Table of Contents

1.0 General Instructions

1.1 Intent

Santa Cruz Regional 9-1-1 (SCR911) intends to purchase a narrowband-capable E911 dispatch console system as specified in this request for proposals (RFP). PROPOSERS interested in furnishing and installing the system shall submit a Proposal to SCR911 as instructed in this RFP.

The overall plan is to purchase 15 public-safety-grade radio dispatch consoles for the primary dispatch center. SCR911 is the primary PSAP in Santa Cruz County and is located at 495 Upper Park Rd, Santa Cruz, CA 95065.

1.2 Specifications Property of SCR911

These specifications in their entirety are the property of SCR911. The PROPOSER shall not copy or disseminate any portion of these specifications without express written authorization of SCR911 except as necessary in the preparation of the Proposal. Any authorized copies of these specifications or portions thereof shall include a similar paragraph prohibiting further copying or dissemination.

1.3 Definitions

PURCHASER or *OWNER*: Santa Cruz Regional 9-1-1 (SCR911). Generally, *PURCHASER* refers to SCR911 during the procurement process and *OWNER* refers to SCR911 during implementation and acceptance.

PROPOSER, *OFFEROR* or *BIDDER*: Any firm that provides a submittal in response to this RFP.

CONTRACTOR: The successful Proposer with whom a contract is executed pursuant to this RFP.

Project Team: The team consisting of representatives of the OWNER and the CONTRACTOR.

1.4 Procurement Schedule

The anticipated schedule for the procurement process is found in TABLE 1-1. The dates indicated in the schedule shall be carefully observed.

TABLE 1-1
Procurement Schedule

Scheduled Event	Date
RFP Release	December 3, 2010
Deadline for Proposer Questions	January 4, 2011
Deadline for Proposal Submission	February 1, 2011
Proposal Evaluation Complete	March 1, 2011
Contract Execution	After

1.5 Site Visits

PROPOSERS are responsible for visiting sites involved in this project prior to submission of a Proposal. A complete facility tour is available on December 8, 2010, commencing after the RFP question and answer session held on that date at 10:00 a.m. PDT. Proposers who are unable to attend on December 8th may arrange a site visit by contacting Amethyst Uchida at (831) 471-1035 or amethyst@scr911.org.

Ignorance of site conditions will not relieve the selected PROPOSER of any liability or obligations under the Contract.

1.6 Questions Regarding This RFP

All questions regarding this RFP shall be submitted in writing to:

Amethyst Uchida
Santa Cruz Regional 9-1-1
495 Upper Park Road
Santa Cruz, CA 95065
E-mail: amethyst@scr911.org

Questions must be received no later than Tuesday, January 4, 2011.

1.7 Answers and Addenda

The PURCHASER will disseminate all questions and answers to all prospective PROPOSERS. Verbal responses to questions are not considered official until the questions have been submitted in writing by the PROPOSER, and a written response has been distributed by the PURCHASER to all prospective PROPOSERS.

Should changes to the RFP become necessary, the changes will be contained in an addendum issued by the PURCHASER. The addendum will be issued to all prospective PROPOSERS as early as January 14, 2011 but no later than 5 calendar days before the Proposal due date.

1.8 Submission of Proposals

Technical and Price Proposals shall be submitted by to the following address:

Amethyst Uchida
Santa Cruz Regional 9-1-1
495 Upper Park Road
Santa Cruz, CA 95065

Technical and Price Proposals must be received no later than 4:00 p.m. on Tuesday, February 1, 2011. The PURCHASER may retain Proposals received after the Proposal due date and time but is not obligated either to evaluate or to return such delinquent Proposals. The PURCHASER reserves the right to postpone the date and time for submission of Proposals at any time prior to the Proposal deadline by giving written notice of such postponement to each prospective PROPOSER.

Submission of a Proposal shall constitute acknowledgment by the PROPOSER that it has thoroughly examined the RFP and all duly issued addenda.

1.8.1 Technical Proposal

The PROPOSER shall send one original, five copies, and two electronic copies of its Technical Proposal to the address above.

The Technical Proposal shall be delivered in a sealed package labeled as follows:

Narrowband-Capable Dispatch Console System
TECHNICAL PROPOSAL
RFP No. 2010-002

Electronic files shall be provided in the following software formats:

Microsoft Word
Adobe Acrobat Portable Document Format (PDF)
Microsoft Excel
Microsoft Visio

The Technical Proposal shall include all the information requested in Sections 1 through 11 of the Proposal as described in Section 2.0 of the RFP.

ABSOLUTELY NO PRICE INFORMATION IS TO BE INCLUDED IN THE TECHNICAL PROPOSAL. TECHNICAL PROPOSALS CONTAINING PRICE INFORMATION MAY BE DISQUALIFIED.

1.8.2 Price Proposal

The PROPOSER shall send one original, two copies, and an electronic copy of its Price Proposal to the address above.

The Price Proposal shall be delivered in a sealed package labeled as follows:

Narrowband Capable Dispatch Console System
PRICE PROPOSAL
RFP No. 2010-002

All pricing information will be considered confidential and will be provided only to individuals associated with the project until such time as the contract is awarded and signed. After contract signing the pricing information may be released to public record at the OWNER's discretion.

Failure by the PROPOSER to fill in all blanks of the Price Forms and to supply all information required may result in the Proposal being rejected by the PURCHASER.

1.9 Withdrawal of Proposals

PROPOSERS may withdraw Proposals by written or telegraphic notice received by the Purchasing Agent any time prior to the Proposal due date and time. After the Proposal due date and time, Proposals may not be withdrawn for 90 calendar days after the Proposal due date.

1.10 Technical Proposal Evaluation

The PURCHASER's technical and operations personnel will evaluate Technical Proposals in accordance with the factors of evaluation found in APPENDIX A. The team will examine the technical and contractual aspects of each Proposal for adequacy, accuracy, and compliance to the specifications.

1.11 Technical Proposal Questions

The evaluation team will generate a list of written questions for each Proposal and will forward the questions to the PROPOSER. Each PROPOSER shall submit written responses to the PURCHASER within five working days from the receipt of the questions. The written responses will be considered a part of the Proposal.

1.12 Price Proposal Evaluation

Price Proposals will be opened after the technical evaluation is completed. The Price Proposals will be evaluated by the SCR911 management team.

The evaluation team will combine the technical evaluation points with the points assigned for pricing, and will recommend to the SCR911 General Manager that the award be made to the PROPOSER and configuration scoring the highest number of points.

The award of a contract pursuant to this RFP will be made to that responsive and responsible PROPOSER whose Proposal is determined to have the greatest overall benefit to the PURCHASER for the life of the system.

The SCR911 General Manager will make the ultimate evaluation of Proposals and the final decision to award. Representatives of the PURCHASER will have the ultimate responsibility for reviewing and evaluating all Proposals submitted in response to this RFP.

1.13 Proposer Demonstrations and Customer Site Visits

The PURCHASER may request that the PROPOSER, at no cost to the PURCHASER, demonstrate its equipment and systems at SCR911 in person. If an in-person demonstration is impossible, a web conference may be an acceptable alternative.

The PURCHASER may also, during the evaluation period, request to visit sites where the PROPOSER has a comparable or identical communications system in operation. If possible, the system selected should be for an organization similar in size and characteristics to the PURCHASER. Sufficient time should be allowed for the evaluation team to talk privately with their user-counterparts at the host site. The PURCHASER will designate no more than five individuals to make this trip. The PURCHASER will be responsible for its personnel's travel and living expenses associated with the site visit.

1.14 Proposer Qualifications

The PURCHASER may make such reasonable investigations and inspections as deemed proper and necessary to determine the ability of the PROPOSER to perform the work and the PROPOSER shall furnish the PURCHASER additional information for this purpose as requested.

Neither requests for additional information nor invitations to participate in negotiations are to be construed as an indication of the PURCHASER's intent to purchase.

1.15 Rights to Submitted Material

All materials submitted by the PROPOSER in response to this RFP shall become the property of the PURCHASER upon receipt.

1.16 Confidentiality

All Technical Proposals shall be open to public disclosure and shall not contain any proprietary information.

The PROPOSER shall indemnify and hold the PURCHASER harmless against any loss or damage, including reasonable attorney fees, it may incur as a result of PURCHASER's reliance upon PROPOSER's representation that materials supplied by the PROPOSER do not contain trade secrets or proprietary information which is not subject to public disclosure.

1.17 Incurred Costs

The PURCHASER shall not be liable for any costs incurred by the PROPOSER in preparing, submitting or presenting Proposals; in satisfying any demonstration or other requirements; or in anticipation of being awarded the contract under this RFP.

Claims for additional compensation or additional time for completion which are based on lack of knowledge or lack of understanding of any part of the RFP shall not be allowed.

1.18 Proposal Errors and Irregularities

The PURCHASER reserves the right to waive minor errors or minor irregularities in any Proposal if it appears to the PURCHASER that such items were made inadvertently. Any such errors or irregularities shall be corrected in the Proposal prior to contract execution.

Defective Proposals with major irregularities may be rejected immediately.

1.19 Exceptions

Major exceptions to the RFP may be a basis for considering a Proposal to be non-compliant. Major exceptions are defined in APPENDIX A.

1.20 Proposals Not Selected

Non-selection of any Proposal will mean that another acceptable Proposal was deemed to be more advantageous to the OWNER or that no Proposal was accepted. PROPOSERS whose Proposals are not accepted will be so notified.

