

Sealed Bid Request for Proposal Next Generation 9-1-1 System

Release Date: June 24, 2009
Questions Due By: 4:30 pm, July 17, 2009
Bidders' phone conference: 1:00 pm, July 23, 2009
Answers Posted Online By: August 7, 2009
Proposals Due By: 2:00 pm, September 4, 2009
Date of Bid Opening: September 4, 2009
Time of Bid Opening: 2:00 pm
Location of Bid Opening: .. Office of Purchasing and Contracting
..... 10 Baldwin Street
..... Montpelier, Vermont

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1 Project description

1.1 Purpose of this RFP

The State of Vermont Enhanced 9-1-1 Board and the Purchasing and Contract Administration Division (collectively referred to as ‘State’ or ‘we’ in the remainder of this document) are seeking to establish purchasing agreements with one or more qualified companies (bidders) to provide next generation 9-1-1 call-taking functionality for the State of Vermont.

Please note that this procurement is for 9-1-1 call-taking functionality rather than for a 9-1-1 system. Bidders can propose to provide a complete system, including hardware, software, and communication devices, that will provide the functionality requested in this RFP, or they can provide services that will provide the functionality requested in this RFP.

1.2 Procurement details

1.2.1 Single point of contact

Address all communications concerning this RFP to John McIntyre at john.mcintyre@state.vt.us. John McIntyre is your sole point of contact for this RFP. Attempts by bidders to discuss this RFP with any other party could result in the rejection of their proposal.

1.2.2 Procurement schedule

We will use the following tentative schedule for this procurement:

RFP issue date	June 24, 2009
Questions due by	4:30 pm, July 17, 2009
Bidders’ phone conference	1:00 pm, July 23, 2009
Answers to questions posted	August 7, 2009
Proposals due by	2:00 pm, September 4, 2009
Winning bid announced	October 16, 2009*
Independent review period	October 16, 2009 – December 18, 2009*
Contract negotiation period	October 16, 2009 – December 18, 2009*
Contract signing period	December 18, 2009 – January 15, 2010*
Go-live date	April 30, 2011*

* Tentative date

All times in this document are Eastern Daylight Time.

1.2.2.1 No bidders' conference scheduled

Based on feedback received after previous procurements and from RFI responses we have not scheduled a bidders' conference. We feel that posting questions and answers online will provide sufficient opportunity for bidders to ask for clarifications of any part of this RFP without the costs associated with attending a bidders' conference.

1.2.2.2 Bidders' conference call

There will be a bidders' conference call at 1:00 pm, July 23, 2009 on July 23, 2009. Please email John McIntyre at John.McIntyre@State.VT.US at least one week before the conference call to confirm your attendance and for the conference bridge number and PIN. The bridge information will also be posted at the following URL:

<http://bgs.vermont.gov/purchasing/bids/>

1.2.2.3 Question and answer period

Any bidder requiring clarification of any portion of this RFP, wishing to take exception to any language in the RFP, or who would like to make a comment on this RFP, should direct their communications to the purchasing agent listed on the cover page of this RFP. You must submit your questions by 4:30 pm, July 17, 2009. Answers will be posted by 4:30 pm, August 7, 2009 at the following URL:

<http://bgs.vermont.gov/purchasing/bids/>

Any objection to any portion of the RFP that you do not raise in writing by 4:30 pm, July 17, 2009 is waived.

1.2.2.4 Date and time due

All proposals are due by 2:00 pm on September 4, 2009. Deliver your proposal to:

BGS, Office of Purchasing and Contracting
10 Baldwin Street
Montpelier, VT 05633-7501-6501

We will not accept late proposals. We will return late proposals at the bidder's expense, or destroy them if requested.

1.2.2.5 Bid opening

The bid opening will take place at 2:00 pm on September 4, 2009. The location of the bid opening is:

BGS, Office of Purchasing and Contracting
10 Baldwin Street
Montpelier, VT 05633-7501

The bid opening is open to the public. Bid amounts will not be disclosed at the bid opening. Bid results are a public record; however they are exempt from disclosure under 1 VSA, Chapter 5, § 317 until the award has been made and the contract executed.

1.2.2.6 Delivery methods

It is the bidder's responsibility to ensure that we receive their proposal by the due date and time shown in section 1.2.2.4 Postmarks are not acceptable. You may deliver your bid via any of the following methods:

- U.S. Mail
- Private express delivery service
- Hand delivery

We will not accept bids submitted electronically or by fax.

1.2.2.7 Evaluation period

We are tentatively planning to evaluate proposals between September 4, 2009 and October 16, 2009. There may or may not be an opportunity for bidders to make an in-person presentation. You should plan on the proposal you submit in response to this RFP as the only opportunity you will have to present your proposed solution to the State.

We may schedule in-person presentations if two or more of the best proposals meet all of the RFP requirements and their evaluation scores are very close. If necessary, we will schedule presentations in the final two weeks of the evaluation period. If we schedule an in-person presentation, we will attempt to give as much advanced notice as possible.

We expect that we will visit one or more reference sites of bidders with high-scoring proposals. Site visits will take place toward the end of the evaluation period.

1.2.2.8 Announcement of winning bid

We expect that we will announce the winning bidder on October 16, 2009; however, we reserve the right to change this date if it is in the best interest of the State.

1.2.2.9 Independent review period

Vermont Statutes require that all projects greater than a certain size must undergo independent review. We anticipate that this project will require independent review. We are tentatively scheduling independent review to occur in the period between October 16, 2009 and December 18, 2009.

1.2.2.10 Contract negotiation period

We expect that negotiations between the State and the successful bidder will occur concurrently with the independent review process.

1.2.2.11 Contract signing

We are targeting contract signing to occur between December 18, 2009 and January 15, 2010.

1.2.2.12 Go-live date

April 30, 2011 is the anticipated go-live date for this project.

1.2.2.13 Changes and addendums

We may for cause, push back the date and/or time of the due date and/or bid opening, or we may issue an addendum to this RFP. We will make a reasonable effort to inform all bidders of any changes by posting them at the following URL:

<http://bgs.vermont.gov/purchasing/bids/>

Bidders should routinely check this URL for any changes.

1.3 Format of your response

Your response must contain all of the items listed in sections 1.3.1 through 1.3.16. Please present your information in the order listed below. You should assemble your proposal in three binders, with tabs for each section (i.e., 1, 2, 3,) and page breaks between subsections (i.e., 1.1, 1.2, 1.3). Pages must be numbered. The first binder containing the bulk of your proposal must include the information requested in sections 1.3.1 through 1.3.14. The second binder will contain your cost proposal, section 1.3.15, and the third binder will contain your audited financial statement, section 1.3.16.

In order to complete your proposal you will need to use the required forms, which are contained in the same downloadable zip file with this RFP. Bidders may include additional information in their proposals, but must not exclude any of the required information.

1.3.1 Cover letter

Your cover letter must include contact information for the person who was responsible for the preparation of your response. This is the person you want us to contact if we have any questions about your proposal. Include a mailing address, email address, and telephone contact information.

1.3.2 Bidder's background, qualifications and experience

Provide a full description of your organization's experience implementing next-generation 9-1-1 systems, complex mission-critical computer systems, and highly-available computer systems. Include a statement that describes why your organization is qualified to provide 9-1-1 call-taking functionality for the State of Vermont.

1.3.3 Subcontractor's background, qualifications and experience

Our intent is to make a single award and sign a single contract with a single vendor that will provide all of the requested products and services. The State will only enter into a contract with a prime contractor. If subcontractors are used, their performance is the responsibility of the prime contractor.

If your proposal includes work to be performed by subcontractors, for each subcontractor, provide a full description of their experience implementing next-generation 9-1-1 systems, complex mission-critical computer systems, and highly-available computer systems. Include a statement that describes why your subcontractor is qualified to help you provide 9-1-1 call-taking functionality for the State of Vermont.

1.3.4 Statement of conformance with ISO 9001 standards

We feel that conformity with ISO 9001:2000 or ISO 9001:2008 standards is an important indicator of an organization's ability to meet our requirements and the project goals. All things being equal, we prefer proposals from organizations that conform to ISO 9001:2000 or ISO 9001:2008 standards, or to proposals from organizations partnered with one or more subcontractors, representing a significant (this can be generally interpreted to mean greater than half of the proposed system) portion of the total system, who conform to ISO 9001:2000 or ISO 9001:2008 standards.

As an indicator of conformity, we place preference on ISO 9001:2000 or ISO 9001:2008 certification. If your organization, or its partner(s) is(are) certified, please provide a copy of relevant certificate(s). If your organization or its partner(s) is(are) claiming conformity, but is(are) not certified, you must support your claim with detailed documentation describing how you have adopted and institutionalized the quality management principles on which ISO 9001 certification is based.

1.3.5 References

Provide the name and contact information (phone and email) of three individuals who can talk knowledgeably about your organization's products, services, and performance with systems similar to the one you are proposing for Vermont. Do not include as a reference any organization that would not consent to a site visit by State personnel.

1.3.6 Recent customers

Provide the contact information of the first three customers you did business with in 2008. Use the date of contract signing to determine the first three customers.

1.3.7 Executive summary

Provide an Executive Summary that will stand alone for high-level discussions of your proposal. It should include the solutions you are offering, cost benefits, and the value your organization will bring to the project. The target audience for the document would include state government officials, city, town and county officials, and state legislators.

1.3.8 Narrative response to section 3

Section 3, and its subsections, provides the details of our requirements and desirables. Using the same numbering scheme, (i.e. your response to section 3.3.2 should also be numbered 3.3.2) provide a point-by-point narrative that states how you will provide the functionality outlined in this RFP. Specifically address each requirement.

1.3.9 Requirements traceability matrix

Some of the items in this RFP are requirements because they represent what we feel are essential features for providing 9-1-1 services. Required features are represented by the use of the words *must*, *will*, *shall*, *requirement* and/or *required*.

Some of the items in this RFP are desirables, because they represent features that we feel are desirable but not required for providing 9-1-1 services. Desirable features are represented by the words *should*, *may*, *desired* and/or *desirable*.

Your proposal must include a completed Requirements Traceability Matrix. The required form is available as an Excel spreadsheet template called *matrix.xlsx* and is included in the downloadable zip file.

The traceability matrix summarizes how you plan to meet each requirement. You can find instructions for completing the Requirements Traceability Matrix in the spreadsheet.

