. The flooded PSAP's 9-1-1 operations are still up and running and even assisting neighboring communications centers overwhelmed by the storm. With the Intrado Intelligent Emergency Network public safety officials can continue to offer life-saving 9-1-1 services by expanding disaster recovery capabilities.

1.3.4. Reporting and Metrics

For supervisors to optimize operations for the Eastern Shore of Virginia 9-1-1 Center, they require in-depth management reports and metrics. These needs are paramount to optimizing resources. PSAPs traditionally have had to rely on their legacy 9-1-1 service provider for reports and metrics. Often the reports are not timely and the information provided lacks the depth needed by many PSAP managers to efficiently run their organizations.

Key Drivers for the Eastern Shore of Virginia 9-1-1 Center

- Maximizing system flexibility and user-definable rules for enhanced call delivery queue management and optimization of call handler productivity
- Enabling enhanced management information reporting for supervisors to monitor call taker staffing and performance at any given time
- Transitioning from an analog network with CPE integration issues
- Outsourcing to a single solution provider for a NG 9-1-1 solution and minimizing system support personnel

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- Eliminating vendor expense for configurable parameters such as call distribution
- Facilitating system administration training for balancing internal and external support
- Leveraging local partner PSAPs to support transitional interim facilities, backup, and overflow support

Intrado's Intelligent Emergency Network can meet the expectations of these key drivers and alleviate the issues and challenges identified, positioning the Eastern Shore 9-1-1 Center to effectively respond to the next generation of communication technologies as they become available.

Borrowing from Intrado's 9-1-1 database management experience and NENA guidelines, Intrado has developed a set of standard metric performance reports. These reports establish benchmarks for Intrado's overall performance as well as the quality of data Intrado receives from customers. Intrado tracks all data transactions processed through Intrado systems. The Eastern Shore 9-1-1 Center has access to the comprehensive metric reports detailing call and data transactions, the number of records processed, and the number of errors. With Intrado's unique tools such as Clear View Reports and 9-1-1 Net, the Center can streamline processes and reduce present and potential errors.

The reporting package from Intrado utilizes powerful business intelligence engines that give PSAP managers actionable data to effectively make decisions concerning their organization. In addition, Intrado's standard metric reports can assist in risk management by allowing the PSAP to query and view audit trails of all calls that come into the network either destined for their center, or transferred from another PSAP.

1.3.5. Prevent Technical Obsolescence

The Eastern Shore of Virginia 9-1-1 Center's existing E9-1-1 infrastructure and PSAP equipment are designed with multiple single-purpose point-to-point voice and data networks that have been patched over a long period of time. This infrastructure is expensive and can not be easily upgraded, making it difficult to add new applications and data sources. The Eastern Shore 9-1-1 Center, for the most part, operates as an island with little ability to share data—such as electronic notes gathered during the call—with other neighboring PSAPs.

Intrado's 9-1-1 Routing is Eastern Shore 9-1-1 Center's solution to bridging the gap between legacy and NG 9-1-1, providing access to improved capabilities for public safety communications. Intrado's 9-1-1 Routing protects the Center's investment from technical obsolescence by providing a hosted operating environment built to predictable public safety class levels of reliability, redundancy, and security.

1.3.6. Maintain Integrity of the Eastern Shore of Virginia 9-1-1 Center

Intrado understands that the integrity of the Eastern Shore 9-1-1 Center's network cannot be compromised during and after the migration to a NG 9-1-1 solution. Intrado has a proven implementation strategy based on thousands of 9-1-1 PSAP migration projects completed over the last decade.

After the migration is complete, the Intelligent Emergency Network maintains the Eastern Shore 9-1-1 Center's network integrity by providing backward compatible interfaces on the carrier-facing network as well as the PSAP's environment. Intelligent Emergency Network provides telecommunications service providers standard interfaces to hand off 9-1-1 calls originating in

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their environment in the same manner they are doing them in today's environment with the opportunity to hand off calls over an IP based interface whenever they are ready. Similarly, within the PSAP environment, Intelligent Emergency Network provides the capability to deliver 9-1-1 calls as expected today, centralized automatic message accounting (CAMA) based, as well as the ability to provide native IP based 9-1-1 calls into the PSAP environment when the PSAP call processing equipment is capable of receiving 9-1-1 calls in a native IP format. Along with standards based voice interfaces, traditional 9-1-1 data interfaces for ALI bids are also provided to maintain backward compatibility with the capability to bid for ALI over an IP based interface.