1.21 Communication with PURCHASER

During the period between submittal of the Proposal and Contract Award, the PROPOSER, including the PROPOSER's agents, shall refrain from communicating in any way with any representatives of the PURCHASER, except for the Procurement Officer or persons designated as contacts by the Procurement Officer. Violation of this provision may result in disqualification of the PROPOSER. Any communication from a PROPOSER that in any manner discloses price information contained in its Proposal, if received prior to Price Proposal opening, may be cause for disqualification.

No PROPOSER, OFFEROR, CONTRACTOR or SUBCONTRACTOR shall confer on any PURCHASER employee having official responsibility for a procurement transaction any payment, loan, subscription, advance, deposit of money, services or anything of more than nominal value, present or promised, unless consideration of substantially equal or greater value is exchanged.

1.22 Open Procurement

The PURCHASER intends to obtain all items pertaining to system performance from one contractor. However, the PURCHASER reserves the right to accept any item or group of items proposed in any Proposal, and the PURCHASER reserves the right to lease and/or purchase more or less of each item or service at the unit price offered by the PROPOSER, unless the PROPOSER qualifies the offer by specific limitation.

Specific terms of the contract will be negotiated between the PURCHASER and the successful PROPOSER. The PURCHASER reserves the right to negotiate with the PROPOSER regarding variations to the original Proposal(s) that may be in the best interest of the PURCHASER. The PURCHASER reserves the right to negotiate additional and/or supplemental terms and conditions with any of the PROPOSERS.

The PURCHASER reserves the right to accept or reject any or all Proposals. The PURCHASER may allow the PROPOSER the opportunity to clarify its Proposal prior to rejection.

1.23 Additional Equipment

The quantities specified are those proposed for immediate purchase. In the event additional proposed equipment is required, the PROPOSER shall agree to provide that equipment at the unit price contained in the Proposal for a period of one year after System Acceptance. The PROPOSER shall further ensure that proposed equipment shall be available for a period of ten years after System Acceptance, either identical to that provided, or functionally and operationally compatible and meeting or exceeding the specifications of the equipment provided. This applies to both fixed and non-fixed equipment.

1.24 Options

Sections designated “OPTION” identify goods and/or services that must be offered by PROPOSERS as options for purchase by the PURCHASER. Costs for these items are not included in the base cost proposal evaluation. These options may be selected for implementation or inclusion with the initial contract or at any time during the term of the price guarantee for the price quoted in response to this RFP.

After the price guarantee term expires, options shall be priced in accordance with the price escalation provisions of this RFP. These items, as priced, provide information that the PURCHASER requires in order to make decisions concerning design alternatives, expansion and/or enhancements to the operation of the system design under consideration.

1.25 Contract Execution

Upon the acceptance of a Proposal, the PURCHASER will begin negotiation to reach a mutually agreed-to contract with the successful PROPOSER. The proposed contract will be delivered to the successful PROPOSER at the address given on the Proposal. In the event the successful PROPOSER fails, neglects or refuses to execute the contract within 30 calendar days after the receipt of the contract or 30 calendar days before the proposed contract start date, whichever is later, the PURCHASER may at its own option terminate and cancel its action in awarding the contract to the successful PROPOSER, and upon such termination the agreement shall become null and void and of no effect, and the PURCHASER may reconsider other Proposals or solicit new Proposals, and pursue any remedies available.

2.0 Proposal Instructions

2.1 Proposal Outline

Proposals shall follow the outline described below:

Section 1	Introduction and Letter of Transmittal
Section 2	Table of Contents
Section 3	Compliance Statement
Section 4	Systems and Services Description
Section 5	Equipment Description and Guaranteed Specifications
Section 6	Supporting Technical Data, Analyses
Section 7	Equipment Listing
Section 8	Exceptions to Terms and Conditions
Section 9	Project Management
Section 10	Qualifications
Section 11	Additional Information
Section 12	Pricing

2.1.1 Introduction and Letter of Transmittal

Section 1 of the Proposal shall provide the necessary certification that the Proposal is a bona fide Proposal from the PROPOSER, and that the signer of the Proposal is authorized to make this Proposal on behalf of the PROPOSER. The letter shall designate by name not more than two individuals authorized to negotiate and sign the contract with the PURCHASER on behalf of the PROPOSER. An executive summary may be provided as an attachment to the letter of transmittal. The letter shall contain a description of the scope of the project and the PROPOSER's general plan for implementation. The letter of transmittal may also briefly set forth any particular information the PROPOSER wishes to bring to the PURCHASER's attention.

2.1.2 Proposal Table of Contents

Section 2 of the Proposal shall contain a table of contents.

2.1.3 Compliance Statement

Section 3 of the Proposal shall provide the confirmation that the PROPOSER intends to comply with the requirements of this RFP. This shall include the following items as a minimum:

- A statement of compliance attesting that the PROPOSER complies with all specifications contained in this document unless specifically excepted in the Proposal.

- Paragraph-by-paragraph response and/or compliance statements. The PROPOSER shall provide its paragraph-by-paragraph compliance statements by completing the table in APPENDIX B. This may also serve as the list of exceptions, provided that each exception is fully explained. Each numbered paragraph of this specification shall be responded to as well as any numbered tables. There are three valid responses. Any other response, or lack of response, will be assumed to be an exception.

The valid responses are:

Response	Explanation
Comply	Response is *fully* compliant to the *entire* numbered paragraph.
Exception	Response does not comply with requirements of the paragraph. The PROPOSER must specifically list each item that is an exception. References to other sections in the Proposal in lieu of a list of exceptions will not be considered for evaluation. Any item not explicitly stated as an exception in the Compliance section of the Proposal will be considered compliant.
Not Applicable	This paragraph is not applicable to the proposed configuration. Use this with caution.

Do not use the words “Understood” or “Read and understood” on any paragraph. It is recommended that when in doubt about the applicability or intent of a paragraph, a confirmation of “Comply” be used. The positive compliance statement can then be used to state your understanding of the meaning of the paragraph.

2.1.4 System and Services Description

Section 4 of the Proposal shall provide a description of the proposed system and services the PROPOSER intends to provide in support of the implementation of the system, and the specifications the PROPOSER will guarantee as part of the Proposal. This shall include the following items as a minimum:

- System block diagram. All diagrams shall be numbered and inserted at the end of the Proposal section in which they are referenced.

- Cutover Plan. The PROPOSER shall provide in its Proposal a general plan for installation and cutover from the existing consoles to the new consoles. The PROPOSER shall include estimated costs associated with the cutover, and identify any cutover costs to be borne by the OWNER, in the Proposal.

- Acceptance Test Plan Outline. The PROPOSER shall include the ATP outline and the estimated duration of time required to complete the tests in its Proposal. The outline shall include a description of the methods, procedures, data reduction process and results; and typical test procedures. The procedures shall provide as much specific detail as possible.

  The PROPOSER shall specify in their Proposal the degree to which it anticipates the system to be tested at a staging area, and shall include the location of that staging area.

- Description of training courses and plans.

- List of test equipment required for maintenance. A description of specialized test equipment that may be required, including programmers and programming software.

2.1.5 Equipment Description and Guaranteed Specifications

Section 5 of the Proposal shall provide a description of the equipment the PROPOSER intends to use in the implementation of the guaranteed system and equipment specifications.

2.1.6 Supporting Technical Information

Section 6 of the Proposal shall provide all analyses, engineering data, and supporting technical information and documentation either required herein or that the PROPOSER believes is necessary for a complete technical evaluation of the Proposal. This shall include the following items as a minimum:

- Any additional HVAC or power requirements that the PROPOSER deems necessary

All drawings shall be numbered and inserted at the end of the proposal section in which they are referenced.

2.1.7 System, Equipment, and Services

Section 7 of the Proposal shall contain an itemized, pro forma listing of all systems, equipment, and services that are being proposed. This shall include the following items as a minimum:

- Detailed equipment list per site including back-up power systems
- Itemized list of spares with quantities
- List of required services
- Optional equipment or services

2.1.8 Terms and Conditions

In Section 8 of the Proposal, the PROPOSER shall provide suggested wording for any specific exceptions taken with the proposed Terms and Conditions.

2.1.9 Project Management

In Section 9 of the Proposal, the PROPOSER shall describe in detail its approach to project management throughout the project. This project management description is to include the following items as a minimum:

- A proposed Project Schedule including start and end dates for all major tasks of the project. This will serve as the basis for the Master Schedule.

- The PROPOSER's approach to ensure that the OWNER is apprised of the status of the project at all times, and is provided with regular and timely updates to the schedule.

- Project management organization description including organizational chart and a short description of the responsibilities of individuals listed on the organizational chart.

2.1.10 Qualifications

In Section 10 of the Proposal the PROPOSER shall provide their qualifications to provide this system, and the qualifications of the PROPOSER's subcontractors. This shall include the following items as a minimum:

- Experience of the PROPOSER in implementing the type of system proposed. The PROPOSER shall submit a listing of successfully completed systems of the type being proposed with reference name and contact information.

- List and qualifications/experience profile of subcontractors.

- Installation and Service Shop qualifications, including repair and return turnaround time for boards, cards, and units.

2.1.11 Additional Information

Section 11 of the Proposal shall contain any additional information the PROPOSER may wish to include as part of the Proposal. PROPOSERS may provide a description of their competitive advantages in this section of the Proposal.