1.3.10 Exceptions to requirements statement (if necessary)

You may take exception to a requirement, and propose what you feel is equivalent or better functionality. If your proposal does not fully meet any requirement, you must have a section in your proposal labeled “Exceptions to Requirements” that lists every requirement not fully meet, and your proposed solution.

You should not construe our acceptance of an Exception to Requirements Statement as our willingness to accept proposals that do not meet all requirements. We allow an Exception to Requirements Statement out of recognition that a bidder may be able to provide a solution that meets or exceeds the functionality required, in a manner that we haven’t considered. We strongly recommend that your proposal meet all requirements.

1.3.11 Certificate of compliance

All bidders are required to complete this form. The required form is called *taxcert.docx* and is included in the downloadable zip file.

1.3.12 Offshore outsourcing questionnaire

All bidders are required to complete this form. The required form is called *offshore.docx* and is included in the downloadable zip file.

1.3.13 Environmental information form

All bidders are required to complete this form. The required form is called *envinfo.docx* and is included in the downloadable zip file.

1.3.14 Acknowledgement of terms

You must acknowledge standard Purchasing and Contract Administration Terms and Conditions that are included in all State contracts. The terms are in the file

terms.docx, which is included in the downloadable zip file. You will find the acknowledgement on the tax certification form, *taxcert.docx*.

1.3.15 Pricing information

We have detailed the requirements for pricing information in section 4, titled “Cost Proposal.” Your cost proposal should be in a separate set of binders. You must summarize your cost proposal in a required form, *costproposal.xlsx*, which is included in the downloadable zip file.

1.3.16 Audited financial information

Your proposal must include audited financial statements, including at a minimum: balance sheet, income statement, statement of cash flows, and statement of stockholders’ equity, and accompanying notes, for the last two complete fiscal years. All submitted information must be in the English language, and financial data denominated in United States currency, and conform to generally accepted accounting principles (GAAP) in the United States. International bidders may submit their financial information in conformance with International Financial Reporting Standards (IFRS).

If your financial information is consolidated with other entities, such as a parent corporation, then it is your responsibility to extract and submit as separate documents all data and information related solely to the bidding entity. This must include all financial information, associated notes, and all other information that would comprise a full financial report conforming to GAAP or IFRS as appropriate.

The financial information of organizations that are not required by law to make their financial statements publicly available will be held in the strictest confidence; we will not disclose them to any third party. You do not need to include your financial information in the publically disclosable copy of your proposal (see section 1.3.17).

1.3.17 Number of copies and format

Please submit six (6) complete copies of your proposal, a publically disclosable copy of your proposal, if desired (see section 1.3.18), plus one CD or DVD containing an electronic copy of your complete proposal, including an electronic copy of your publically disclosable proposal, if one is provided. Your electronic documents must be in any of the following formats; .pdf (preferred) .doc, .docx, .rtf, .xls, .xlsx, .ppt, .pptx, .jpg, .bmp, .vsd, and .gif.

All of your materials must be enclosed in a single package and clearly marked as follows:

SEALED BID

NEXT GENERATION 9-1-1 SYSTEM

DUE DATE: 2:00 pm on September 4, 2009

[YOUR ORGANIZATION'S NAME]

1.3.18 Publicly disclosable copy of your proposal

The successful proposal will become part of the contract and will become a public record. Unsuccessful proposals will also become a public record. If your response contains material that you consider to be proprietary and confidential under 1 VSA, Chapter 5, § 317 you may designate portions of your proposal as exempt from disclosure. Bidders who elect to exempt proprietary and confidential information must provide a publicly disclosable copy of your proposal with the text you believe is exempt from disclosure redacted. For each section that you want to exclude, you must provide justification, including the predicted harm you would suffer from the release of the identified material. Under no circumstances can you exempt the entire cost proposal.

Your publicly-disclosable copy must be based on the proposal you submit, so that it is easy for us to determine if the redactions are allowed under 1 VSA, Chapter 5, § 317. If you do not supply a publicly disclosable copy of your proposal, we will release your complete proposal in response to valid public information requests.

If you elect to provide a publicly disclosable copy of your proposal, you need to include one (1) copy in your bid submission package, as well as an electronic copy. It is preferred that you use an electronic method of redaction as shown in the example below:

"Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. [REDACTED]

[REDACTED]. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur."

1.3.19 Cost of response

We recognize that considerable effort will be required to prepare a response to this RFP. You must bear all costs for preparing your response to this RFP.

1.4 Evaluation of proposals

We will evaluate all proposals in a fair, consistent, and objective manner, in accordance with applicable State statutes and rules. Evaluation criteria will be based solely on the

information requested in this RFP; scoring tools will be prepared prior to the response due date.

We will first look to see if your proposal is complete. We reserve the right to reject proposals that do not include all required components and forms, as described in section 1.3.

Next, we will review the proposal to ensure that it meets all requirements. If one or more proposals meet all requirements, the State may elect to set aside any proposals that do not meet all the requirements, and that do not include an Exceptions to Requirements Statement. It is very important that your proposal either meet all requirements or include an Exceptions to Requirement Statement.

We will distribute the remaining proposals to the members of the evaluation team, along with a scoring tool. The evaluators will independently score the proposals. As noted in section 3.7, we reserve the right to acquire the ENS functionality in a separate procurement; therefore we may consider ENS scoring separately. We will combine each evaluator's scores to derive a composite score for each proposal. A formula will be used to compare the composite score with the cost proposal to produce a cost/benefit ratio, with the goal of selecting the proposal that offers the cost/benefit ratio most favorable to the State.

1.4.1 Right to reject proposals

We reserve the right to reject any and all offers, in whole or in part, by deeming the offer unsatisfactory as to quality or quantity; delivery; price or service offered; non-compliance with the requirements or intent of this solicitation; lack of competitiveness; error(s) in specifications or indications that revision would be advantageous; cancellation or other changes in the intended project; or other determination that the proposed requirement is no longer needed; limitation or lack of available funds; circumstances that prevent determination of the best offer; or any other determination that rejection would be in the best interest of the State.

1.4.2 Right to select partial proposal

In order to ensure the best possible system, the State reserves the right to award a contract for a portion of the total system requested, based on the cost breakdown, and to procure the remaining components in a separate procurement.

1.4.3 Evaluation criteria

1.4.3.1 Requirements

We will award points for each requirement. Failure to meet requirements is sufficient cause to reject the bidder's proposal unless you explain the reason to our satisfaction in the Exception to Requirements section of your proposal. We reserve the right to use weighting when scoring requirements.

1.4.3.2 Desirables

We will award points for each desirable. Failure to meet a desirable will not adversely affect a proposal beyond the loss of points for the section. We reserve the right to use weighting when scoring desirables.

1.4.3.3 Intangibles

We place a very high degree of importance on intangibles. It is possible for a proposal that scored high in the requirements and desirables sections to move down in the rankings if the proposal does not adequately address intangibles. Conformance with ISO 9001 standards will weigh very heavily in our determination of how well a proposal addresses the intangibles. We will look at the following areas:

1.4.3.3.1 Confidence

Does the proposal give the evaluator a sense of confidence that the bidder will be able to deliver the proposed system without significant issues? Is the bidder's plan realistic? Are assumptions realistic? Does the bidder's experience and references support their claims?

1.4.3.3.2 Understanding

Does the proposal show the evaluator that the bidder clearly understands the State's goals for the project? Does the bidder's proposal show alignment with the State's goals?

1.4.3.3.3 Partnership

Does the proposal give the evaluator a sense that a mutually beneficial long-term working partnership will result by awarding the contract to the bidder? Does the proposal indicate

a willingness to work collaboratively with the State for an extended period?

1.4.3.3.4 Viability

Does the proposal, especially the financial statements, indicate that the bidder has sufficient resources to successfully complete the project? How would the bidder be able to respond to unforeseen issues? Does the bidder have a long history implementing large projects that would indicate that the bidder would be able to meet all of the expectations contained in this document and the negotiated contract?

1.4.3.4 References

We will check the references for each bidder, unless the bidder's proposal scores so poorly as to have no chance of being selected. Information gathered during reference checking will be important in evaluating the Intangibles section.

1.4.3.5 Cost

We will derive a composite score for each proposal from the four previously mentioned sources. We will then combine each score with the total cost to derive a dollar value per scored point, or in simple terms, the cost to procure a unit of functionality. A lower dollar value per scored point will indicate a better functionality/cost ratio. We are looking for proposals that provide greater functionality relative to cost.

1.4.3.6 Preferences

If we are unable to clearly distinguish a winning proposal due to multiple proposals tied for the top position, we reserve the right to give preference to resident bidders of the State and products manufactured in the State, all other things being equal. We also reserve the right to give preference to minority- and women-owned businesses, if necessary, to break a tie.

1.5 Contract details

Pursuant to State law, the contract term arising from this Request for Proposal shall be 48 months, with any subsequent extensions to that term granted only with the approval of the Administration.

1.5.1 Contract award

Awards will be made under the provisions of 29 VSA, Chapter 49, § 903. The State reserves the right to make additional awards to other vendors who submitted proposals, at any time during the first year of the contract if such award is deemed to be in the best interest of the State.

1.5.2 Contract terms

The selected vendors will sign a contract with the State to provide the items named in their responses, at the prices listed. Minimum support levels, as well as terms and conditions from this RFP and the vendor's response, will become part of the contract. This contract will be subject to review throughout its term. The State will consider cancellation upon discovery that a vendor is in violation of any portion of the agreement, including an inability by the vendor to provide the products, support and/or service offered in their response.

1.5.3 Cancellation

The State specifically reserves the right to cancel the contract, or any portion thereof, if, in the opinion of its Commissioner of Buildings and General Services, the services or products supplied by the contractor are not satisfactory or are not consistent with the terms of the contract.

1.5.4 Hold backs

We will hold back 20% of the implementation costs until after all acceptance tests are passed. We will pay ongoing operation/maintenance contract costs on a quarterly basis, billable per net 30 day payment terms at the beginning of each quarter of the State fiscal year. We will make an exception for third party support contracts that are only billed yearly; we will pay those on an annual basis billable per net 30 day payment terms.

1.6 General terms**1.6.1 Delivery**

All equipment pricing is to include F.O.B. delivery to the ordering facility. We will not honor requests for extra delivery costs. All equipment must be delivered assembled, serviced, and ready for immediate use, unless otherwise requested. Liability for product delivery remains with the contractor until properly delivered and signed for in accordance with the Division of Purchasing and Contract Administrations terms and conditions.