In this next generation environment, like Intelligent Emergency Network, security is also maintained by following strict network-to-network integration best practices, such as protecting the public safety network from carrier networks via border control devises and technologies. This bridges the gap between the new and old systems so that full interoperability exists with the NG 9-1-1 enabled and legacy environments.

1.4. Corporate Overview

For nearly 30 years, Intrado has been designing and deploying public safety products and services based on the needs of the industry and our forward-looking view of 9-1-1. We listen to public safety officials, we monitor new technology development, and we participate in industry standards bodies to understand these needs and develop products that revolutionize the public safety industry. Intrado was founded with a core understanding of PSAP operations; our co-founders came directly from the PSAP environment. Intrado employs the highest number of Emergency Number Professionals (ENPs) in the commercial side of the industry, and a majority of our employees are highly experienced in PSAP operations.

Intrado provides the core of the nation's 9-1-1 network and a wide range of services for both safety and mobility. As North America's leader in 9-1-1 infrastructure, systems, and services, Intrado has played a key role in defining, building, and maintaining the complex emergency communications infrastructure. In 2006, Intrado systems and services supported an estimated 240 million calls to 9-1-1. Intrado's customers include all major U.S. wireline, wireless, and VoIP carriers, large international operators, and a growing number of public safety agencies and municipalities in the U.S. and abroad.

Intrado began in 1979 under the name of SCC Communications. With backgrounds in law enforcement, co-founders George Heinrichs and Stephen Meer saw the potential for using technology more effectively to protect the public. In 1998, Intrado completed an initial public offering of its common stock and was publicly traded on the NASDAQ stock exchange under the market ticker TRDO until April of 2006, when it was acquired by West Corporation, a leading provider of outsourced communication solutions. Joining the West family has provided Intrado with expanded resources and the means to accelerate a number of key initiatives, strengthen its existing market position, and execute on new opportunities. Intrado continues to deploy successful public safety systems that revolutionize the public safety industry.

Intrado currently employs over 750 public safety and communications professionals. The majority of the employees are located at Intrado's corporate headquarters in Longmont, Colorado. Other Intrado locations include Lisle, IL and Austin, TX.

Built on a belief in work worth doing, Intrado touches millions of lives every day and takes that responsibility very seriously. More information on Intrado's product suite and service offerings are available via the web at www.intrado.com.

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2. THE EASTERN SHORE OF VIRGINIA 9-1-1 CENTER SOLUTION AND SERVICE OVERVIEW

2.1. Introduction

To meet the Eastern Shore 9-1-1 Center's requirements for its NG 9-1-1 initiative, Intrado's Intelligent Emergency Network offers the most advanced emergency communications service available. Because Intelligent Emergency Network is modular and flexible, the Eastern Shore 9-1-1 Center, and associated public safety entities and responders, can customize the service implementation in consideration of the Center's service areas and financial and technological constraints. In addition, a staged approach to a network-based service implementation minimizes the impact on existing 9-1-1 operations.

Intelligent Emergency Network connects to legacy, non-traditional networks and offers core managed network services to support NG 9-1-1 call and data management. Standards-based interfaces provide connectivity to traditional ALI and allow quick deployment of new applications, enabling integration with future data sources and eliminating "forklift" upgrades.

The Intelligent Emergency Network solution for the Eastern Shore 9-1-1 Center provides 9-1-1 voice and data services to authorized users in an open architecture enabling a multitude of suppliers, authenticated information services, and content providers to easily integrate their services for emergency communications.

Intelligent Emergency Network as deployed within the Eastern Shore 9-1-1 Center can support a fully diverse and redundant infrastructure for managing connectivity from telecommunications service providers as well as to mutual backup PSAPs such as the one desired in the Town of Chincoteague. This also allows for complete interoperability between the Eastern Shore 9-1-1 Center, as well as any neighboring PSAPs that may or may not be part of a NG 9-1-1 network.