2.1.12 Pricing

2.1.12.1 Price Proposal Forms

Section 12 of the Proposal shall contain the PROPOSER's Price Proposal for the basic system and all mandatory options. The Price Proposal shall be provided in the form found in APPENDIX C. The Price Proposal shall be prepared according to the instructions found in APPENDIX C using the Microsoft Excel workbook provided on the CD-ROM included with the RFP. The Price Proposal shall be provided in both hard and soft copy. **The Price Proposal shall be provided in a sealed package separate from the technical proposal.**

Failure to use the Excel workbook provided may be cause for rejection of the Proposal. If the PROPOSER wishes to provide additional information, the PROPOSER may submit the information on additional sheets and electronic files. **In all cases, the hardcopy of the pricing shall be binding.**

2.1.12.2 Price Guarantee

The OWNER views the purchase of the narrowband-capable consoles and its components as a long-term capital procurement. To this end, the PROPOSER shall provide the following pricing guarantees as part of their Proposal:

- The PROPOSER shall state in the Proposal that the quoted prices for all equipment and accessories specified and all new or substitute products purchased, or agreed to purchase, prior to system acceptance, shall remain valid for a period of one year following final system acceptance.

- The PROPOSER shall also state in the Proposal that the quoted prices for all equipment and accessories specified and all new or substitute products purchased, or agreed to purchase, prior to system acceptance, shall not increase at a rate higher than the Consumer Price Index, for an additional period of four years beginning one year following system acceptance.

- The CONTRACTOR shall forward a complete commercial price listing for all products and parts manufactured by the CONTRACTOR. The pricing on this list shall be the same list pricing information provided to the various state and federal government agencies. The CONTRACTOR shall continue to send such price listing to OWNER once every twelve months until asked to discontinue this practice by the OWNER.

2.2 Bid Surety

A bid bond is not required as part of the Proposal due to the uncertainty of the timeline for executing an agreement. However, the selected PROPOSER should be prepared to provide a bond or bonds to cover Performance and Labor and Materials as specified in section 3.3 Contract Security.

2.3 Proposal of Approved Equal Equipment

The use of a particular manufacturer's model number in this specification is intended to establish minimum performance standards, and is not intended to be restrictive. The PROPOSER may propose alternate but equal equipment. Proposals to use alternate but equal equipment shall be accompanied by point-by-point specification comparisons demonstrating that the proposed equipment indeed equals or exceeds the specified equipment in all areas germane to the operational requirements of the RFP.

Any specification requirements that cannot be readily verified based on provided equipment data sheets, may be treated as exceptions during the evaluation.

2.4 Alternate Proposals

The OWNER may accept alternate Proposals for evaluation, provided that operational performance, reliability, and maintainability are demonstrated to be as described in this specification. Such alternate Proposals must meet the format requirements above.

It is the intent of the OWNER to purchase a system designed and manufactured around proven technology. The OWNER may, at its sole option, reject alternate approaches that use technology that is as yet unproven or uses equipment that has not been type accepted by the FCC.

3.0 General Terms and Conditions

3.1 Order of Precedence

Incorporated by reference into the contract which is to be entered into by the OWNER and the successful PROPOSER pursuant to this RFP shall be: (1) all of the information presented in or with this RFP and the PROPOSER's response thereto; and (2) all written communications between the OWNER, its agents, and the successful PROPOSER after the date of the RFP. These documents shall include but not be limited to the following, in order of precedence:

A. Contract, including negotiated technical points
B. Written Clarifications (Formal Requests for Clarification and responses)
C. Compliance Statements (Point-by-Point Response to RFP)
D. RFP Addenda
E. RFP
F. Proposal amendment
G. Proposal
H. Vendor terms and conditions included in Proposal

3.2 Pricing, Payments, and Retainage

Negotiated prices shall be firm and not subject to increase during the term of any contractual agreement arising between the PURCHASER and the successful PROPOSER as a result of this RFP.

Payments will be made based upon the following milestones:

10%	On Initial Notice to Proceed
10%	After submission and approval of drawings and documentation required prior to and concurrent with the detailed design review
10%	After approval of Factory Staging Acceptance Test Plans and Procedures
30%	After delivery of software and equipment
20%	After complete installation of fixed equipment and software
20%	Final Payment on System Acceptance, and after approval the Final System Test Report and Final System Maintenance Manual

Any payment terms requiring payment in less than 30 calendar days will be regarded as requiring payment 30 calendar days after invoice or delivery, whichever occurs last. This shall not affect offers of discounts for payment in less than 30 calendar days.

Milestone payments will not be made until all submittals required prior to milestone completion have been received and approved by the OWNER.

3.3 Contract Security

A Performance Bond and a Labor and Material Payment Bond, duly executed by the successful PROPOSER as principal and by a surety company qualified to do business under the laws of the State of California, and satisfactory to the OWNER, as surety, will be required for the faithful performance of the contract, the payment for labor and materials and for the guarantee and maintenance of the work. Specific terms of the Bonds will be negotiated as part

of the contract. The successful PROPOSER shall furnish the Performance and Labor and Material Payment Bonds simultaneously with the delivery of the executed contract.

3.4 Contractual Claims

Contractual claims, whether for money or other relief, shall be submitted in writing to the Dana McRae, 701 Ocean Street, Santa Cruz, CA 95060, no later than 60 calendar days after final payment; however, written notice of the CONTRACTOR's intention to file such claim shall have been given at the time of the occurrence or beginning of the work upon which the claim is based.

For good cause and as consideration for executing this contract, the PROPOSER acting herein by and through the person signing this Proposal on behalf of the PROPOSER as duly authorized agent, hereby conveys, sells, assigns, and transfers to the OWNER all rights, title and interest in and to all causes of action it may now or hereafter acquire under the anti-trust laws of the United States and the California, relating to the particular goods or services purchased or acquired by the OWNER.

3.5 Sales Tax

The PURCHASER is not exempt from California state sales and use taxes. The Proposal shall include all taxes and fees applicable. The Sales Tax Rate for the City of Santa Cruz is currently 9.5%. The tax rate should be verified by PROPOSER prior to submitting the Price Proposal.

3.6 Liquidated Damages

For each and every day the installation of the system shall fail to be complete beyond the date set for completion of installation and any extensions granted under the contract, CONTRACTOR shall pay to the OWNER the total amount of all costs resulting from the delay as liquidated damages and not as a penalty. Liquidated damages may be deducted by the OWNER from any money due or to become due to the CONTRACTOR as compensation under the contract. Liquidated Damages shall not exceed 5 percent of the total amount of the contract per incident/delay. The total of Liquidated Damages shall not exceed the total cost of the contract.

3.7 Indemnity

The CONTRACTOR shall indemnify and save harmless the OWNER, its officials and employees from all losses, claims, demands, payments, suits, actions, recoveries, and judgments of every nature and description brought or recoverable against the OWNER or by reason of any act or omission of the CONTRACTOR, its agent, or its employees, in the execution of the work or in consequence of any negligence or carelessness in guarding the same, including all liability for, or growing out of any infringement of letter patent or copyright of the United States, in respect to the normal use of the proposed and installed system. The OWNER will promptly give the CONTRACTOR notice of any such claim.

The successful PROPOSER shall assume all risk and bear any loss or injury to the property or persons occasioned by neglect or accident during the progress of work until the same shall be completed and accepted. The CONTRACTOR shall also assume all blame or loss by reason of neglect or violation by CONTRACTOR of any state or federal law, city or county code, or municipal rule regulation, or order. The CONTRACTOR shall give to the proper authorities all required notices relating to the work, and shall be responsible for ensuring all official construction permits and licenses are obtained prior to beginning of work, and for paying all proper fees. The OWNER will sign permit requests as required and as submitted by the CONTRACTOR. The CONTRACTOR shall make good any injury that may have occurred to any adjoining building, structure, or utility in consequence of this work.

3.8 Liability Insurance

The successful PROPOSER shall carry public liability insurance in the amounts specified below, including the contractual liability assumed by the CONTRACTOR, and shall deliver a Certificate of Insurance to the OWNER with 30 calendar day cancellation notice provision from carriers acceptable to the OWNER and licensed to do business in

the County of Santa Cruz and the State of California. The certificate shall be delivered in conjunction with delivery of the executed contract to the OWNER.

A. Worker's Compensation and Employer's Liability

Coverage A - Statutory Requirements
Coverage B - $100,000 per Occurrence
Coverage C - $100,000 Accident and/or Disease
All States Endorsement

B. Automobile Liability, Including Owner, Non-Owner and Hired Car Coverage

Limits of Liability

Bodily Injury:	$250,000 each person	
		$250,000 each occurrence
Property Damage:	$250,000 each occurrence	

OR

Single Limit Bodily Injury Property Damage	$500,000 each occurrence

C. Comprehensive General Liability

Limits of Liability

Bodily Injury	$500,000 each occurrence	
		$500,000 annual aggregate
Property Damage	$500,000 each occurrence	
		$500,000 annual aggregate

OR

Single Limit Including:	$1,000,000 each occurrence

1. Completed Operations/Products
2. Contractual Liability
3. Personal Injury
4. Broad Form Property Damage

3.9 No Assignment

Assignment by the successful PROPOSER to any third party of any contract based on this RFP or any monies due shall be absolutely prohibited and will not be recognized by the OWNER unless approved by the OWNER in writing. Approval will not be unreasonably withheld.