1.6.2 Quality

All products provided under these agreements will be new and unused, unless otherwise stated. We will not accept factory seconds or remanufactured products, unless specifically requested. All products provided by the contractor must meet all federal, state, and local standards for quality and safety requirements. Products not meeting these standards will be deemed unacceptable and returned to the contractor for credit at no charge to the State.

1.6.3 Method of ordering

Purchase orders must be used to order items available under this contract. If verbal orders are given, a confirming purchase order must be issued.

1.6.4 Environmentally preferable purchasing

The State of Vermont is a national leader in the development and application of environmentally responsible purchasing and control of hazardous material use. Environmentally preferable purchasing means “products and services that have a lesser or reduced effect on human health and the environment when compared with competing products or services that serve the same purpose. This comparison may consider raw material acquisition, production, manufacturing, packaging, distribution, re-use, operation, maintenance, or disposal of the product or service” (Presidential Executive Order 13101; US EPA; generally accepted by industry).

We have established specific goals and objectives aimed at providing sound environmental stewardship, protection of human health, reducing state operating expenses associated with the use and control of regulated hazardous materials, and reduction of potential liability attributable to environmental impact. Therefore, the following environmental criteria shall be considered for all state purchasing and contracts.

1.6.4.1 Mercury content

The State of Vermont is committed to minimizing the amount of mercury utilized in its operations, and desires to eliminate the purchase of products that contain mercury whenever feasible alternatives exist at a reasonable cost and comparable performance. Where mercury-free alternative products do not exist, preference will be given to the purchase of products with the lowest (documented) total mercury content feasible and products that bear a mercury content warning label as required of product manufacturers under Vermont law (Executive Order #03-02.) The State of Vermont urges suppliers to continue to develop, produce, and bring to

market appropriate, cost competitive, and effective mercury-free replacements. Include the environmental information form (see section 1.3.13) to indicate the Mercury content in any product included in your proposal.

1.6.4.2 Life cycle cost evaluations

Life cycle cost analysis shall extend beyond the cost of purchase, to include installation, operation, maintenance, and disposal of a particular piece of equipment or product.

1.6.4.3 Take-back provisions

It may be preferable to have product or equipment returned to the provider at the end of its useful life to provide for environmentally conscientious disposal. If you have a take-back program please provide details that include methodology and any costs associated with it. Detail the program by addressing each of the following: date the program is or will be in operation, type of equipment being taken back or proposed to be taken back, volume of equipment being recycled/disposed or proposed, certificates of disposal, disk storage cleaning, take-back charge by type of equipment, and compliance with federal or other regulatory authorities regarding disposal. The State of Vermont reserves the right to request additional information.

1.6.4.4 Energy efficiency – Energy Star

State of Vermont Agencies and Departments are directed to reduce greenhouse gas emissions from state government buildings and operations (Executive Order # 14-03). To improve our energy performance and help the environment by reducing our energy use, purchases shall be made only for reduced energy-consuming devices that meet or exceed the Energy Star or comparable standards established by the U.S. federal government, where possible, without compromising quality or performance.

1.6.4.5 Design for the environment

Where applicable, bidder must describe their environmental program in each of the following areas:

- Reduction/minimization/avoidance of use of toxic and hazardous constituents (cadmium, chromium, mercury, lead,);
- Compliance with international directives such as the European Union's Directive "Restriction of Hazardous Substances";

- Reduction of chlorinated plastics (PVC) and brominated flame retardants;
- Compliance with the European Union's WEEE Directive requiring the recycle or reuse of old equipment;
- Certification by independent third party eco-labeling program (TCO, Blue Angel, etc.);
- The use of recyclable, non-toxic packaging.

2 Description of project

2.1 Description of system being replaced

The State of Vermont Enhanced 9-1-1 Board currently operates an IP-based, statewide 9-1-1 system. This consists of two data centers, eight PSAPs, and the Board offices, which also serve as a backup PSAP. There are 34 call-taker positions between the nine locations described above. Together they function as a single PSAP, any 9-1-1 call that enters the system from any location, can be answered at any call-taker position. You can find system statistics for 2008 in section 5.

Emergency calls from both wireline and wireless callers enter the system over CAMA trunks from two aggregation points operated by FairPoint Communications. The CAMA trunks terminate in the data centers where VoIP gateways convert the calls to IP-based calls. The system is entirely IP-based. Calls are processed by software-based switches on Intel based servers. There is no selective routing performed by telephone company switches. It is our intent to preserve the number of call-taking positions, and number of PSAP locations, though we may redistribute the positions between the locations.

2.2 Description of components that may be preserved

We believe that many of the components in our current system could be reused in our next system. You may utilize the components listed below in your proposed system. We understand that some components are easier to reuse than others, especially when one considers that it is likely the new system will run in parallel with the current system for a brief period. If you plan to reuse any components your proposal must address how you will manage the transition of reused components from the current system into the new system. While we encourage reuse where possible as a way to reduce costs, we understand that the complexity posed by transitioning components from one system to another may negate any cost savings. Please be certain that you have adequately addressed transition issue if you plan to reuse components.

2.2.1 Network components

- (21) Cisco 2821 routers deployed in redundant pairs – CISCO2821-SEC/K9, IOS 12.4.6. Each has (1) AIM ATM Module and (1) DS1 WIC
(Three are spares and can be reused without transition issues.)
- (21) Cisco 3560 LAN switches deployed in redundant pairs – WS-C3560G-24PS,12.2(25)
(Two are spares and can be reused without transition issues.)

- (3) Cisco 7204VXR Routers – CISCO7204VXR, IOS 12.3.9. Each has (1) DS3 ATM interface
(One is a spare and can be reused without transition issues.)
- (5) Cisco 3750 Switches deployed in redundant pairs –WS-C3750G-48PS-E, 12.2(25)
(One is a spare and can be reused without transition issues.)
- (4) Cisco ASA5510 deployed in redundant pairs – AIP10-K9 – ASA5510-NA

2.2.2 Call-taker workstations

- (36) Dell Precision 380 – Each PC is equipped with the following:
 - Intel PENTIUM D 3.2GHz
 - GB RAM
 - T9099 Card, Graphics, 256, FX3450 MRGA12
 - Hard Drive, 80GB, S2, 7.2K, 8M, Lead Free, Samsung
 - Creative Sound Blaster X Fi XtremeMusic 7.1 Sound Card SB0460 (PCI)
 - Intel Pro/1000 Adapters (PCI)
 - Broadcom NetExtreme 5721LF – Onboard
 - Windows XP Pro SP3(Four are spares and can be reused without transition issues.)

2.2.3 Monitors

- (32) Dell 3007WFP Flat Panel Monitors

2.2.4 Master clock

- Spectracom GPS Master Clock

2.2.5 Cabinets

- (8) APC 19” 25 U cabinets
- (6) 19” 42 U Enclosed cabinets

2.2.6 UPS

Each PSAP has a single UPS that supports the current system.

2.2.7 Administrative software

- Fluke - Crannog Netflow Tracker
- Ipswitch - What's Up Gold Premium Edition v12
- Microsoft DPM
- Cisco MCCSA 5.2 with sufficient licenses for existing workstations and servers
- Symantec Anti-virus – Current version with sufficient licenses for existing workstations and servers.

2.2.8 VoIP gateways

- (16) Mediant 1000 Gateways
(Eight are spares and can be reused without transition issues.)

2.2.9 Servers

- (14) Dell PowerEdge 2950 Servers
 - (8) Xeon Processors – 3 GHz
 - 4GB RAM
 - Dual NIC - Broadcom BCM5708C Netextreme II GigE
 - Windows 2003 R2 Standard Edition(Two are spares and can be reused without transition issues.)
- (11) Dell PowerEdge 2850 Servers
 - (4) Xeon Processors – 3 GHz
 - 4GB RAM
 - Dual NIC – Intel Pro 1000 MT(Three are spares and can be reused without transition issues.)
- (2) HP DL380G5 Servers
 - (2) Xeon Processors 1.6 GHz
 - 2GB RAM
 - Dual NIC – HP NC373i Multi Gig Adapter
 - Windows 2003 Standard Edition

2.3 Project goals

As an early adopter of IP 9-1-1 technology, we recognize the vast potential offered by IP-based 9-1-1 systems. We are looking for a vendor who will work with us as a partner to realize the full potential of IP-based 9-1-1 systems. Creative solutions that advance

the state of the art in 9-1-1 systems to achieve our goals are encouraged. Some of the more important goals are described below:

2.3.1 Rapid scalability

One of the major concerns of our emergency planners is how would we handle a major influx of people into Vermont. From Montreal to Boston to New York City, Vermont is surrounded by tens of millions of people; far more than the approximate 600,000 residents of Vermont. It is conceivable that a catastrophic event in a neighboring region could send hundreds of thousands of refugees headed to Vermont. We need a 9-1-1 system that could quickly scale from the 30 or so call-taker positions adequate for our population, to a system that could handle perhaps two to three times our normal population.

2.3.2 Flexible locations

There are many reasons why we may not be able to answer calls in one of more PSAPs: severe weather, floods, terrorism, and pandemic flu, among others. We need the flexibility to bring the 9-1-1 system to our call-takers, rather than bring our call-takers to the 9-1-1 system.

2.3.3 Cost reductions

Our 9-1-1 system is funded through the Vermont Universal Service Fund. As competition in the telecommunication marketplace drives phone bills down, it also drives down USF revenue. In the current economic climate, finding other sources of revenue is not an option. We must be able to deliver 9-1-1 services at a lower cost. Four-year total cost of ownership will be an important consideration when we evaluate proposals.

2.3.4 Accommodate the transition from wireline service

Fewer than 50% of our 9-1-1 calls come from traditional wireline phone subscribers, yet we have a 9-1-1 system built for wireline customers and modified to handle other types of calls. We feel that it is time to have a 9-1-1 system built for the majority of our callers, but which accommodates wireline subscribers.

2.3.5 Technological compatibility

Vermont's 9-1-1 system must remain compatible with the rapid changes in technology. SMS, vehicle telematics, and other emerging technologies will be used to transmit information about emergencies in the future, and our system must accommodate them.

2.3.6 Long-term viability

Ideally, we would like this procurement to be our last for many years. We are looking for a long-term partnership with an organization that shares our vision for 9-1-1, has the technical and financial resources to meet the challenges facing 9-1-1, and a culture of cooperation and collaboration to work with us as an equal partner.

2.3.7 Turnkey solution

We are looking for a comprehensive turnkey solution that provides the following functionality:

- Call delivery
- Call handling
- Map display
- Wireline and wireless caller location
- Emergency notification
- Management information
- Project management
- Training
- Ongoing operation
- Support

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3 Scope of work

We are looking for call-taking functionality. We will accept proposals for systems that provide the necessary functionality. It is up to your organization to determine the best way to provide the required functionality.