Intelligent Emergency Network also offers the following features:

- Provides a secure managed IP network and application-based framework for delivering highly reliable, robust, secure, and efficient emergency services
- Provides the capability to transfer calls natively to neighboring PSAPs
- Provides the capability to quickly and dynamically setup remote operating centers or positions for answering 9-1-1 calls in the event the primary answering centers are rendered out of service for any reason
- Is built on an open, standards-based architecture that provides extensive management capability and modular extensibility
- Allows quick and effective development and deployment of new applications with minimal or no impact on users or their operational activities
- Connects to both legacy emergency networks and non-traditional networks such as VoIP
- Establishes the foundation to support future public emergency service-requesting devices using various emerging multi-media protocols
- Provides access for additional data sources such as the capability to receive photos from camera phones or video from wireless devices.

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- Delivers current and future emergency services to a variety of users—including PSAPs, dispatchers, and other public safety agencies—without compromising the integrity and security of the emergency services infrastructure

2.1.1. Network Infrastructure

A Managed Emergency Services IP Network connects Intelligent Emergency Network voice and data complexes with open, standards-based interfaces from the PSAP to authorized agencies, ALI, and other public safety data sources. The network initially supports converged voice and data with the capacity to add incremental data sources and the flexibility to grow with the Eastern Shore 9-1-1 Center, adding the ability to keep pace with evolving public safety applications.