3.10 News Release

The PROPOSER shall at no time make any news or advertising releases pertaining to this RFP for any purpose without the prior written approval of the Purchasing Agent and then only in coordination with the OWNER.

3.11 Transportation and Storage

The CONTRACTOR shall make all arrangements for transportation of equipment in suitable vehicles and by experienced equipment carriers. Supervision of packing, unpacking and placement of equipment shall be furnished by the CONTRACTOR without charge to the OWNER. The CONTRACTOR shall incur the transportation expenses.

The acquisition of the required storage space will be at the expense of the CONTRACTOR.

3.12 Transfer of Title

The CONTRACTOR shall assume full financial and operational responsibility until the system is accepted by the OWNER. Only at that time will the OWNER assume responsibility for and take possession of the system. If the CONTRACTOR desires, transfer of title may be effective upon delivery, however under no circumstances shall any warranty begin until final acceptance of the system by the OWNER.

3.13 Contractor Commitment

The CONTRACTOR shall maintain and upgrade the operational software and hardware at its most recent revision level for the term of the contract with the OWNER pursuant to this RFP. There shall be no requirement on the OWNER'S part to incorporate any new features.

Any change shall have minimal impact on system operations, or the cost shall be assumed by the CONTRACTOR.

3.14 Non-Discrimination in Employment

By signing this Proposal, the PROPOSER certifies that it does not and will not during the performance of this contract knowingly employ illegal alien workers or otherwise violate the provisions of the Federal Immigration Reform and Control Act of 1986.

During the performance of this contract, the CONTRACTOR shall be governed by all applicable state and federal regulations, and agrees as follows:

A. The CONTRACTOR will not discriminate against any employee or applicant for employment because of race, religion, color, sex or national origin. The CONTRACTOR agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this non-discrimination clause.

B. The CONTRACTOR, in all solicitations or advertisements for employees placed by or on behalf of the CONTRACTOR, will state that such subcontractor is an equal opportunity employer.

C. Notices, advertisements and solicitations placed in accordance with federal law, rule or regulation shall be deemed sufficient for the purpose of meeting the requirements of this section.

D. The CONTRACTOR will include the provisions of the foregoing paragraphs A, B, and C in every subcontract or purchase order of over $10,000, so that the provisions will be binding upon each subcontractor or vendor.

3.15 Force Majeure

Neither party will be liable to the other for any failure or delay in rendering performance arising out of causes beyond its reasonable control and without its fault or negligence. Such causes may include, but are not limited to acts of God or the public enemy, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes and unusually severe weather; but the failure or delay must be beyond reasonable control and without fault or negligence. If the CONTRACTOR's failure to perform is caused by the default of a subcontractor, and if such default arises out of causes beyond the reasonable control of both the CONTRACTOR and subcontractor, and without the fault or negligence of either of them, the CONTRACTOR shall not be liable for any excess costs for failure to perform, unless

the equipment or services to be furnished by the subcontractor were obtainable from other sources in sufficient time to permit the PROPOSER to meet the required delivery schedule. Dates or time of performance will be extended to the extent of delays excused by this section, provided that the party whose performance is affected notifies the other promptly of the existence and nature of such delay.

3.16 Contractor Registration

The CONTRACTOR and all firms performing work on behalf of the CONTRACTOR shall have all necessary federal, state and local licenses, and remain licensed though the completion of the work.

3.17 CONTRACTOR Responsibilities

The CONTRACTOR shall be considered the Prime Contractor and shall assume total responsibility for delivery, installation, acceptance, and warranty of all hardware, software, and engineering and support services offered in the Proposal, whether or not the PROPOSER is the manufacturer, producer, author or supplier of them.

The CONTRACTOR shall be the sole point of contact with regard to all contractual matters, including the performance, service, and payment of any and all charges resulting from the lease and installation of the entire system configuration, and all other services performed. Failure to meet these obligations shall result in the cancellation of any contracts.

3.18 CONTRACTOR's Project Manager

A single person shall be designated by the CONTRACTOR as Project Manager to be the primary source of contact between the OWNER and the CONTRACTOR (and PROPOSER if different than CONTRACTOR). The Project Manager, as a member of the Project Team, shall bear full responsibility for supervising and coordinating the installation of the communications system.

Within 15 working days after execution of the contract, the CONTRACTOR shall advise the OWNER of the name, address and office and home telephone numbers of the CONTRACTOR'S designated Project Manager.

Any changes in the CONTRACTOR's designated Project Manager shall be made only with prior written approval by the OWNER.

3.19 System Responsibility

The PROPOSER shall be responsible for verifying the completeness and suitability of all work or equipment proposed for this system. The CONTRACTOR shall provide any additional equipment or labor required in order to meet these specifications, without claim for additional payment, it being understood that a complete operating system is required.

The CONTRACTOR shall be responsible for designing, furnishing, and installing all required interfaces with existing systems and equipment, as well as such interfaces that might be specified in the system specification, unless such interfaces are specifically excluded or ascribed to others in this specification. The CONTRACTOR shall be obligated to provide a system that meets all guarantees in the Proposal for the price contained therein.

3.20 Permits, Permissions, and Services

The CONTRACTOR shall be responsible for obtaining any local, state, or federal permits, licenses and approvals necessary to implement this project.

All fees and costs associated with facility permits, permissions, and services shall be the responsibility of the CONTRACTOR without cost to the OWNER unless specifically noted elsewhere.

3.21 Qualification of Personnel

Personnel shall have the appropriate training, experience, and certifications to complete assigned tasks. The CONTRACTOR shall be responsible for oversight of all contractor-controlled personnel including subcontractors.

3.22 Coordination with OWNER's Operations

The CONTRACTOR shall coordinate all work with the OWNER's operating and scheduling requirements. This may require the CONTRACTOR to perform specific elements of the work (such as cutovers, installation of non-fixed equipment, etc.) during periods outside of the OWNER's normal working hours.

3.23 Property Damage

The CONTRACTOR shall be responsible for any loss or damage to property caused by his operations or personnel. Damages will be settled with the owner of the property by the CONTRACTOR in the company of an agent of the OWNER. The CONTRACTOR shall submit a signed damage release for all sites concerned within 20 days after cutover.

3.24 System Use before Acceptance

The OWNER is planning to accept the new console system in total, and not use any part of that system prior to acceptance. Acceptance shall be on a system basis only. There shall be no "conditional acceptance" of any portion of the system.

It may become necessary however, because of unplanned events, for the OWNER to use a part or all of the system or a subsystem. Such use shall not constitute acceptance unless it continues for 30 consecutive days. The CONTRACTOR will be entitled to seek relief from any damages for delays which result from such unplanned use of the system or subsystems.

3.25 Acceptance Default

Should specific devices or subsystems fail to meet specifications during the acceptance tests, the OWNER may, at its option, elect one of the following procedures:

A. The CONTRACTOR shall repair the equipment and retest that device or subsystem later in the test sequence.

B. The CONTRACTOR shall retest the device or subsystem at a later date and submit the results to the OWNER for approval.

In the event that devices, subsystems, or systems fail to meet specifications upon retest, or in the event that multiple devices or subsystems fail during any individual test sequence, the OWNER may, at the OWNER's option, terminate the test sequence for rescheduling at a later date.

In the event that the CONTRACTOR has provided notice that work is complete and the system or subsystem is available for inspection or acceptance testing, and then at the appointed hour and place for inspection or testing, it is determined that the system or subsystem is not complete or ready for testing, and the CONTRACTOR has not provided five days notice of change in schedule, then the system or subsystem will be considered to be in "Acceptance Default".

In the event of termination and rescheduling of any test for failure to meet specifications, or of re-inspection or re-testing of a system that has been placed in "Acceptance Default", any additional costs due to the rescheduling shall be borne by the CONTRACTOR.

3.26 Relocation of Equipment at Existing Site

The PROPOSER and subsequent CONTRACTOR, as part of the proposal or the DDR, may propose the relocation of any items at these site. The CONTRACTOR shall obtain approval from the OWNER before relocating any items or equipment. The cost for relocating any items or equipment shall be included in the Proposal.

3.27 Change Orders

A separate change request must be completed for each requested change. Change orders shall not become binding until agreed to by the Project Team and signed by Santa Cruz Regional 911 and the CONTRACTOR. The change order will then be incorporated as an official change to the project.

4.0 Project Management

4.1 Sequence of Events

The sequence for system acceptance will be as follows:

4.1.1 Project Initialization and Design

The CONTRACTOR shall proceed with project initialization and design activities after Contract Execution.

4.1.2 Kickoff Meeting

A kickoff meeting and design review shall be conducted within 30 days of Contract Execution. The following items shall be discussed at the project kickoff meeting:

- Introductions
- Project work plan
  - Project review meetings
  - Project teleconferences
  - Action items
  - Submittals
  - Transmittals
  - Punch lists
  - Project status reports
- Project overview
  - Status of project
  - Schedule
- Action items
- Schedule for meetings and teleconferences

4.1.3 Design Review

The CONTRACTOR shall provide the following quantities of design documentation to the PURCHASER at the design review:

Recipient	Hard (Paper) Copies	Soft (Electronic) Copies
Purchaser	3	2

The design documentation shall include but is not limited to the following items:

- System block diagram(s)
- IP addressing scheme
- Electrical load calculations
- Electrical circuit requirements
- Heat load calculations
- Rack and equipment elevations
- Equipment lists
- Floor plans for all equipment installations
- Alarm system plan
- Project schedule

- List and quantity of recommended critical spare parts
- Acceptance test plans
- Cutover and migration plans

The design review shall be conducted immediately following the kickoff meeting. The CONTRACTOR shall present the design to the Project Team. The Project Team will return comments on the design within 10 business days after the design review. The CONTRACTOR shall make appropriate changes to the design after receiving the Project Team's comments. Once all comments have been resolved to the satisfaction of the OWNER, the OWNER will approve the design.