The State owns its current system, and contracts with a vendor to operate it. In the previous procurement, we requested details on the individual components that make up the system. We will accept proposals that result in a system similar to our current system: one where the State purchases hardware, software, and integration services and retains ownership of the system, with a vendor contracted to operate it under State direction.

We will accept proposals for a system that is not owned by the State, where a vendor owns the infrastructure, and provides 9-1-1 functionality according to a service level agreement.

We will also accept proposals that will provide the required functionality in ways that are not listed, such as a hybrid between the two types of systems described above.

We do not favor one type of system. We will evaluate your proposal according to how well it provides the necessary functionality and what it costs.

3.1 Project monitoring

The winning bidder will be required to appoint a project manager accountable to our project manager. In the planning and deployment phases of the project, your project manager will have to be available for weekly status meetings. After deployment, status meetings will be held less frequently.

3.2 Charges for delays

Vermont cannot be without a 9-1-1 system. Our current contract expires on June 30, 2011. The winning bidder must ensure completion of the project, with all deliverables met, by June 30, 2011. If delays result in charges by our current system provider for keeping the current system operational beyond June 30, 2011, we will deduct the amount of the charges from the amount to be paid to the winning bidder.

3.3 Description of proposed system

3.3.1 Narrative

Your proposal must include a detailed narrative description of your proposed system.

3.3.2 Diagrams

Your proposal must support the narrative descriptions with detailed diagrams.

3.4 System-wide functionality

3.4.1 System sizing

The system must be sized to handle two and one-half (2.5) times the maximum volume seen on the current system. You will find information on current call volumes in Section 5. Describe how your proposed system will meet this requirement.

3.4.2 Reliability and availability

The winning bidder's response to this section will be negotiated into a service level agreement.

3.4.2.1 Five-nines reliability

It is a requirement that your proposed system must provide 99.999 reliability. The system must be able to deliver calls, as designed (i.e. with mapping, ALI, recordings, etc), more than 99.999% of the time. Individual components do not have to provide 99.999% uptime as long as the system as a whole is able to do so. Describe how your proposed system will meet this requirement.

3.4.2.2 No scheduled downtime

It is a requirement that your proposed system not require down time for routine or anticipated maintenance. Individual components may have downtime for routine or anticipated maintenance; however, the system as a whole must remain operational and able to deliver calls as designed. Describe how your proposed system will meet this requirement.

3.4.2.3 Redundancy

It is a requirement that any redundant components in your proposal must provide redundancy automatically, without human intervention. You must provide a documented method to periodically test redundancy. Describe how your proposed system will meet this requirement.

3.4.2.4 Diversity

It is a requirement that to the degree possible, your proposed system must take advantage of facility diversity. Describe how your proposed system will meet this requirement. You must identify areas where diversity is recommended, but not provided, either because it is not available or for other reasons.

3.4.2.5 Fail-over

It is a requirement that your proposed system must be able to maintain normal operations in a fail-over scenario. For example, if you plan to meet the requirements in sections 3.4.2.1 and 3.4.2.2 with the use of two data centers, then the entire system must be operational with a single data center. It is not acceptable to have a portion of the call-taking capacity dedicated to one component, with the intent of operating with reduced capacity if that component fails. Describe how your proposed system will meet this requirement. Your description must describe what would happen to calls in progress in fail-over scenarios.

3.4.2.6 Single points of failure

It is a requirement that your proposed system eliminate single points of failure that would prevent delivery of incoming 9-1-1 calls to a call-taker. Describe how your proposed system will meet this requirement.

3.4.3 Information assurance

3.4.3.1 Information security framework

Describe the information security framework used by your organization.

3.4.3.2 User management

It is a requirement that your proposed system must centralize user management, ideally by interfacing with commonly available directory services such as Microsoft Active Directory, or LDAP. Users must have a single login throughout the system. The system must maintain a historical record of all logins. Describe how your proposed system will meet this requirement.

3.4.3.3 User authentication

It is a requirement that your proposed system must uniquely identify all users. All users must be authenticated with a password at a minimum. The use of strong authentication, such as one-time passwords, tokens, biometrics, etc. is encouraged. Describe how your proposed system will meet this requirement.

3.4.3.4 Passwords

If you are proposing the use of passwords, it is a requirement that your proposed system must store passwords in a manner that does not allow for

decryption (hashed). You must provide a method to allow users to change their own passwords. You must provide a method to set and enforce a password policy, i.e. length, complexity, aging, etc. Your system must not transmit passwords in clear text.

3.4.3.5 Role based access control

It is a requirement that your proposed system must provide role based access controls (RBAC). With RBAC, groups are created, and users are placed in groups to control their access. Permissions applied to system objects and resources such as functionality (i.e. the ability to perform a manual query) or data (i.e. the recording of a specific call) allow or deny access to an object or resource for groups and users. There must be the capabilities throughout the system to selectively allow or deny users or groups, the ability to perform certain functions such as monitor users, change settings, access logs and recordings, etc. This is similar to the access control methods used in the Windows, UNIX, and Linux operating systems. Describe how your proposed system will meet this requirement.

3.4.3.6 Least privilege

It is a requirement that your proposed system must support the concept of “least privilege.” This means that system administrators must be able to set up access controls so that user access can be restricted to the minimum required.

3.4.3.7 Traffic engineering

It is a requirement that your proposed system must provide robust network security that limits network traffic to only that which it is engineered for and expected. Traffic which is not expected, i.e. protocols that are not necessary to provide the required functionality, or traffic between devices which have no need to communicate with each other must be blocked. This is intended to defend against a day-one attack, as well as to ensure system performance and reliability. Describe how your proposed system will meet this requirement.

3.4.3.8 Monitoring

It is a requirement that your proposed system must incorporate monitoring that will detect abnormal traffic indicative of a security problem, such as a breach or compromised system. Describe how your proposed system will meet this requirement.

3.4.3.9 Encryption

It is a requirement that data in transit over WAN connections must be protected by 128 bit or higher AES encryption. It is desirable that your proposed system encrypt all data communications, including data at rest. Describe how your proposed system will meet this requirement.

3.4.3.10 Malware protection

It is a requirement that your proposed system must address threats from malware. Describe how your proposed system will meet this requirement.

3.4.3.11 External access

It is a requirement that your proposed system must provide secure external access over the Internet. This will be used for system administration and call-taker access. Describe how your proposed system will meet this requirement.

3.4.3.12 Data protection

It is a requirement that your proposed system must provide adequate safeguards to ensure that data will not be lost. Describe how your proposed system will meet this requirement.

3.4.3.13 Backups

It is a requirement that your proposed system must include provisions to regularly backup system data. Describe how your proposed system will meet this requirement.

3.4.3.14 Configuration backups

It is a requirement that your proposed system must provide a method to maintain current backups of all system configurations. Describe how your proposed system will meet this requirement.

3.4.3.15 Emergency power

It is a requirement that your proposed system must remain operational in the event of power outages of unknown length. Describe how your proposed system will meet this requirement.

3.4.3.16 Physical security

It is a requirement that your proposed system must provide adequate physical security to ensure data confidentiality, integrity, and availability. Describe how your proposed system will meet this requirement.

3.4.4 Services**3.4.4.1 Time synchronization**

It is a requirement that every device in your proposed system that has time keeping functionality must be synchronized to a common time source. Describe how your proposed system will meet this requirement.

3.4.4.2 Centralized control

It is a requirement that every device in your proposed system must be manageable from a central location. Describe how your proposed system will meet this requirement.

3.4.5 System administration**3.4.5.1 Dashboard**

It is a requirement that your proposed system must include some type of dashboard which provides real time information on system activity. At a minimum, the dashboard must provide information on call volume and staffing levels. Describe how your proposed system will meet this requirement.

3.4.5.2 Change management

It is a requirement that your proposed system must include comprehensive change management processes to ensure that all changes made to the system are engineered, tested, and documented. Describe how your proposed system will meet this requirement.

3.5 Call-taking functionality

3.5.1 Call delivery

3.5.1.1 Interfaces to the PSTN

Describe how your proposed system will interface to the PSTN. Currently calls are delivered into the system over CAMA trunks. Your proposed system must accept call delivery over CAMA trunks. We anticipate that other options will be available in the near future. Your proposed system must also be able to accept call delivery via SS7 and PRI. List any other interfaces to the PSTN that your proposed system can handle.

3.5.1.2 i3 compliance

Your proposed system must accept calls via an IP connection that is compliant with the version of the NENA i3 standard in effect at the time of system implementation. Describe how your proposed system will meet this requirement.

3.5.1.3 Call flow

You must provide a detailed description of call flow through your proposed system. Describe how calls enter the system, how the correct PSAP/position is selected, and how the call is delivered to the proper location. Provide details on whether PSAP/position selection is table based or GIS based, or both.

3.5.1.4 Virtual PSAPs

It is a requirement that your proposed system must support virtual PSAPs. A virtual PSAP is one where call-taking positions can be grouped regardless of their physical location. Describe how your proposed system will meet this requirement.

3.5.1.5 Call routing

It is a requirement that your proposed system must provide multiple methods to select the proper destination for incoming calls. At a minimum, there must be a way to send calls to the longest idle call-taker, the next available call-taker, in a round-robin manner, and to all available call-takers. Describe how your proposed system will meet this requirement. Also, describe any other call distribution methods. Describe how call flow and routing is configured in your proposed system.

3.5.1.6 Call rerouting

It is a requirement that your proposed system must provide at least five tiers of roll-over capabilities, i.e. a call that is not answered at the first location will roll over to a second location. If it is not answered at the second position, it will roll over to the third position, and so on. Describe how your proposed system will meet this requirement.

3.5.2 Connectivity to call-takers

It is a requirement that you must provide a method to deliver calls to call-takers. Currently we have eight active PSAPs. Describe in detail the infrastructure you would put in place for this purpose. Include anticipated call delivery times. Call delivery time will be the greater of the time to make the voice connection and the time to provide the ANI/ALI data. These will become part of a service level agreement in the contract with the winning bidder. It is important that you address resiliency and reliability concerns, and provide adequate bandwidth.

3.5.2.1 Bandwidth requirements

It is a requirement that your proposal must list the minimum bandwidth required to ensure acceptable performance and sound quality. Describe the requirements for each section of the network, i.e. between the data centers, between the data centers and the call-takers, etc.