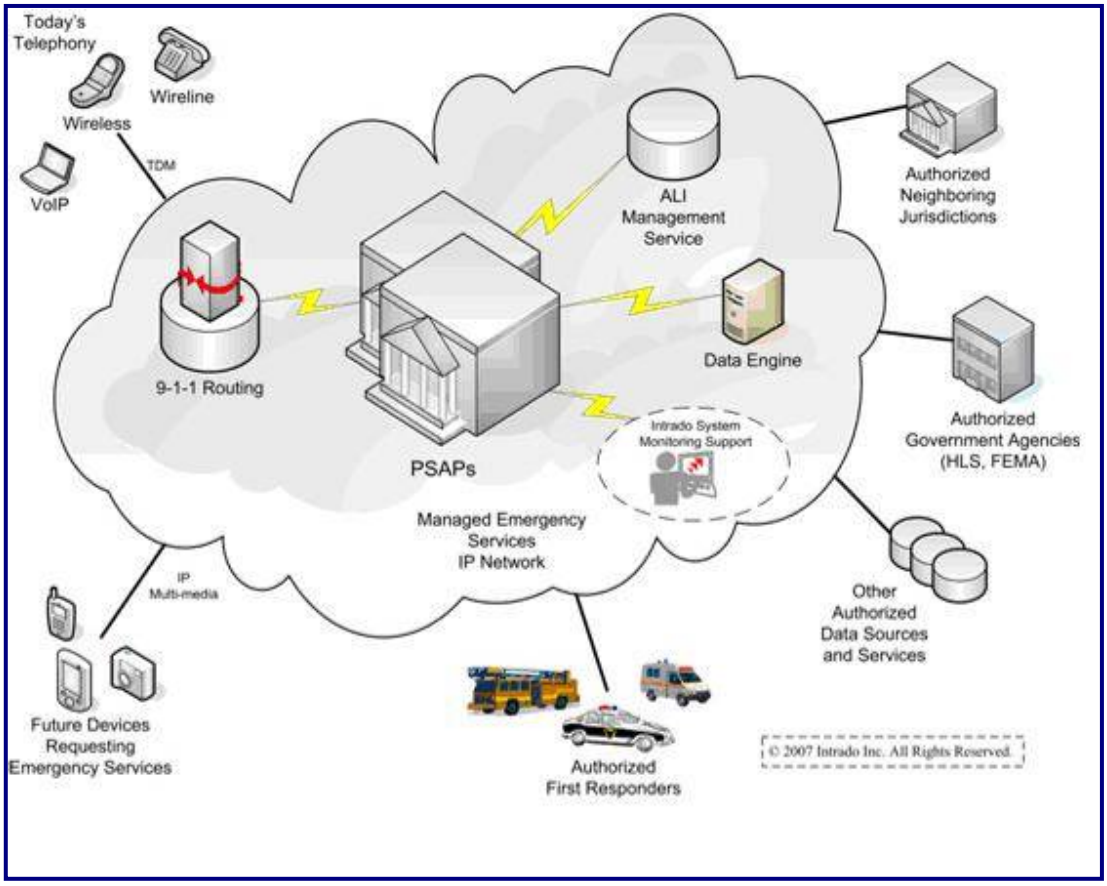

Figure 1: Intelligent Emergency Network Connectivity

As Figure 1 illustrates, Intelligent Emergency Network is comprised of 9-1-1 Routing for call management, Intrado's ALI Management Service, and a data engine for next generation data applications management, which are all supported by Intrado support personnel 24x7x365. These integrated platforms use private Internet Protocol (IP) links to replace existing legacy selective router voice and ALI data circuits. Intrado coordinates the Intelligent Emergency Network implementation from concept design to installation and testing, providing technical consulting and maintenance support for the Center's mission-critical operating environment.

The Intelligent Emergency Network solution for the Eastern Shore 9-1-1 Center deploys on a redundant, secure, public safety-class IP network, with geographically diverse platforms that

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allow for continuous operation and highly reliable disaster recovery. Intelligent Emergency Network involves minimal impact and disruption to the existing systems because it is based off premises and is not constrained by daily operations or activities in the call centers. This core network is robust and flexible, and may be leveraged to support other public safety applications and data such as:

- GIS data distribution
- Public safety mobile radio (regardless of frequency band)
- Data access such as criminal justice database
- Public safety automatic crash notification and vehicle location tracking
- Notification services
- Incident management
- Chemical, biological, and nuclear network sensors

This interconnected, secure, IP-based system provides the Eastern Shore 9-1-1 Center with:

- Quick deployment of additional virtual PSAPs or PSAP positions to support specific situations, such as a drastic increase in call volume, large public events, and emergency incidents
- Quick remote access to voice and data for any authorized non-PSAP-based personnel, including call takers, dispatchers, first responders, law enforcement, incident commanders, and medical staff
- Ability to transfer call taker notes with a call to another Intelligent Emergency Network-connected entity
- On-the-fly call management modifications including routing of incident-specific calls (based on caller location) to specific call takers
- Ability to “push” data from dispatchers to first responders’ mobile data terminals or even radio screens
- Access to expanded data sources such as real-time maps, building blueprints, public safety databases, and medical records via secured Internet

Intrado takes pride in being a leader in assessing technology trends as well as providing new and emerging tools for monitoring, managing, securing, and supporting multi-agency operations. We recognize the value of leveraging national industry efforts together with state and local initiatives to derive hardened, secure, and technology-neutral operating platforms. The Eastern Shore 9-1-1 Center can depend on Intrado to deliver and support the Center’s next generation of 9-1-1 services to the level the industry has come to expect from a leader.

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APPENDIX A: PRICING

This distributed component-based approach allows Intelligent Emergency Network services to be deployed to meet the Eastern Shore of Virginia 9-1-1 Center specific needs in a reasonable timeframe and at manageable costs. Intrado has prepared this pricing for use in designing an appropriate level of service agreement between Intrado and the Center. Special bundled annual pricing for the required five-year commitment is included in this proposal. The service pricing for five (5) years focuses on the monthly service charge associated with project set up costs - Non-recurring charges (NRC), for bundled services per telephone number (TN), with the estimated number of TNs for the Eastern Shore 9-1-1 Center of approximately 26,000.

Monthly Total Dollar Amount for 9-1-1 Routing, ALI and MPLS with NRC Options			
NRC Option	**$100,000**	**$150,000**	
MRC / TN	0.18	0.10	
Total TNs	26,087	26,087	
ALI/SR	$4,695	$2,609	
MPLS Network connectivity	$9,000	$9,000	
Combined monthly ALI/SR MPLS	**$13,695**	**$11,609**	

Pricing Notes:

1. Services and pricing are contingent on the Incumbent Local Exchange Carrier's (ILEC's) ability and willingness to connect to Intrado at our point of interface. Intrado is actively negotiating with ILECs for termination at our interface locations.