4.1.4 Fixed Equipment Orders

The CONTRACTOR shall proceed with the placement of material orders for fixed equipment after and only after the OWNER has approved the system design.

4.1.5 Inspection

The OWNER will conduct a physical inspection of the equipment installation. Deficiencies identified as a result of this inspection will be recorded as punch list items. The Project Team shall agree to an inspection schedule, which shall be updated as necessary in the Master Schedule.

The CONTRACTOR shall notify the Project Team when the dispatch center is ready for inspection. All commercial power, backup power, grounding, consoles, console equipment and wiring shall be completely installed in a clean and workmanlike fashion.

The OWNER will inspect the site, update the project punch list, fill out inspection forms, identify action items, and deliver these lists, forms and action items to the Project Team as a project transmittal.

The CONTRACTOR shall respond to these inspection items in the form of a pre-test resolution list. These punch list items and particular action items shall be resolved prior to the beginning of acceptance testing.

4.1.6 Acceptance Testing

The CONTRACTOR shall provide a draft Acceptance Test Plan (ATP) to the OWNER 60 calendar days prior to the beginning of Acceptance Testing.

Acceptance testing shall not begin until inspection punch list items have been resolved and the ATP has been received and approved by the OWNER.

4.1.7 Thirty-Day Performance Period

The CONTRACTOR shall conduct a 30-day performance ("burn-in") test after the completion of acceptance testing. During the test, the CONTRACTOR shall maintain records of any equipment failures and readjustments made.

A successful performance period shall consist of 30 consecutive calendar days of successful uninterrupted operation. During the performance period records shall be kept detailing and describing any equipment failures and readjustments made. During this period, some equipment failures are to be expected. The performance period shall be considered interrupted if any of the following conditions are met:

- The system experiences a major failure, as defined in the specifications
- The same device fails more than twice during the performance period
- A failure is not responded to within the time specified by the Warranty

If the 30-day performance test is interrupted by any of the above conditions, the CONTRACTOR shall correct the deficiency and begin the 30-day performance test again as day one of the test. The OWNER will not accept 30 cumulative days instead of 30 consecutive days for passing of this test.

The performance period will not be considered interrupted by mutual agreement, or downtime due to causes beyond the reasonable control of the CONTRACTOR. Downtime will not be counted as part of the performance period.

If a successful 30-day performance period is not completed within 90 consecutive days of the beginning of the first 30-day test, the CONTRACTOR may be deemed to be in default, and the OWNER may, at its option, enforce the default provisions of the contract.

4.1.8 System Cutover

The CONTRACTOR shall provide a detailed cutover plan to the OWNER for approval at least 60 calendar days prior to beginning the acceptance testing.

Cutover shall not occur until after the cutover plan is approved by the OWNER, Acceptance Testing is completed and the 30-day performance period is completed.

Cutover from the existing console system to the new console system shall be planned to minimize disruption to operations.

The plan shall take into account fixed equipment cutover, interfaces with and transfer of control to or from existing systems/equipment, any dispatching transitions, special sequences, scheduled downtime, any dual operation necessary, and personnel schedules.

4.1.9 Final Documentation

Final Documentation includes, at minimum, the following items in their final and approved version:

A. The required quantities of standard manuals: both maintenance and operational
B. The required quantity of System Maintenance Manuals
C. The required quantity of facilities as-built documentation

These items will necessarily be delivered at various times during the project, but shall be tracked with regards to their official delivery and receipt by the OWNER.

The System Maintenance Manual and facilities as-built documentation are subject to review and approval. Delivery of the final versions of these items to the OWNER must be verified by the OWNER prior to sign-off for this milestone.

The system will not be accepted until all documentation is received and approved.

4.2 Project Work Plan

4.2.1 Project Schedule

The CONTRACTOR shall develop and maintain a Project Schedule including a detailed breakdown of all tasks and their start and end dates. The schedule in TABLE 4-1 is tentative but may generally serve as a basis for the project schedule. The Project Schedule shall be updated with actual dates as tasks are completed. The updated schedule shall be distributed to the Project Team on a monthly basis. The initial or baseline Master Schedule shall be presented at the kickoff meeting.

The Project Schedule will be an agenda item for each project teleconference and scheduled Project Review Meeting.

TABLE 4-1
Project Schedule

Scheduled Event	Date
Contract Execution	7/28/2011
Kickoff Meeting/Design Review	8/29/2011
Factory Equipment Orders	9/19/2011
Equipment Shipped	12/2/2011
Installation and Optimization Complete	2/1/2012
System Acceptance Testing Complete	2/15/2012
Thirty-Day Performance Testing Complete	3/15/2012
Cutover Complete	3/22/2012
Final Documentation	4/6/2012
Final Acceptance	4/20/2012

4.2.2 Project Documentation

All project documentation pertinent to the definition and implementation of this project, including, but not limited to, items such as agenda, charts, data, diagrams, drawings, electronic mail, licenses, manuals, minutes, permits, procedures, reports, spreadsheets, text files, written plans, etc., shall be professionally generated via electronic process, i.e., word processor, spreadsheet, CAD system, PDF, or by other approved software packages. Drawings prepared by a professional draftsman are acceptable. Hand-drawn sketches or text are not acceptable.

Documentation shall be professionally printed and reproduced. All material shall be clean and legible.

Documentation shall be provided in both hard and soft copy if so generated. CD-ROM copies are preferable and shall be supplied without copy protection.

When appropriate, documentation shall be professionally bound in three-ring binders with section tabs and a table of contents.

When submitted for approval or information, documents shall be clearly marked with the name of this project and other tracking information, i.e., contract information, site name and/or drawing/document number.

4.2.3 Project Submittals

Submittals shall be provided individually or as grouped in TABLE 4-2. Partial or incomplete submittals will not be accepted. All submittals shall be provided in the designated quantity to the OWNER.

The OWNER will establish a submittal schedule based on the schedule found in TABLE 4-2. The submittal schedule will be published monthly and will identify deliverables that are delayed, late or incomplete. The schedule will include the RFP reference, document description, scheduled submittal date, actual submittal date, and notes.

TABLE 4-2
Submittal Schedule

RFP Section	Submittal	Scheduled Delivery Date
3.23	Damage Release Form	20 days after cutover
3.18	Designated Project Manager Contact Information	15 working days after contract execution
4.1.3	Design Documentation	Kickoff Meeting/Design Review
4.1.5	Notification of Readiness for Inspection	Prior to beginning of acceptance tests
4.1.8	Draft Acceptance Test Plan	60 calendar days prior to beginning acceptance testing
4.1.10	Detailed Cutover Plan	60 calendar days prior to beginning acceptance testing
4.2.9	Project Management Reports	8 working days after end of month
5.6	Completed Acceptance Test Documentation	5 working days after completion of tests
5.6	Authenticated Inspection and Factory Test Documentation	Concurrent with equipment shipment
5.7.1	Equipment Manuals	Concurrent with equipment shipment
5.7.2	Draft System Maintenance Documentation	Start of the 30-day performance test
5.7.2	Final System Maintenance Documentation	20 days after cutover
5.7.3	System maintenance records	5 working days after beginning of month
6.1.7	As-Built Documentation	20 days after cutover

4.2.4 Transmittals

The CONTRACTOR shall deliver all submittals and other contract-related documentation with a transmittal identification number. Besides the documentation included on the project submittal schedule, contract-related documentation may include significant memos, reports, and change order requests. The transmittal number shall be in a unique format agreed upon by the project team to identify the sender. The transmittal vehicle (e-mail, letter, form, etc.) shall include transmittal ID number, date, author, organization, recipient(s), subject and a list of documents delivered as part of the transmittal (as appropriate).

The PURCHASER will deliver official project documentation with a transmittal identification number. Official documentation may include decisions, meeting agenda, meeting minutes and change order requests. The transmittal number shall be in a unique format agreed upon by the project team to identify the sender. The transmittal vehicle (email, letter, form, etc.) shall include transmittal ID number, date, author, organization, recipient(s), subject and a list of documents delivered as part of the transmittal (as appropriate).

The PURCHASER will maintain a log of its transmittals and will deliver it to the project team monthly.

4.2.5 Regular Project Review Meetings and Teleconferences

The CONTRACTOR shall conduct project review meetings and teleconferences on a regular basis. Attendees shall include the members of the Project Team and others involved with the project as necessary. The agenda for these meetings shall include at a minimum:

- Review of schedule
- Review of budget (as required)
- Identified problems
- Solutions to previously identified problems
- Establishment of action items
- Review of previously established action items

- Plans for the next period
- Date, time and place for next meeting

The CONTRACTOR is responsible for providing a teleconference bridge, and for preparing agenda and meeting minutes.

Proposer: Outline your proposed schedule for project review meetings and teleconferences.