3.5.3 Call handling

3.5.3.1 Equipment

It is a requirement that your proposed system must include equipment for call-takers to use when answering 9-1-1 calls. Describe in detail the equipment that you are proposing for this purpose. It is important that you address resiliency and reliability concerns.

3.5.3.1.1 Interoperability with other applications

We anticipate using an automated emergency procedure knowledge base to provide instructions for call-takers. It is a requirement that your proposed system must co-exist with this type of software.

3.5.3.2 Sound quality

It is a requirement that your proposed system must accurately reproduce the sounds transmitted by the devices connected to the call. The system

cannot introduce echo, static, interference, delay, or anything else that reduces the ability of the parties on the call to communicate with each other. We recognize that there may be external influences to sound quality such as PSTN circuits, cordless phones, cell phones, etc.; however, your proposed system must provide a method to determine that a reduction in sound quality is caused by an external source. Describe how your proposed system will meet this requirement.

3.5.3.3 Sound adjustments

It is a requirement that your proposed system must allow call-takers to easily adjust both transmit and receive volume. Describe how your proposed system will meet this requirement.

3.5.3.4 Call recordings

It is a requirement that your proposed system must record every call. Recordings must be stored centrally. The recording must accurately reproduce the sounds heard by the call-taker, as if the recording was made with a microphone in the same place as the call-taker's ear. All parties taking place on the call must be included in the recording. Access to recordings must be based upon user permissions and logged. You must provide a method to export recordings both as .WAV and .MP3 files. Describe how your proposed system will meet this requirement.

3.5.3.5 Instant recall recorder

It is a requirement that your proposed system must provide call-takers with a method to play back the recording of any call, provided they have the proper permissions. They must be able to play back a call that is still in progress. Describe how your proposed system will meet this requirement.

3.5.3.6 Interface customization

It is a requirement that a user with proper permissions must be able to customize the user interface. Describe how your proposed system will meet this requirement.

3.5.3.7 Settings

It is a requirement that your proposed system must allow users to save any per-user settings. The settings must follow the user and be used on each system they login on. Describe how your proposed system will meet this requirement.

3.5.3.8 Answering calls

It is a requirement that the call handling application in your proposed system must provide both audible and visual methods to notify the call-taker of an incoming call. Call-takers must be able to hear the audible alert with or without a headset on. Call-takers must be able to answer a call with either a mouse or a keyboard. Any calls in queue shall be easily identified and retrieved. There must be no possibility that a call can be in a queue if there is an available call-taker anywhere in the system. By default, answering a call shall result in the oldest call being picked up. Describe how your proposed system will meet this requirement.

3.5.3.9 Call transfer

It is a requirement that your proposed system must allow a call to be transferred to any other position in the system. Describe how your proposed system will meet this requirement.

3.5.3.10 Selective transfer

It is a requirement that your proposed system must provide a list of responding agencies, based on the location of the caller. The call-taker must be able to connect to a responding agency with a single mouse click or keystroke. Describe how your proposed system will meet this requirement.

3.5.3.11 Non-selective transfer

It is a requirement that your proposed system must include a contact list that lets call-takers with proper permissions dial numbers with a single action. The list must allow the call-taker to sort and filter the list in various ways to allow for the rapid selection of the proper contact.

3.5.3.12 Manual dialing

It is a requirement that your proposed system must provide a method to allow a call-taker to manually dial any number. The ability to dial a number must be available while on a call, to navigate through auto-attendant options for example. Describe how your proposed system will meet this requirement.

3.5.3.13 Dial back

It is a requirement that your proposed system must include a way to dial back a disconnected caller with a single action. Describe how your proposed system will meet this requirement.

3.5.3.14 Forced disconnect

It is a requirement that your proposed system must allow call-takers to release any call at any time. Describe how your proposed system will meet this requirement.

3.5.3.15 ANI-ALI display

It is a requirement that your proposed system must provide a NENA compliant ANI/ALI display. Codes, such as disability codes, should be displayed in plain English. Describe how your proposed system will meet this requirement.

3.5.3.16 Manual ALI query

It is a requirement that your proposed system must support manual (reverse) ALI queries based on the user's permissions. All manual queries must be logged. Describe how your proposed system will meet this requirement.

3.5.3.17 Call history display

It is a requirement that your proposed system must maintain a log of all calls. The call log must allow call-takers to recall and redisplay the ANI/ALI information of any call. Describe how your proposed system will meet this requirement.

3.5.3.18 History by number

It is a requirement that your proposed system must maintain call history by call back number and provide an easy to use method for viewing the history data. Describe how your proposed system will meet this requirement.

3.5.3.19 Comments by number

It is a requirement that your proposed system must allow call-takers to enter comments that will be stored by call back number and provide an easy to use method for viewing the comments. Describe how your proposed system will meet this requirement.

3.5.3.20 Muting

It is a requirement that your proposed system must allow call-takers to block the caller from hearing the remaining parties on the call. The call-taker should have the ability to selectively mute any party on a call. Describe how your proposed system will meet this requirement.

3.5.3.21 Conferencing

It is a requirement that your proposed system must allow each call-taking position to be able to conference in up to five additional parties for a total of seven (five, plus caller and call-taker). The call-taker must be able to selectively drop conferenced parties. The call recording functionality must capture the audio of each party. Describe how your proposed system will meet this requirement.

3.5.3.22 Hold

It is a requirement that your proposed system must support placing calls on hold. There must be some sort of reminder that alerts the call-taker after an administrator-configurable timer has expired when a call is on hold. Describe how your proposed system will meet this requirement. Callers who are on hold should hear a message periodically reminding them that they are on hold and that they should stay on the line.

When a call on hold disconnects there should be an alarm to alert the call-taker. The alarm should display the call back number.

3.5.3.23 Monitoring and barge-in capabilities

It is a requirement that your proposed system must include provisions for the silent monitoring of workstation audio from another workstation. If necessary, the monitoring workstation must be able to barge-in and enter into a 3-way conference. Describe how your proposed system will meet this requirement.

3.5.3.24 TTY

It is a requirement that your proposed system must fully support all ADA laws with integrated TDD/TTY features at each call-taking position. TDD/TTY calls must have the same level of functionality as voice calls. TDD/TTY detection must be automatic. The entire conversation must be logged and easily retrieved. The TDD/TTY interface must support the creation and use of pre-programmed messages. The system must be

Hearing Carry Over (HCO) and Voice Carry Over (VCO) compliant. Describe how your proposed system will meet this requirement.

3.5.3.25 Auto answer

It is a requirement that your proposed system must support pre-recorded greeting and auto answer features. Describe how your proposed system will meet this requirement.

3.5.3.26 Future issues

It is a requirement that your proposed system must be designed to accommodate future forms of emergency calling. These may include:

- SMS messaging
- Instant Messaging
- Cellular text messaging
- Satellite Personal Locator Beacons
- Future development in TTY/TDD type devices

We understand that it is not possible to design a system that anticipates every possibility; however, the State feels that a modular system architecture based on open standards and industry best practices is better prepared to adapt to new technologies. Describe how your proposed system will meet this requirement.

3.5.3.27 Broadcast messaging

It is a requirement that your proposed system must provide a method for call-takers to communicate with each other through some sort of broadcast messaging system. Describe how your proposed system will meet this requirement.

3.5.3.28 Automatic ALI rebid

It is a requirement that your proposed system must provide automatic ALI rebid on wireless calls. The rebid timer must be configurable. Describe how your proposed system will meet this requirement.

3.5.3.29 Abandoned call handling

It is a requirement that your proposed system must alert call-takers to abandoned calls and allow callback with a single action. Describe how your proposed system will meet this requirement.

3.5.3.30 Call logging

It is a requirement that your proposed system must provide extensive logging of call-handling activities. The logs must be accessible from a centralized location. At a minimum, logs must include the following:

- Event start date/time
- Event end date/time
- ANI, if applicable
- ALI, if applicable
- Where the call was transferred to
- Position
- Event
- Logged in user

Logging must capture login and logout, non-9-1-1 associated calls, and other such events. Describe how your proposed system will meet this requirement.

3.5.3.31 CAD interface

It is a requirement that your proposed system must support the transfer of ANI/ALI information to external systems, such as CAD systems. This requirement includes providing a method to transfer the data in a standard format to multiple locations based on the destination of the call transfer. Describe how your proposed system will meet this requirement.

3.5.3.32 Discrepancy handling

Your proposed system should allow call-takers to create ALI and RNF discrepancies electronically. Describe how your proposed system will facilitate this.

3.5.4 Mapping

It is a requirement that call-taking positions must provide a map display that is integrated with the call-handling software. Any call that has location information must be displayed on the map. The map display must allow the call-taker to zoom in and out, pan, and search. Describe how your proposed system will meet this requirement.

3.5.4.1 Data requirements

It is a requirement that your proposed system must be able to use or import our existing GIS data. We currently maintain our GIS data in ESRI's ArcGIS 9.x/ArcEditor. Vermont has a multiuser geodatabase (GDB) or a Relational Database Management System (RDBMS). This RDBMS is managed in Microsoft SQL Server through an ArcSDE data gateway. For E911 specific data we use an extension (x9GIS). Currently we use transactional replication to update server side, single user (viewer) GDBs at eight PSAPs (and the Board offices).

3.5.4.2 Search functionality

It is a requirement that your proposed system must provide robust search functionality in the mapping display. At a minimum, call-takers should be able to search based on address, landmarks, intersections, and geographic coordinates. Describe how your proposed system will meet this requirement.

3.5.4.3 Selective transfer information

It is a requirement that your proposed system must let call-takers access selective transfer information from the map display. Describe how your proposed system will meet this requirement.

3.5.4.4 Discrepancy handling

Your proposed system should allow call-takers to create GIS discrepancies from the map display. Describe how your proposed system will facilitate this.

3.5.4.5 Phase 1 wireless

It is a requirement that your proposed system must be able to map Phase 1 wireless calls and provide a visual indication of the area that the caller is calling from. Describe how your proposed system will meet this requirement.

3.5.4.6 Phase 2 wireless

It is a requirement that your proposed system must be able to map Phase 2 wireless calls and provide a visual indication of the area that the caller is calling from, based on confidence factor information. Describe how your proposed system will meet this requirement.

3.5.5 Reporting

In general, all reports must be available both in hard copy and in commonly used electronic formats.