2. Pricing is a non-binding cost that is an estimate only, and is to be used for budget planning purposes only.

3. MPLS network costs include redundant connections between ESVA PSAP and Chincoteague PSAP.

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Add-On Quote

Date	Quote #	Acct Mgr
12/03/07	TQDBQ2795	Tammy Bracken

Quote Prepared For:

Eastern Shore 911 Commission, VA
Jeff Flouney
23201 Front Street
Accomac, VA 23301

Agency already Multi-Jurisdictional CAD.

One CAD workstation over a dedicated T.1 (full bandwidth) might be OK but will still be somewhat slow. Two concurrent workstations will not operate with a dedicated T.1. Two concurrent workstations will require a 10 mb connection.

Qty	Part Number	Product Description	Unit Price	Extended Price	Annual Maintenance
		Additional CAD Console Licenses for Chincoteague PSAP			
2	CAD-CON	ADDITIONAL CAD CONSOLE LICENSE	$2,600.00	$5,200.00	$936.00
		An additional license, in addition to the number of console licenses in the base CAD system, is required for each call taker and dispatch console/workstation to operate SunGard OSSI's CAD system.			
2	CAD-MAPD	ADDITIONAL CAD MAP DISPLAY LICENSE	$1,000.00	$2,000.00	$360.00
		An additional license, in addition to the number of map console licenses in the base CAD system, is required for each additional call taker and dispatch console/workstation to display maps with SunGard OSSI's CAD system. Each license represents one workstation, not concurrent user.			
			SubTotal:	$7,200.00	
		Call Taker / Dispatch Workstation			
2	HWR-WS-CAD	CAD Dispatch Workstation	$1,394.67	$2,789.34	$0.00

Dell Precision 390 Mini-Tower
- Microsoft® Windows® XP Professional w/Service Pack 2
- Intel™ Core®2 Duo E6300 1.86GHz 1066MHz FSB w/2MB L2 Cache
- 2GB 667MHz DDR2 ECC SDRAM (2 DIMMS)
- 80GB 3.0Gb/s SATA Drive with 8MB DataBurst Cache™
- Integrated Ethernet NIC
- 16X DVD-ROM with Cyberlink Power DVD
- Dell Two Piece Stereo System
- Dell USB Keyboard and 2-Button Optical Mouse w/Scroll
- 3Yr Same Day 4Hr Response Parts + Onsite Labor (7 x 24 Hours)

Qty	Part Number	Product Description	Unit Price	Extended Price	Annual Maintenance
2	HWR-MATROX-P650PCIe	Matrox P650 PCIe 128 Video Card	$256.67	$513.34	$0.00
		Matrox P650 Dual-Monitor Video Card to be used for CAD Workstations with 2 digital or analog monitors. Requires an available PCI Express expansion slot. Compatible with Full Hight configurations only.			
4	HWR-DELL-19FP	Dell 19 Inch UltraSharp™ 1908FP Flat Panel (VGA/DVI)	$274.67	$1,098.68	$0.00
		Dell 19 inch UltraSharp™ flat panel monitor.			
2	HWR-DELL-ES725	Dell Back-UPS ES 725 Broadband	$47.54	$95.08	$0.00
		Workstation class UPS for use with the CAD dispatch/calltaker workstation by APC®. Includes eight NEMA 5-15R power outlets, built-in phone/fax/modem line (DSL-compatible) protection and PowerChute software. Manufactured by APC.			
2	TCH-INSTALL-WKSTN	Implementation Services for Application Workstation	$175.00	$350.00	$0.00
		Services for setup and configuration of a single SunGard OSSI Application Workstation. This includes unpacking, staging and network configuration of the workstation. For the CAD workstation, the installation of the Matrox video card is included. These services do not include Travel and Living.			
			SubTotal:	$4,846.44	
		OSSI Services Workstation - For ANI/ALI Information			
1	HWR-WS-SRVC	Application Services Workstation	$1,337.79	$1,337.79	$0.00
		Dell OptiPlex 745 Mini-Tower - Microsoft® Windows® XP Professional w/Service Pack 2 - Intel® Core™ 2 Duo Processor E6300, 1.86GHz, 2MB/1066MHz FSB - 2GB DDR2 Non-ECC SDRAM,667MHz, (1DIMM) - 80GB SATA 3.0Gb/s and 8MB DataBurst Cache™ - Integrated Gigabit NIC - 16X SATA DVD+/-RW with Roxio Creator - Dell 17 inch UltraSharp™ 1708FP Flat Panel - Dell AS501 Sound Bar for UltraSharp™ Flat Panel Displays - DVI (Digital) Adapter Card - Integrated Sound Blaster Compatible Sound Card - Dual Profile Serial I/O Card - Dell USB Keyboard and 2-Button Optical Mouse w/Scroll - 3 Year Limited Warranty Plus 3 Year Next Business Day On-Site Service The Customer is required to provide remote access to the application server(s) for SunGard OSSI's remote diagnosis and support. Remote access is obtained by using the Application Services Workstation and a pcAnywhere session. SunGard OSSI recommends using our secure Cisco VPN solution over the Internet to create the connection required for pcAnywhere access. If the VPN solution is to be implemented, SunGard OSSI will assist the customer with the installation. If Internet access is not available, the customer can install an external modem on the SunGard OSSI Services Workstation to provide this connectivity.			
1	THP-SYM-PCA	pcAnywhere 12.1	$189.68	$189.68	$0.00
		pcAnywhere is required for remote support and assistance using the SunGard OSSI secure VPN connection.			
1	TCH-INSTALL-WKSTN	Implementation Services for Application Workstation	$175.00	$175.00	$0.00
		Services for setup and configuration of a single SunGard OSSI Application Workstation. This includes unpacking, staging and network configuration of the workstation. For the CAD workstation, the installation of the Matrox video card is included. These services do not include Travel and Living.			
			SubTotal:	$1,702.47	