4.2.6 Action Items

The CONTRACTOR shall establish and maintain an action item checklist to tracks all action items agreed upon by the Project Team for which a particular team member will be responsible. All open items shall be reviewed at each Project Review meeting, and at most telephone conference calls. All action items must be originated at a team conference, either a teleconference or a project review meeting, and concurrently assigned a control number. Interim decisions made between any participants that will result in an action item must be reviewed and ratified in the team environment, so that all participants are aware of what has transpired and who is responsible. The CONTRACTOR shall document the checklist and include it with the minutes of the Project Review Meetings.

4.2.7 Project Management Reports

The CONTRACTOR shall issue monthly project management reports throughout the entire project. These shall include as a minimum work done during the previous period, scheduled items for the next period, action items, and red flag items. Schedules, transmittal logs, and various checklists should be an attachment to each project management report.

The report should be issued within eight working days after the end of the month.

4.2.8 Risk Management

During the course of the project, team members will identify potential risks that might impact either their portion of the project or other parts of the project. These are not problems, but should be considered as potential problems.

The responsibility for identifying risks includes everyone on the project. It will be the responsibility of the Project Team to assess the impact of risks. Should a risk item develop into a problem, it will be placed on the Action Item Checklist.

Open risk items will be reviewed regularly during the Project Review meetings, with the responsible party commenting on status and potential impact to currently scheduled tasks.

4.2.9 Change Orders

Historically, throughout a project various changes will become necessary. Such contract changes which would result in an increase or decrease in the timing or costing associated with the performance of any part of the contract shall be documented formally utilizing change orders.

A separate change request must be completed for each requested change. The Change Order shall not become binding until agreed to by the Project Team and signed by the OWNER and the CONTRACTOR. The Change Order will then be incorporated as an official change to the project.

The Change Order form/request must clearly specify all cost, schedule, and operational impacts on the system and its components. The Change Order request/form will include as a minimum the following information:

- Customer
- Project information, i.e. Project Number, Project Title
- Issue date
- Tracking number, i.e. Request Number
- Originator
- Reason for change
- Description of change
- Cost impact
- Schedule impact
- Operational or performance changes, if any

4.2.10 Punch List

The OWNER will establish and maintain a punch list for inspections and acceptance tests. The list will be published monthly and will include a sequential punch list item number, site reference, date identified, description of the item, resolution date, and notes about the item. The CONTRACTOR shall be responsible for reviewing each punch list item, and advising the Project Team of any changes as they occur.

5.0 General System Requirements

The following sections provide a functional description of the console system to be proposed and the basis for all PROPOSERS to respond as specified in this RFP. As a system specification, the emphasis in evaluation will be on functional criteria. Deviations from the specification that do not significantly impact the cost, and that are shown to improve operational capability, maintainability, technical quality, or to diminish the propensity toward obsolescence, may be considered. Such deviations shall be fully explained in the Proposal.

Santa Cruz Regional 9-1-1 is conducting an extensive project to improve and modernize the dispatch radio console system. The overall plan is to purchase 15 public safety grade radio dispatch consoles for the primary dispatch center located at 495 Upper Park Rd, Santa Cruz, CA 95065.

This RFP is for a narrowband-capable IP-compatible dispatch console system, capable of supporting conventional wideband and narrowband analog radios and capable of being upgraded to support Project 25 trunking in the future. Standard Motorola 2175-Hz tone control is currently used and the existing tone control must remain in place so that existing radio infrastructure can be supported without modification. The new consoles must not require any change to the existing infrastructure but must be capable of supporting new infrastructure as it is deployed. For instance, SCR911's dispatch radio consoles currently connect to radio equipment which is not narrow-band capable and will be replaced in some cases after the proposed console installation is complete.

5.1 Support Subsystems

Any required support subsystems shall meet industry standards, shall be easy to interface, and shall operate with the LMR, paging and connectivity system and its backbone, without degrading overall system performance, coverage, and reliability.

5.2 System Reliability

5.2.1 General

No single-point failure shall reduce the ability of the system to provide the required emergency dispatch operations, two-way radio voice or data communications under routine day-to-day operational conditions of the agencies using the system.

5.3 Equipment

5.3.1 General

Equipment shall conform to standard communications industry interfaces and protocols, allowing easy and cost expansion.

5.3.2 New Equipment

Equipment shall be new, unmodified, standard equipment of the latest version. Exceptions to specific point in this RFP made in order to propose standard equipment may be considered in the award of the contract provided the PROPOSER can demonstrate that system operations, maintainability and equipment quality is not compromised by so doing.

Used and/or remanufactured equipment shall not be accepted, unless specifically allowed by the OWNER, with the exception of equipment which is currently used by the OWNER and which is specifically designated to be reconfigured, repaired, refurbished, reconditioned and/or relocated.

All proposed equipment whether new or exempted as stated above shall be warranted and guaranteed by the CONTRACTOR in accordance with this RFP and the negotiated contract.

5.3.3 Equipment Mounting

The proposed consoles will be mounted in the existing SCR911 furniture positions.

All equipment shall be securely mounted in a neat and workmanlike manner and in such a way as to provide ready access to electronic controls and metering points. All equipment shall be properly cooled under normal operating conditions.

5.3.4 Environmental Specifications

The proposed consoles shall meet the industry expected environmental conditions and specifications for consoles used in an E911 Dispatch Center.

5.3.5 Equipment Power Requirements

All fixed equipment shall be powered by 120/240 VAC, 60 Hz electric power. Where equipment is powered by DC electric power, the associated rectifiers, battery chargers or power supplies shall be powered by 120/240 VAC, 60 Hz electric power.

5.3.6 FCC Part 15 Devices

All electrical and electronic equipment shall comply with the standards for unintentional and incidental radiators found in 47 CFR 15, “Radio Frequency Devices.”

5.4 Software

The CONTRACTOR shall be responsible for all proprietary and third-party software necessary for overall system operation, including, but not limited to, all interface protocols, interoperability protocols, backbone and network interconnections, auxiliary equipment, subsystem interfaces and communications links.

5.5 Installation

The CONTRACTOR shall install equipment and physical facilities in a neat and professional manner, employing the highest standard of workmanship and in compliance with all applicable standards.

The CONTRACTOR shall leave all sites in a neat, presentable condition throughout the installation phase of the project. All rubbish, temporary structures, and equipment generated or used by the CONTRACTOR shall be removed after completion of the work, and prior to acceptance.

5.5.1 Control of Measuring and Test Equipment

All measuring and test equipment used for installation and/or for determining compliance with quantitative values shall be part of a documented calibration control program.

5.5.2 Rack and Cabinet Mounting

All equipment racks and cabinets shall be securely mounted to the floor and bolted together or braced from the ceiling to prevent swaying or being dislodged. All equipment shall be installed by methods approved for seismic conditions found in Santa Cruz County. Racks shall be isolated from floors and ceilings using suitable insulators, insulating plates, washers and sleeves.

Equipment racks and cabinets shall be placed to allow a minimum of 36 inches access front and back, unless all connection and maintenance points are in the front. Under no conditions shall an equipment rack or cabinet need to be moved for maintenance after installation.

5.5.3 Labeling

All cables and wiring between equipment shall be clearly labeled at both ends indicating source and destination equipment, connector designation and termination points.

5.6 Acceptance Testing

Acceptance testing shall demonstrate system features, functions and failure modes described in the specifications. Within bounds, the specific means of demonstrating console performance and compatibility with the existing radio system will be left to the CONTRACTOR.

The CONTRACTOR shall provide authenticated inspection and factory test documentation of the new consoles being supplied, showing that the equipment meets the specifications. This test documentation shall be provided to the OWNER when the equipment is delivered.

Acceptance testing shall address the following:

- All features and functions defined in the specifications
- Proper operation of all interfaces to existing equipment
- Demonstration of failure mode operation
- Proper operation of all channels and interfaces

The consoles shall be turned on and operational prior to the beginning of acceptance tests. Tests shall be conducted in such a way as to be repeatable.

Tests shall be documented by the CONTRACTOR, and may be witnessed, all or in part, by the OWNER.

The CONTRACTOR shall provide to the OWNER copies of completed acceptance test documentation (including punch list items) within five working days after completion of system testing.

5.7 Documentation

5.7.1 Standard Manuals

Instruction manuals shall be submitted to the OWNER concurrent with the shipment of the equipment. At least five instruction manuals shall be submitted for each type of equipment provided. A copy of each standard manual shall be provided on CD.

Manuals shall be of the same revision level as the equipment or components provided. They shall be complete and self-contained. If multiple manuals exist that span a subject matter, the OWNER has the discretion over which manuals it requires.

If the CONTRACTOR offers its standard manuals in electronic format (via mass storage medium or subscribed online services) the OWNER shall be provided with this service for the period of five years immediately following system acceptance at no extra cost to the OWNER.

5.7.2 System Maintenance Documentation

The system maintenance documentation is intended to enable a technician to understand, align, troubleshoot, fix and/or reconfigure the equipment of the system.

The system maintenance documentation shall contain all system information relevant to console operation, including, but not limited to:

A. System operational description, including a description of the function of each major system component, signal flow and circuit types between system components

B. System interconnection drawings and block diagrams depicting the layout/architecture

C. System level setting procedures and a log of level settings for all control circuits

D. Numbering and labeling of all interconnecting cabling

E. Numbering and labeling of all connections to punch blocks

F. System interconnection and installation documentation as required for vendor equipment and/or physical facilities

G. Complete list of all major fixed equipment by model number and revision code and installed firmware/software with revision (configuration control) numbers

H. A chart or list of software and firmware version numbers, programming parameters and jumper configurations as they apply

I. Record of any telephone circuits interconnected with the equipment by circuit number and telephone number

J. Measured levels of alignment (initial levels for draft documentation and final levels for final documentation). Provide level setting block diagrams and logs of all level settings necessary for setup, alignment and maintenance activities.