3.5.5.1 Call-taker activity

It is a requirement that your proposed system must include a call-taker activity report. The report must be filterable and sortable by relevant fields such as date/time, PSAP and call-taker ID. The report must be able to show all call-taker activity, such as login, logout, busy, not busy, on a call, etc. Describe how your proposed system will meet this requirement.

3.5.5.2 Operations

It is a requirement that your proposed system must include a comprehensive operations report. The report must be filterable and sortable by relevant fields such as date/time, PSAP, class of service, etc. The report must be able to show all system activity including calls by PSAP, calls by class of service, calls by date, calls by time, calls by day of week, etc. Statistics such as average time to answer and average call length must be available. Describe how your proposed system will meet this requirement.

3.5.5.3 Call-takers on duty

It is a requirement that your proposed system must include a call-taker on duty report. The report must be filterable and sortable by relevant fields such as date/time, PSAP and call-taker ID. The report must be able to show staffing levels and call-takers on duty for a given time period. Describe how your proposed system will meet this requirement.

3.5.5.4 Event log

It is a requirement that your proposed system must include a event log report. The report must be filterable and sortable by relevant fields such as date/time, PSAP and call-taker ID. The report must be able to show recorded events. Describe how your proposed system will meet this requirement.

3.5.5.5 Ad Hoc reporting

It is a requirement that your proposed system must include a comprehensive ad hoc reporting tool. Describe how your proposed system will meet this requirement.

3.6 Database functionality

It is a requirement that your proposed system must provide ANI/ALI database functionality to maintain the records associating each landline telephone with a valid address. The ALI database must provide for automatic (hands-off) import of files from the telephone service providers. All errors in customer files must be transmitted automatically and electronically to any affected telephone service provider. The system must be able to process updates within 4 hours of receipt. Your proposed system must integrate the ANI/ALI database with the State's GIS data. Your proposed system must be capable of supporting i3 requirements. Describe how your proposed system will meet this requirement.

3.6.1 Database management

It is requirement that your proposed system must allow State 9-1-1 staff the ability to manage the database. Describe how your proposed system will meet this requirement.

3.6.2 Response time

It is a requirement that your proposed system must provide sub-second response time to database queries. Describe how your proposed system will meet this requirement.

3.6.3 Error checking

It is a requirement that your proposed system must have mechanisms to ensure the validity of the data in the system. All ALI information must be verified against the MSAG. Additionally the DBMS must verify and synchronize with the GIS system. Describe how your proposal will meet this requirement. Explain how your system will integrate with the GIS data.

3.6.4 MSAG

It is a requirement that your proposed system must include a Master Street Address Guide (MSAG) to allow for the validation of records in the database. The MSAG must be linked to our GIS data in some manner. Describe how your proposed system will meet this requirement.

3.6.4.1 Error checking

It is a requirement that your proposed system must provide a method to error check entries to ensure data integrity. Describe how your proposed system will meet this requirement.

3.6.4.2 Coordination with telcos

It is a requirement that your proposed system must support an internet-based method for telecommunications providers to query, view, and download NENA standard files relative to the MSAG. Describe how your proposed system will meet this requirement.

3.6.5 Data import

It is a requirement that your proposed system must be able to import data in NENA standard formats. Describe how your proposed system will meet this requirement.

3.6.6 Data export

It is a requirement that your proposed system must be able to export data in NENA standard formats. Describe how your proposed system will meet this requirement.

3.6.7 Data integrity and availability

It is a requirement that your proposed system must store data in a robust DBMS appropriate for a mission critical application to ensure its integrity and availability. Describe how your proposed system will meet this requirement.

3.6.8 ALI updates

It is a requirement that your proposed system must support automated ANI/ALI updates in NENA standard formats. All updates must automatically detect and import customer records. All updates must be able to import ESNs. The import process must automatically create error files for reporting to telephone service providers. The update process must be captured in logs and reports.

Our staff must be able to configure which errors are acceptable for the records imported to the customer table and set up import rules based on each telephone service providers' service orders.

Our staff must be able to strip out street suffix and post directional from the telephone service provider's street field and place them in the appropriate NENA standard field(s). Our staff must be able to make a substitution (alias) in the street suffix field (for example - substitute AVE for AV).

The system must be able to perform an NPAC comparison of records being migrated, orphaned migrates unlocked, and foreign exchanges.

The system must be capable of altering the ALI Customer name to read "Private Citizen" in accordance with Vermont's Private Citizen Rule. Describe how your proposed system will meet these requirements.

3.6.9 Disability codes

It is a requirement that your proposed system must support disability codes that are stored with a telephone number record. Describe how your proposed system will meet this requirement.

3.6.10 Wireless

It is a requirement that your proposed system must be able to pull the wireless ALI directly from third party database providers. The system must meet or exceed all relevant NENA standards in place at the time of implementation, with a commitment to comply with future standards. The ALI database must be able to provide ALI steering to remote databases by entering into a table the identity of the entity where the remote ALI database is located and the associated ESRDs, ESQKs and ESRKs. Describe how your proposed system will meet this requirement.

3.6.11 User access to data

It is a requirement that your proposed system must let properly authenticated users query and display ALI records based on the following:

- NPA
- NXX
- Telephone Number
- Town
- County
- State
- Street
- Name
- ESN
- Telco
- Type of Service
- Class of Service

Describe how your proposed system will meet this requirement.

3.6.12 Telco access to data

It is a requirement that your proposed system must be able to let the Telco query only their ALI records and view by the following:

- NPA

- NXX
- Telephone Number
- Town
- County
- State
- Street
- Name
- ESN
- Type of Service
- Class of Service

Telcos should have a limited view of other data in the database. Describe how your proposed system will meet this requirement.

3.6.13 Bulk modifications

It is a requirement that your proposed system must allow for bulk modifications to data stored in the database. Describe how your proposed system will meet this requirement.

3.6.14 Number portability

It is a requirement that your proposed system must support number portability. Describe how your proposed system will meet this requirement.

3.6.15 Private switch ALI

It is a requirement that your proposed system must include support for PBXs and MLTS. Describe how your proposed system will meet this requirement.

3.6.16 Database reports

In general, all reports must be available both in hard copy and in commonly used electronic formats.

3.6.16.1 Reverse ALI lookups

It is a requirement that your proposed system must provide a report that lists reverse ALI lookups. The report must be filterable and sortable by:

- Date/time
- PSAP
- Call-taker

Describe how your proposed system will meet this requirement.

3.6.16.2 RNF

It is a requirement that your proposed system must provide a report that lists RNFs. The report must be filterable and sortable by:

- Date/time
- Telco
- PSAP
- Call-taker
- Repair code
- Cause code
- Status

Describe how your proposed system will meet this requirement.

3.6.16.3 ALI discrepancies

It is a requirement that your proposed system must provide a report that lists ALI discrepancies. The report must be filterable and sortable by:

- Date/time
- COID
- PSAP
- Creator
- Repair code
- Cause code
- Telco
- COS
- Status

Describe how your proposed system will meet this requirement.

3.6.16.4 SO exceptions

It is a requirement that your proposed system must provide a report that lists service order exceptions. The report must be filterable and sortable by:

- Date/time
- COID
- Telco

- Error code
- Time to resolve

Describe how your proposed system will meet this requirement.

3.6.16.5 ALI audit

It is a requirement that your proposed system must provide a daily ALI audit report. Describe how your proposed system will meet this requirement.

3.6.16.6 ALI/GIS site audit

It is a requirement that your proposed system must provide a report that compares TN records with GIS data and reports TNs that do not have a match in the GIS data. The report must be filterable and sortable by:

- Date
- Town
- COS
- ESN
- Street name

Describe how your proposed system will meet this requirement.

3.6.16.7 TN reports

It is a requirement that your proposed system must provide a report that lists all TNs. The report must be filterable and sortable by:

- Town
- Town with unpublished numbers omitted
- Street
- Street with unpublished numbers omitted

Describe how your proposed system will meet this requirement.

3.6.16.8 MSAG

It is a requirement that your proposed system must provide a report that lists MSAG records. The report must be filterable and sortable by:

- Town
- Street
- ESN

Describe how your proposed system will meet this requirement.

3.6.16.9 MSAG audit

It is a requirement that your proposed system must provide a report that lists MSAG records with overlapping ranges and other range errors. The report must be filterable and sortable by:

- Town
- Street
- ESN

Describe how your proposed system will meet this requirement.

3.6.16.10 ESN

It is a requirement that your proposed system must provide a report that lists ESN records and displays the ESA data. The report must be filterable and sortable by:

- Town
- ESN
- ESA

Describe how your proposed system will meet this requirement.

3.6.17 Ad hoc reporting

It is a requirement that your proposed system must include a comprehensive ad hoc reporting tool. Describe how your proposed system will meet this requirement.

3.7 ENS functionality

We are looking for the functionality to use the 9-1-1 ANI/ALI data in an emergency notification system (ENS). Since we consider the ENS as add-on functionality we reserve the right to evaluate proposals based on 9-1-1 call handling functionality and to consider ENS functionality separately.

3.7.1 Data source

It is a requirement that your proposed system must provide a method to use the data in the ANI/ALI database for emergency notification calls. Describe how your proposed system will meet this requirement.

3.7.2 Geographic selection

It is a requirement that your proposed system must allow for ENS activation by selecting sites off a map. Describe how your proposed system will meet this requirement.

3.7.3 Lists

It is a requirement that your proposed system must provide a method to maintain pre-defined lists of numbers to include in an ENS activation. There should be a method to associate the list with a specific location. Describe how your proposed system will meet this requirement.

3.7.4 Privacy

It is a requirement that your proposed system must only display the numbers to call and not the subscribers' names. Describe how your proposed system will meet this requirement.

3.7.5 Scalability

It is a requirement that your proposed system must be scalable to handle small activations of less than one hundred numbers to large activations of more than ten thousand numbers. Describe how your proposed system will meet this requirement.

3.7.6 Activation

It is a requirement that your proposed system must restrict activation only to individuals who are authorized. Describe how your proposed system will meet this requirement.

3.7.7 Logging

It is a requirement that your proposed system must maintain a log of each activation. The log must include the date and time of the activation, the user who initiated the event, and each number attempted and the result of the attempt. Describe how your proposed system will meet this requirement.

3.7.8 Follow-up calls

Your proposed system should have the ability to distribute a second follow-up call to all numbers notified at the conclusion of an event. Describe how your proposed system will provide this functionality.

3.7.9 TTY

Describe how your proposed system will accommodate TTY devices.

3.7.10 Auto-callback

It is a requirement that your proposed system must have the ability to re-queue numbers which were busy or did not answer. The number and interval of retries should be configurable by the administrator. Describe how your proposed system will meet this requirement.