Qty	Part Number	Product Description	Unit Price	Extended Price	Annual Maintenance
		CAD Services - SA Maintained by ESVA 911			
1	CAD-USR-TRN	CAD USER TRAINING	$4,800.00	$4,800.00	$0.00
		Training for end-users (10 people max.) on base CAD. Topics include navigation, call-processing, dispatching, searching, and reporting. Class duration = 4 days.			
1	CAD-PROJ-MGNT	CAD PROJECT MANAGEMENT	$750.00	$750.00	$0.00
		CAD project management includes professional services from SunGard OSSI for project coordination and project management. The project management fee also includes coordinating with the Customer's project manager all SunGard OSSI related deliveries such as application software, implementation services, and scheduling of SunGard OSSI's resources with the Customer.			
1	CAD-TE	TRAVEL EXPENSES FOR CAD SERVICES	$500.00	$500.00	$0.00
		Includes travel expenses for the purposes of: On-site planning session with an SunGard OSSI representative Installation of the CAD application software Presence of an on-site SunGard OSSI representative when CAD goes live Living expenses are budgeted for one travel day per trip and each day on site. The listed travel and living expense costs are a budget quote based on an estimate of the number of trips and the total number of days of on-site professional services SunGard OSSI provides. The Customer will be billed only for the actual cost of travel and living per the terms of the contract. Changes or modifications to the project would be appropriately reflected in the travel and living.			
1	CAD-LE	LIVING EXPENSES FOR CAD IMPLEMENTATION SERVICES	$750.00	$750.00	$0.00
		Includes living expenses for the purposes of: On-site planning session with a SunGard OSSI representative Installation of the CAD application software CAD System Administrator Training CAD User Training SunGard OSSI representative to be on-site when CAD goes live Living expenses are budgeted for one travel day per trip and each day on site. The listed travel and living expense costs are a budget quote based on an estimate of the number of trips and the total number of days of on-site professional services SunGard OSSI provides. The Customer will be billed only for the actual cost of travel and living per the terms of the contract. Changes or modifications to the project would be appropriately reflected in the travel and living.			
		Technical Service Days for Implementation (Up to 3 days)			
3	TCH-PROF-SERV	Technical Professional Service Day	$1,400.00	$4,200.00	$0.00
		Professional services for implementation and/or configuration of third party hardware and/or software in support of SunGard's OSSI application software. This includes installation and setup of the product. All implementation services are billed on a daily basis. If SunGard provides less than a day of service, it will be billed at the full daily rate.			
		Estimated Travel and Living (For Technical and Training)			