The CONTRACTOR may include standard maintenance and operations manuals in the system maintenance documentation.

The CONTRACTOR shall provide a copy of the draft system maintenance documentation to the OWNER at the start of the 30-day performance test. The OWNER will review and recommend changes to the system maintenance documentation prior to delivery of the final version.

The CONTRACTOR shall provide three sets in hard copy of the final system maintenance documentation to the OWNER within 20 days after cutover.

5.7.3 System Maintenance Records

After system acceptance, the CONTRACTOR shall provide documentation of all system maintenance performed to the OWNER within five working days after each month detailing the previous month's work. This report will include all repairs or exchanges on all fixed or non-fixed equipment. The report shall also include a list of all units repaired and their cost, and all units exchanged. The report will also list any repairs pending and their current status.

6.0 Dispatch Center Console Systems Requirements

6.1 Console System

This section specifies the requirements for integrating the current dispatch center functionality with the proposed replacement console system. It is desired to retain the current dispatch center functionality with the existing infrastructure (wideband analog) and to transition smoothly as the infrastructure is upgraded (to narrowband analog). In the near future, it is anticipated that additional changes will take place including the addition of new radio channels to the infrastructure due to a possible dispatch center consolidation. It is also desired that the console system have the capability of being upgraded to support digital radio infrastructure and possibly even P25 trunking in the more distant future. The OWNER also wants to add two additional console positions.

The PROPOSER shall be provided the opportunity to visit the dispatch facility to verify existing equipment and required interfaces during the bidding period. The CONTRACTOR shall ensure that, after installation, reinstalled systems and equipment provide the same functions and performance level as the existing configuration.

This RFP is for a narrowband-capable IP-compatible dispatch console system, capable of supporting conventional wideband and narrowband analog radios and capable of being upgraded to support Project 25 trunking in the future. Standard Motorola 2175-Hz tone control is currently used and the existing tone control must remain in place so that the existing radio infrastructure can be supported without modification. The new consoles must not require any change to the existing infrastructure but must be capable of supporting new infrastructure as it is deployed.

The console equipment specifically stated herein shall meet all domestic U.S. telephone company specifications regarding specific audio levels and DC control voltages on the line at the time of the Proposal.

6.1.1 Console System Configuration

6.1.1.1 Dispatch Center

Location:
Santa Cruz Regional 9-1-1 Center (SCR911)
495 Upper Park Road
Santa Cruz, CA 95065

The console system for the dispatch center shall support the existing equipment and capabilities. The existing dispatch equipment and capabilities are as follows:

- 13 consoles (12 in communications center and 1 in equipment room for systems administration)
- No dedicated supervisor positions
- Instant recall recorder (IRR), currently provided by existing Dictaphone equipment
- Motorola Premier CAD V6.6.8 computer-aided dispatch system
- Positron Viper 3.0/Power911 5.3 9-1-1 telephone system
- Voice Print 5.1 Data Logging Recorder
- AUX I/O functions (currently 4 used to control relay switches)
- No patching is supported at present
- Preprogrammed and manual multi-channel select function provided for “Be on the lookout” messages
- Currently supports 44 unique radio resources including backup control stations
- Intercom to CALFIRE’s dispatch radio console in Felton CA
- Allows users to access up to 15 resources displayed on screen
- Zetron Paging Terminal Model 25 Programmable Encoder (interfaced to CAD) for fire-station alerting
- Consoles support two-tone paging

- Interfaces to radio resources provided by 2-wire and 4-wire circuits transported by existing telco lease lines, T1, microwave and fiber

The CONTRACTOR shall provide a system comparable to the current configuration with the following changes:

- 15 narrowband-capable consoles (14 to communications center and 1 to equipment room)
    - SCR911 will provide furniture location for additional consoles in comm. center
- New consoles shall include integrated IRR and shall not use the Dictaphone equipment
- New consoles must be able to support at least 60 radio resources (44 existing, 9 new due to possible dispatch center consolidation, and spares for future growth, i.e., additional tactical channels)

6.1.2 Console Equipment

6.1.2.1 Consoles

PC-based consoles shall be provided. The console shall be self-contained and designed to be placed on a work surface. It shall consist of a display, console electronics and audio electronics, speakers, headset jacks, keyboard and pointing device.

The console and audio electronics shall be located on or nearby the desktop work surface.

6.1.2.2 Footswitch

A footswitch shall be provided to permit the console operator to key the selected talk group or conventional channel, or, as an option, to disable the coded squelch within the conventional base station or repeater without the use of hands.

6.1.2.3 Microphone

No microphones are needed for the consoles to be located at the main dispatch center as headsets will be used exclusively.

6.1.2.4 Headset Jack

Dual headset jacks shall be provided which allow the operator to hear select audio via a headset and to allow the operator to respond via a microphone attached to the headset. These jacks shall be compatible with either four- or six-wire headsets. Inserting the headset plug into either headset jack shall automatically disconnect the select speaker and disable the acoustic feedback cross-muting features. The existing headsets allow connection to both telephone and console. The microphone amplifier shall include a speech filter that is tuned to the guard tone frequency. The base station transmitters shall be able to be keyed via the console's transmit control or footswitch or the headset switch.

The console shall interface to the existing headset integration device provided by the CPE vendor (Positron IAP/PC). The capability to converse on the telephone using the same operator headset and jack that is used for radio conversations shall be maintained. When the telephone is in use, the select speaker audio will be reactivated. When transmitting on the radio while the telephone is in use, the transmission audio must not be delivered to the telephone.

Separate volume controls shall be provided to control radio volume and telephone volume to the headsets.

6.1.2.5 Select/Unselect Speaker

Two speakers shall be provided on the console. Both speakers shall face forward, toward the operator. The select speaker shall reproduce the audio from the talk groups or conventional channel(s), which have

been selected for operation. The unselect speaker shall reproduce the audio from the other active talk groups or conventional channels in the console.

Each speaker amplifier shall not have guard tone heard at the speaker position and shall contain a volume control. The volume control shall allow the volume to be reduced to an inaudible level. Each unselected talk group or channel shall have its own volume control and indicator.

Any additional specified speakers shall be mounted in the console or supplied in individual enclosures.

All speaker/electronics enclosure boards shall be easily accessible. For ease of service and maintenance, the main board in the speaker/electronics enclosure shall remain attached electrically and mechanically to the console once the cover is removed.

6.1.2.6 Display and Display Interface Device

The operator shall be able to perform all dispatch operations by using a combination of display screen, the screen-coordinated keyboard, and a pointing device. The majority of functions should be able to be performed using only the pointing device or the keyboard and not both. The screen layout shall be designed to expose the operators to the minimum number of controls necessary to operate the console efficiently. The screen-pointing device may be implemented by any combination of the following methods: mouse, trackball, or custom computer keyboard. Touchscreens are not allowed.

In order to minimize any strain on the operator's eyes, a high-resolution color display monitor shall be provided. Console operator display(s) shall utilize a graphical interface and an LCD flat panel monitor(s). The display screen shall be a 19-inch diagonal and shall have a minimum resolution of 1024 x 768 pixels. This screen shall be capable of displaying a minimum of 256 colors. The ability to support multiple resolutions and additional colors is desired. Brightness and contrast adjustments for the display monitor shall be provided to the operator.

6.1.3 Console System Operation

The console system shall provide the following features and capabilities:

6.1.3.1 Tone Control

The tone remote control system shall be operable over wire lines or over any path used for speech, such as a radio frequency link. The console shall include all circuitry needed for tone remote control of a base station. The circuitry shall be compatible with industry standard tone keying protocols used by M/A-COM, Motorola, TAIT, and other major manufacturers of fixed-end LMR equipment. SCR911 currently uses Motorola 2175 Hz tone keying.

6.1.3.1.1 Toning and Paging

A system guard tone shall be available. In compliance with FCC regulations, if control circuit facilities should be lost, the system shall be designed such that the base station transmitter ceases transmitting within 500 milliseconds.

All modules shall be capable of generating EIA tone sets, which is required for two-tone paging on some existing resources.

The console equipment will share a wireline resource with the Zetron Model 25 equipment to provide tone-control paging for fire stations. The Zetron Model 25 is controlled from the CAD system.

6.1.3.2 Alias

The proposed console system must support a minimum of 20,000 alphanumeric aliases. For maximum flexibility, these aliases shall be defined by the OWNER at system installation and shall be easily changed at any time after system installation. At least 15,000 user and 5,000 channel (or group) aliases shall be available without the use of an external memory device. Aliases coding shall allow at least 8 alphanumeric characters.

6.1.3.3 Backup Control Stations

Each console position shall be capable of controlling existing backup control stations under emergency failure conditions. The PROPOSER shall describe the recommended method of operation for interfacing to the backup control stations.

The existing backup control stations are located in the Radio Equipment Room and in the Tower Shelter and are accessed via wire line.

The Radio Equipment Room backup control stations are: SO Blue Standby, SO Red Standby, Fire Black, Yellow Fire, Public Works and Local Government.

The Tower Shelter backup control stations are: Blue Fire, CLEMARS, NLEMARS, White Fire, Santa Cruz PD Blue Standby and Santa Cruz Yellow Standby.