3.7.11 Voice mail

Describe how your proposed system will react if it encounters an answering machine or a voice mail system.

3.7.12 Simultaneous events

It is a requirement that your proposed system must handle multiple simultaneous events. Does it have the ability to split the available lines between events? Describe how your proposed system will meet this requirement.

3.7.13 Call prioritization

It is a requirement that your proposed system must provide the ability to prioritize calls based on the distance from a given location. For example, in case of a HazMat incident, the system should be able to select all the numbers in a one-mile radius, with the numbers closest to the incident called first. Describe how your proposed system will meet this requirement.

3.7.14 Pre-recorded messages

It is a requirement that your proposed system must support the use of pre-recorded messages. Describe how your proposed system will meet this requirement.

3.7.15 Response plans

It is a requirement that your proposed system must support the use of pre-defined response plans which consist of a pre-recorded message and a pre-defined list of numbers. Describe how your proposed system will meet this requirement.

3.7.16 Reports

It is a requirement that your proposed system must provide reports of ENS activity. Describe how your proposed system will meet this requirement.

3.8 Implementation

3.8.1 Project management

It is a requirement that your proposal must include a comprehensive project management plan for the entire project. Your project management team will be responsible for the successful completion of all phases of this project, including, but not limited to:

- Responsibility for contractor's project personnel management;
- Contractor's project team organizational structure;
- Controlling project activities and costs;
- Project tracking, using Microsoft Project, or equivalent project management software, including any applicable achievement milestones, and action items;
- Providing status reports to the State.

The tasks to be managed include, but are not limited to:

- System engineering;
- Equipment installation;
- Testing;
- Training;
- Operations and maintenance.

Initially, the vendor's project management team will be required to meet weekly with the Enhanced 9-1-1 Board's project team. Describe how your proposed system will meet these requirements.

3.8.1.1 Project management team

Provide details on the qualifications of the project management team you will assign to this project.

3.8.1.2 Project plan

It is a requirement that your proposal must include a project plan. The plan must include a detailed schedule, listing all major tasks and milestones that will allow the project completion within the specified timeframe. Describe how your proposed system will meet this requirement.

3.8.1.3 Migration plan

It is a requirement that your proposal must include a detailed plan to migrate from the current system to your proposed system. It must include

a comprehensive risk analysis and mitigation plan. It must include provisions to roll-back if problems occur during the transition. Describe how your proposed system will meet this requirement.

3.8.2 Installation

3.8.2.1 Coordination with telecommunication companies

The winning bidder must coordinate with the telecommunication companies operating in Vermont during deployment. Describe how you will meet this requirement.

3.8.2.2 Coordination with current system provider

The winning bidder must coordinate with the current system provider prior to and during deployment to ensure that cutover takes place without any 9-1-1 downtime. Describe how you will meet this requirement.

3.8.2.3 Data migration

The winning bidder will be responsible for migrating data from the current system into the new system. Describe how you will meet this requirement.

3.8.2.4 Staging

The winning bidder will be required to pre-stage and test any required equipment. Installation must follow a detailed plan to ensure consistency and quality. Ad hoc installation practices will not be tolerated. Describe how you will meet this requirement.

3.8.2.5 Installation standards

The winning bidder will be required to follow best practices in installation. This includes, but is not limited to:

- Installation will conform to engineered plans;
- All wiring and connections must be labeled;
- As-built documentation must be provided;
- Wire management must be used;
- Cables must be secure.

3.8.3 Testing

3.8.3.1 Pre-cutover

It is a requirement that your proposal must include a pre-cutover test plan. The State expects assurances that the cutover will occur flawlessly. Final details of the pre-cutover acceptance test plan will be developed in the negotiation phase.

3.8.3.2 Certification

The winning bidder will be required to perform their own acceptance testing prior to the State. Once the contractor is satisfied that the system meets all requirements, and is installed as agreed upon, the contractor must certify the system as complete. This will serve as notification that the State can begin acceptance testing.

3.8.3.3 Acceptance testing

The State and the winning bidder will develop a comprehensive acceptance test plan during the negotiation phase. In general, the test plan will ensure that the completed system meets the requirements in this RFP, as well as the winning bidder's representations in their proposal. Final payment will not occur before the system successfully passes all acceptance tests and operates as designed for a minimum of thirty days.

3.8.4 Training

3.8.4.1 Train-the-trainer training

The winning bidder will be required to implement a train-the-trainer plan for call-takers. Describe how you will meet this requirement.

3.8.4.2 Administrator training

The winning bidder will be required to implement a train-the-trainer plan for PSAP Administrators. Describe how you will meet this requirement.

3.8.4.3 Technical staff training

The winning bidder will be required to train the 9-1-1 Board's technical staff. Describe how you will meet this requirement.

3.8.4.4 User documentation

The winning bidder will be required to provide an electronic copy of documentation suitable for call-takers, and grant the E-9-1-1 Board the permission to make minor modifications if necessary to reflect the policies and procedures of the E9-1-1 Board, and to make up to fifty copies of the documentation for distribution to the PSAPs. Describe how you will meet this requirement.

3.8.4.5 Technical documentation

The winning bidder will be required to provide documentation suitable for technical staff. Describe how you will meet this requirement.

3.8.4.5.1 Manuals

The winning bidder will be required to supply all equipment manuals for all components, in library format, as a complete collection of printed materials, and in electronic format, as .pdf files, unless documentation is not available from the manufacturer in electronic format. A simple HTML web page must be created that lists the technical support and documentation URLs for each component in the system, where available.

3.9 Ongoing operation

3.9.1 Technical support

It is a requirement that your proposal must include a detailed narrative that describes how you plan to meet the support requirements. Include a description of your support infrastructure, including the qualifications of the support staff. List any third party maintenance agreements you foresee.

3.9.2 Support personnel

It is a requirement that individuals who provide service and support must have proper training, certifications, and /or supervision to ensure that manufacturer guidelines are followed. Our PSAPs are located in secure facilities and most, if not all, require that support personnel undergo a fingerprint supported background check.

3.9.3 Single point of contact

It is a requirement that the system operator must provide a single point of contact for all problems. This must be provided both through a toll-free number and an on-line (email or web page) help desk. This must be in place prior to system installation. Describe how you will meet this requirement.

3.9.4 24x7 support

It is a requirement that the system operator must provide live 24x7 technical support for the entire system. Due to the criticality and 24-hour nature of 9-1-1, there can be no discernable difference in support due to day or time. First tier technical support call-takers must be capable of assisting users with common problems and not just act as an answering service for on-call technicians. Describe how you will meet this requirement.

3.9.5 Subcontracting

The system operator may sub-contract any or all support functions to sub-contractors; however, the contractor must provide a single point of contact.

3.9.6 Third-party support contracts

It is a requirement that the system operator must maintain support contracts with third party vendors and manufacturers if these contracts are necessary to properly support the system. This would include support with hardware and software manufacturers that provide routine updates. If contracts can be procured through existing State contracts at lower costs, it is acceptable to do so; however,

maintenance and support must be handled by the system operator. Describe how you will meet this requirement.

3.9.7 Response time

It is a requirement that all calls for support must be responded to within one hour. If it is necessary to provide on-site support, the response time is four hours. Once alerted to a problem, the contractor must make reasonable efforts, appropriate for a mission critical system, to remedy the problem in as short a period of time as possible. Describe how you will meet this requirement. Describe your escalation process for problems which are not quickly resolved.

3.9.8 Pre-emptive support

It is a requirement that the system operator must respond to any issues that they are aware of, through any manner, as if a call was placed by a system user. This applies to security issues.

3.9.9 Spares

It is a requirement that the system operator must maintain spares for any device that is critical to the system operation for which replacements are not readily available. Describe how you will meet this requirement.

3.9.10 Support logging

It is a requirement that the system operator must maintain a help desk software application that will track and log all calls for support. Board staff must have access to this application. Describe how you will meet this requirement.

3.9.11 Preventative maintenance

It is a requirement that the system operator must provide preventative maintenance on all components supplied under the contract resulting from this RFP at least once per year. Describe how you will meet this requirement.

3.9.12 Declaration of support

It is a requirement that your proposal must contain a declaration of support that details your support policies, including minimum advance notice given for End of Life and End of Support status for any components that you have developed. It is not necessary to provide minimum notice for EOL and EOS for common and readily available items such as PCs, servers, and operating systems.

3.9.13 Bug fixes

Unless otherwise agreed upon, it is a requirement that bugs and defects found in software applications developed by the winning bidder, or a subcontractor, must be repaired in the same release of the software in which the bug was found. It is not acceptable to defer bug fixes to a future release of the software. It is acceptable to install new executable files to fix a bug; however, this cannot change the user experience or system operation to the degree that additional training is necessary.

3.9.14 Patching and upgrades

It is a requirement that the system operator must provide patches and upgrades for all components supplied under the contract resulting from this RFP. Patches that address serious security vulnerabilities must be applied within 48 hours of patch release, unless other mitigation measures can address the security vulnerability.

3.9.15 Network management

It is a requirement that the system operator must provide comprehensive network management that is able to alert the staff when conditions develop that jeopardize the reliable delivery of calls or data. The network management infrastructure must provide reports on important metrics such as bandwidth utilization and connectivity. Describe how you will meet this requirement.

3.9.16 Database service bureau

It is a requirement that the system operator must optionally function as the database service bureau. This involves working with the Board and the telecommunication service providers to accept and process service order updates, and ensure that the database contains accurate information. Describe how you will meet this requirement.

3.10 Warranty

All components must be covered by a warranty that begins at the time of delivery and extends for one year from the acceptance date. During this period, the system must function properly in accordance with the RFP, proposal, and contract. The winning bidder must remedy any defects or malfunction at no charge to the State.

3.10.1 Out of warranty items

Describe the process, procedure and costing factors used if a repair is not covered under warranty or maintenance, as in the case of water damage, for example.

4 Cost proposal

You are required to provide a detailed cost proposal. This must be in a separate binder. You are required to use the standard cost proposal spreadsheet that is included with the downloadable forms. You must allocate all costs to one of 24 categories as described below. The information that you enter on the category pages flows to the summary page and provides the total project cost. You must break down your cost proposal so that the evaluators can determine how you arrived at your total cost. The following table illustrates the level of detail that we are looking for. It would not be acceptable to simply enter 32 *call-taker positions* as shown in the first line; you must break out the major components and their cost.