Qty	Part Number	Product Description	Unit Price	Extended Price	Annual Maintenance
1	TCH-TE	Travel Expenses for Third Party Applications	$1,000.00	$1,000.00	$0.00
		Estimated travel expenses that may be incurred during the installation of third party software products provided by SunGard OSSI. OSSI will bill for this item as it is incurred and follow the guidelines established in the Primary Contract.			
1	TCH-LE	Living Expenses for Third Party Applications	$2,000.00	$2,000.00	$0.00
		Estimated living expenses that may be incurred during the installation of third party software products provided by SunGard OSSI. OSSI will bill for this item as it is incurred and follow the guidelines established in the Primary Contract.			
			Total:	$27,748.91	$1,296.00

This quote is valid until 03/02/08

This Quote constitutes a Supplement to the Contract and Agreement by and between the parties hereto. Except as otherwise provided herein, all terms and conditions of the Contract and Agreement shall remain in full force and effect. As applicable for certain customers, the term "Contract and Agreement" is defined as the Software License & Services Agreement and the License Program Support Agreement between the parties hereto.

Should Customer terminate this agreement per the "Term and Contract" Section of the Contract and Agreement, the Customer agrees to pay, immediately upon termination, the remaining balance for all hardware, software, and services delivered prior to the termination date together with travel reimbursements, if any, related to the foregoing. Notwithstanding any language in the Contract and Agreement to the contrary, the purchase of support services is NOT necessary for the continuation of Customer's License.

Licensed Program(s) are provided in and may be used in machine-readable object code form only. SunGard offers the Customer, through a third party escrow agent, a Source Code Escrow Agreement that provides for release of the source code version of the Licensed Program(s) from escrow upon the occurrence of certain release events, such as SunGard's failure to provide required maintenance services as agreed.

Applicable taxes are not included, and, if applicable, will be added to the amount in the payment of invoice(s) being sent separately. Travel and living expenses are in addition to the prices quoted above and shall be governed by the SunGard Corporate Travel and Expense Reimbursement Policy.

The SunGard application software warranty shall be for a period of one (1) year after Delivery. There is no Testing and Acceptance period on the Licensed Program(s) herein.

Any interfaces listed above are interfaces only. Customer shall be responsible for obtaining the applicable software, hardware and system software from the appropriate third party vendor.

Preprinted conditions and all other terms not included in this Quote or in the Contract and Agreement, stated on any purchase order or other document submitted hereafter by Customer are of no force or effect, and the terms and conditions of the Contract and Agreement and any amendments thereto shall control unless expressly accepted in writing by SunGard to Customer.

Third party hardware/software maintenance and/or warranty will be provided by the third party hardware and software manufacturer(s). SunGard makes no representations as to expected performance, suitability, or the satisfaction of Customer's requirements with respect to the hardware or other third party products specified in this Quote. The return and refund policy of each individual third party hardware/software supplier shall apply.

This Agreement is based on the current licensing policies of each third party software manufacturer as well as all hardware manufacturers. In the event that a manufacturer changes any of these respective policies or prices, SunGard reserves the right to adjust this proposal to reflect those changes.

This Quote shall be effective notwithstanding any provisions as to non-availability of funds contained in the Contract and Agreement.

Payment Terms are as Follows:

License, Conversion, Project Planning, Project Management and Third Party Hardware and Systems Software Fees are due upon execution of this Quote. Training, Professional Services and Travel/Living expenses are due as incurred daily. Installation is due upon completion. Additional services, if requested, will be invoiced at then-current rates. Any shipping charges shown are estimated only - actual shipping charges will be due upon delivery. Third Party Hardware and Systems Software Implementation is due 50% on execution of this Quote, and 50% due upon invoice, upon completion.

SunGard Application Annual Support - the initial term of support is included in License Fees and begins upon delivery of the first major module (such as Base CAD, RMS, JAIL or Mobile) of the Licensed Program(s) and extends for a twelve (12) month period. Subsequent terms of support will be for twelve (12) month periods, commencing at the end of the initial support period. Support fees shown for the second term of support shall be due prior to the start of that term. Fees for subsequent terms of support will be due prior to the start of that term at the then prevailing rate. Third Party Application Annual Support Fees - payment terms shall be as provided by the Third Party to Customer with the exception that any Fees listed above for the initial term of support are due upon execution of this Quote.

Accepted:

Eastern Shore 911 Commission, VA

Signature Date Printed Name