Cost Proposal						
2.1 - Call-taking – Products						
RFP Sections	Item Description	Cost	Year 1	Year 2	Year 3	Year 4
3.5.3	32 call-taker positions	\$96,000	-	\$10,400	\$10,400	\$10,400
3.5.3	32 Lic. call-handling software	\$32,000		\$3,200	\$3,200	\$3,200
3.5.3	32 Acme workstations	\$64,000		\$6,400	\$6,400	\$6,400
3.5.1	Call Distribution Equipment	\$65,000	-	\$6,500	\$6,540	\$6,580
3.5.1	Call server software	\$25,000		\$2,500	\$2,500	\$2,500
3.5.1	4 Acme Servers Linux	\$40,000		\$4,000	\$4,040	\$4,080

You are required to provide a 4-year cost for your proposed system. The spreadsheet pages provide columns to include the 4-year costs for each item. This is where you would include items such as software support contract amounts. Costs for years one through four, which are not attributable to a specific item, should be entered in the “ongoing” section. For example, costs of software support for the call-handling software should be shown on the call-handling software line; however costs to provide for system operations, not attributable to any one item, should be included in the “ongoing” section.

Having said this, where exactly costs are entered is of lesser importance than allocating all costs, and showing the full 4-year cost projection, and providing a sufficient level of detail. If you feel that that the cost proposal spreadsheet hinders your ability to present your cost proposal you may include additional information, or an alternate format. However, you are still required to use the spreadsheet, and the total cost listed on the required spreadsheet should match your proposed cost, as it is the spreadsheet cost that will be used when evaluating your proposal and preparing contract documents.

Your cost proposal should assume that we want to duplicate the existing system capacity of 34 call-taking positions in nine locations.

4.1 System wide

Costs that are attributable to core system functionality.

4.1.1 Products

Costs for hardware and software products that provide core system-wide functionality. Items that may fit this description include: information assurance software, master time clock, or a backup device.

4.1.2 Services

Costs for services that are necessary to provide core system-wide functionality. Items that may fit this description include configuring firewalls, or network design.

4.1.3 Other

Costs associated with providing core system-wide functionality that do not fit into either of the two categories listed above.

4.2 Call-taking

Costs that are attributable to providing call-taking functionality.

4.2.1 Products

Costs for hardware and software products that provide call-taking functionality. Items that may fit this description include: call-handling software, call servers, or network devices.

4.2.2 Services

Costs for services that are necessary to provide call-taking functionality. Items that may fit this description include call server configuration, or call-handling software customization.

4.2.3 Other

Costs associated with providing call-taking functionality that do not fit into either of the two categories listed above.

4.3 Database

Costs that are attributable to providing database functionality.

4.3.1 Products

Costs for hardware and software products that provide database functionality. Items that may fit this description include database software or database servers.

4.3.2 Services

Costs for services that are necessary to provide database functionality. Items that may fit this description include database services and telco coordination. Since the operation of the database service bureau is an optional component, its costs must be broken out as (a) separate line item(s).

4.3.3 Other

Costs associated with providing database functionality that do not fit into either of the two categories listed above.

4.4 ENS

Costs that are attributable to providing ENS functionality.

4.4.1 Products

Costs for hardware and software products that provide ENS functionality. Items that may fit this description include ENS software or call servers.

4.4.2 Services

Costs for services that are necessary to provide ENS functionality. Items that may fit this description include an ENS service bureau or per-call charges.

4.4.3 Other

Costs associated with providing ENS functionality that do not fit into either of the two categories listed above.

4.5 Implementation

Costs that are attributable to system implementation.

4.5.1 Project management

Costs associated with overall project management.

4.5.2 Installation

Costs associated with system installation.

4.5.3 Training

Cost associated with user and staff training.

4.5.4 Other

Costs associated with implementation that do not fit into either of the three categories listed above.

4.6 Ongoing

Costs that are attributable to ongoing system operation after the implementation phase is complete.

4.6.1 Operations

Costs to operate the system. This is differentiated from support as the costs that would be charged on an ongoing basis if support was provided on a time and materials basis. Items that may fit this description include staffing an ALI database service bureau, or staffing a first tier help desk.

4.6.2 Support

Costs to provide support contracts. Costs in this section could be eliminated if the State elects to have support billed on a time and materials basis.

4.6.3 Other

Costs associated with ongoing system functionality that do not fit into either of the two categories listed above.

4.7 Third party

Costs to be paid to third parties. Items listed in this section are not part of your proposal cost, and will not be included in the contract amount, but will be used to determine the total project cost. This section is so we can determine the true cost to the State. For example, a system that has low initial costs, but very high data circuit costs may appear to be the better value when in fact it may have a higher four-year cost.

We encourage you to provide this information; however, we will not consider a proposal incomplete if the information is not included. In that case, we will supply the missing information. We reserve the right to change this information to ensure that all proposals include comparable data. For example, if one proposal includes ten T1 circuits at \$550.00 while another proposal includes eight T1 circuits at \$600.00 and we are able to get T1 circuits at a State contract rate of \$500.00, we will change the amounts to list the actual costs of \$5,000.00 (10 x 500.00) and \$4,000.00 (8 x 500.00) respectively.

4.7.1 Data circuits

List costs associated with providing data circuits necessary for system operation. Instead of entering the actual costs in the spreadsheet you may list the required connectivity, including the minimum bandwidth and circuit characteristics, and we will use a common rate as described above.

4.7.2 Trunks

List costs associated with delivering calls from the area served by Vermont's 9-1-1 system into your proposed system. We understand that you may not have this information available and you are not required to provide it. This is primarily a placeholder for a common amount, based on current trunk costs, which we will use to ensure that we can determine the true cost of your proposed system. However, if your proposed system has unique ways to bring calls into the system that can bypass the current use of aggregation points and provide cost savings, please provide a narrative description that describes your method and why we should not use a common amount.

4.7.3 Products

List products that the state will need to procure, but that are not part of your proposed system. Items that may fit this description include software licenses that can be purchased at a lower cost off of State contract, or call-taker headsets.

4.7.4 Services

List services that the State will need to procure, but that are not part of your proposed system. Items that may fit this description include modifications to state-owned buildings or cable and electrical work.

4.7.5 Other

Costs to be paid to third parties that do not fit into any of the four categories listed above.



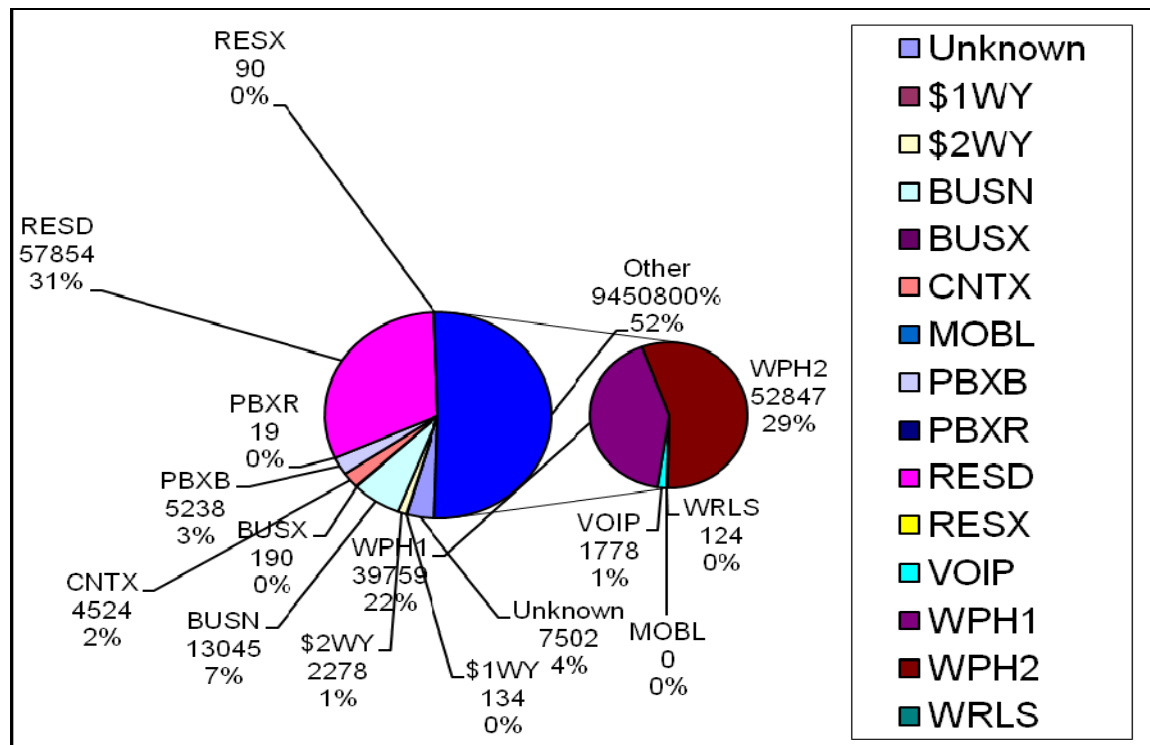
5 System information

5.1 2008 call volumes by PSAP

Note: the Montpelier and Springfield PSAPs were decommissioned in 2008.

PSAP	Positions	Total		Wireline		Non-Wireline	
	Act/Stby	Count	%	Count	%	Count	%
Derby	4/0	19867	10.72%	10667	53.7%	9049	45.5%
Hartford	2/0	6363	3.43%	2656	41.7%	3678	57.8%
Lamoille	2/1	7382	3.98%	3452	46.8%	3826	51.8%
Montpelier	0	1117	0.60%	650	58.2%	465	41.6%
Rockingham	4/0	26843	14.48%	13262	49.4%	13415	50.0%
Rutland	4/0	34344	18.53%	17243	50.2%	16917	49.3%
St. Albans	2/1	5003	2.70%	3688	73.7%	1256	25.1%
Shelburne	2/0	5864	3.16%	2811	47.9%	2996	51.1%
Springfield	0	108	0.06%	59	54.6%	49	45.4%
Williston	6/0	78444	42.31%	28866	36.8%	42835	54.6%
Board Office	0/6	47	0.03%	18	38.3%	22	46.8%
System	26/8	185382	100.00%	83372	45.0%	94508	51.0%

5.2 Calls by Class of Service



5.3 Available communication options

The State is currently in another procurement process for telecommunication services. The results are not available at release time for this RFP. It is expected that a winning bidder will have been selected before the end of the question and answer period for this procurement. We will include information on available communication options in our answer to questions (see section 1.2.2.3).