6.1.3.4 Auxiliary Input/Outputs

The system must provide 10 auxiliary inputs/outputs to allow connectivity to and control of various ancillary devices and systems. Currently 3 auxiliary I/O provide control of relay switches but additional controls are desired for future functionality.

6.1.4 Console Operating Characteristics

The consoles shall be designed to enhance the operator's capabilities in performing resource management tasks and minimize the effort and concentration required for radio control. Transmitting over the displayed selected conventional channel(s) (or future talk groups), and instant transmitting over a displayed conventional channel shall be performed with only one operator action.

All channels, users, and talk groups shall be indicated by aliases, not numeric resource references.

6.1.5 Console Radio Channel Requirements

The CONTRACTOR shall be responsible for integrating all existing radio resources into the console system. The console system shall support at least 60 wire-line radio resources, with capability of accessing 16 radio resources per screen.

Allowances shall be made for parallel operation of existing and new console systems until complete conversion to the new console system.

6.1.6 Display Areas

The screen display shall be designed to minimize the number of items that appear on the screen at one time reducing the potential distractions to operators. However, all radio dispatch functions shall be operable from a single screen view. It shall be possible to configure a screen view to display at least 16 conventional channels (or future talk groups) at one time. The system should support configurations which allow multiple pages and/or which allow pages to be reconfigured "on the fly" by dispatch personnel. The display of options, auxiliary outputs, and auxiliary indicators shall also be configurable and presented on the primary operating

screen. The screen shall be designed so that it is not cluttered with indicators that are permanently displayed, whether activity is occurring or not.

The existing consoles have integrated Graphic User Interfaces (GUI) which support a mouse, footswitch, wireless headset for phone and radio, speakers and LCD monitor.

The following display areas shall be provided:

6.1.6.1 System Status Area

A small portion of the screen shall be designated to give system and other information to the operator. It will contain information on system status or any central electronics or operator errors. This information shall be displayed in text that will be understandable to the operator.

6.1.6.2 Radio Control Area

The predominant portion of the screen area shall provide a complete interface to the conventional channels (and future talk groups). The radio control area shall display full radio activity for all programmed entries simultaneously.

6.1.6.3 Call History Area

A small portion of the screen shall be designated to chronologically list recent transmit and receive call history. The operator shall be able to scroll through the list and review the call time, caller name, or channel. This information shall be displayed in text that will be understandable to the operator.

6.1.6.4 Active Status Indicator

One conventional repeater, base station, monitor receiver, talk group, etc. shall be controlled by a single active status indicator on the display screen at the console position.

Each active status indicator shall contain the specific indicators required to control the corresponding resource. In order to minimize distractions to the operator, the only information that will appear constantly are the channel name, volume level, and mute status. Patch or simultaneous select status, text, channel markers or other indications of channel activity shall appear only when such activity is present. Control options for a channel (e.g., frequency and repeater control) shall be able to be hidden from view until the operator must view or control them.

The following entries shall be available on each active status control indicator:

6.1.6.4.1 Alphanumeric Designator

Each active status indicator shall display the name of the channel it is associated with. Authorized personnel may change the name through the set-up function. The operator shall not be required to associate numbers with a channel to perform any function. The console shall allow a minimum of 8 characters in the alphanumeric display.

6.1.6.4.2 Call Indicator

A CALL indicator shall indicate receiving call status on each active status indicator.

6.1.6.4.3 Select

An operator shall be able to select an active status indicator with a maximum of two input operations. The operator shall select a channel by choosing the active status indicator on the screen. Selecting a channel by entering a number shall not be acceptable. Selecting the active status indicator shall route receive audio to the Select speaker and will route microphone audio and PTT signals to the

corresponding base interface module. Selecting any active status indicator shall deselect all other active status indicators (unless the resource is in a simultaneous select group). When an active status indicator is selected its display area shall be highlighted, change color, or otherwise stand out from the other active status indicators.

6.1.6.4.4 Busy Indicator

A BUSY indicator shall be provided on each active status indicator. The BUSY indicator shall be displayed whenever any parallel operator connected to the same resource is transmitting on the channel or when the dispatcher is transmitting on another channel frequency on the same base station.

6.1.6.4.5 Volume Control Indicator

A VOLUME indicator shall be provided on each active status indicator. This indicator will show MUTE whenever the channel is muted.

6.1.6.4.6 Channel Marker Indicator

The active status indicator will display if a channel allocation marker is active on the channel.

6.1.6.4.7 Patch Indicator

PATCH is not currently utilized at SCR911 and may not be required. However, if this function is available, the Proposal should describe its capability and operation and in that case a PATCH indicator shall be included on each active status indicator. This PATCH indicator shall show whether the associated channel is in a patch at this operator position and which patch it is in. A patch shall not inhibit the operator from continuing with normal dispatching functions.

6.1.6.4.8 Simultaneous Select Indicator

A SIMULTANEOUS SELECT indicator shall be included on each active status indicator. This SIMULTANEOUS SELECT indicator shall show whether the associated channel is included in a simultaneous transmit group at the operator position and which simultaneous transmit group it is in. It shall be possible to establish multiple simultaneous transmit groups per operator position. A simultaneous transmit group shall not inhibit the operator from continuing with normal dispatching functions.

6.1.6.4.9 Multi-Frequency Transmitter

When multi-frequency transmitters are present in the system, a frequency control indicator shall be provided in the appropriate active status indicator. All multiple frequency conventional channel status indicators shall send the frequency control information to the transmitters and to all parallel consoles. Authorized personnel shall be able to assign names to each frequency through the set-up function.

All receiver stations shall appear to the operator as being separate, distinct single frequency stations. Special lockout features shall prohibit an operator from placing more than one of the control indicators related to a multi-receiver station into a patch or multi-select condition.

6.1.6.4.10 Squelch Disable

A squelch disable indicator shall be able to be displayed on the screen to show that the coded squelch has been disabled in base station receivers. A control shall permit the operator to monitor the selected conventional channel(s) before transmitting. The squelch disable control shall operate in parallel with the squelch foot switch.

6.1.6.5 Help

Extensive Help instructions shall be available on the screen. These Help instructions shall explain all major console operations and functions in an easily understandable way. The operator shall be able to enter Help mode through no more than one input operation, and shall be able to exit the Help mode with only one input operation. All radio operations shall continue as normal and critical channels shall be able to be monitored while a Help screen is being viewed.

6.1.7 Customized Personality Configurations

The installer, supervisor, or authorized personnel shall be able to configure the operator position capabilities and screen display to suit different operator positions, different applications, or personal preferences. Authorized personnel shall be able to change: channel, group, and auxiliary control display names; channels, groups, and functions available at an operator position; and how channels, groups, and auxiliary controls are displayed to the operator. Each console shall be independently configurable and should be able to export/import configurations for use on additional consoles.

Console personality configuration activities shall be carried out using only the keyboard, display, and pointing device supplied as standard equipment with each console.

Each console system shall have store and recall access to a minimum of 10 personality configurations for each operator position. A new personality configuration shall load in less than one minute. A console shall power up using the most recently loaded personality configuration.

Access to editing personality configurations and loading personality configurations shall be able to be protected by separate passwords, so that only those authorized to perform each function will be able to do so.

While editing or loading personality configurations, the operator shall be able to continue, at a minimum, the normal dispatch functions of monitoring select and unselect audio and transmission on the selected channel or talk group.

6.1.8 Common Console Capabilities

The following console capabilities shall be provided. These capabilities apply to all consoles connected to a given central electronics equipment bank, regardless of local or remote console connection type.

6.1.8.1 Supervisory Control

A DISABLE capability shall be provided whereby the systems administrator or supervisor may totally disable an entire operator position. At consoles so denied, no audio shall be heard from the excluded resources and no transmissions may be made on those resources. A busy indicator shall be provided on each denied active status indicator. This feature shall be available only to users authorized by authentication but not limited by console as there are no dedicated supervisor positions.

6.1.8.2 Channel Markers

The system shall be capable of providing channel allocation markers to designate channels as reserved. When an allocation marker is assigned to a channel, an audible tone shall be transmitted at frequent intervals (every 10-20 seconds) to alert users to the channel's status. When an allocation marker is assigned to a channel, an indicator will appear on the active status indicator for that channel.

6.1.8.3 Simultaneous Select

A simultaneous select function shall be provided to permit the console operator to simultaneously select two or more channels for transmission. A resource may be added to or removed from a simultaneous select group with a maximum of two input operations, by choosing the active status indicator on the

screen. The operator shall not need to enter numbers for each channel added or removed from a simultaneous select group. A separate simultaneous select control shall be used to key the simultaneous select group. The system shall be capable of holding simultaneous select groups in memory for quick recall at any time.

If an operator attempts to transmit on a simultaneous select group of resources that includes a resource(s) in use by a different console operator, the busy resources shall be excluded from the transmission, and the remaining channels in the group shall be keyed.

The PROPOSER shall specify the maximum number of simultaneous select groups that can be simultaneously constructed and the maximum number of resources in each simultaneous select group. The PROPOSER shall also specifty the maximum number of simultaneous select groups that can be stored in memory.

6.1.8.4 Intercom

An INTERCOM function shall be provided to permit the console operator to selectively talk to another console connected to the central electronics equipment. In the intercom mode, the screen shall list the user-defined names of all available consoles and prompt the operator to select the desired console. At a called console, the screen shall indicate an intercom call is being received. SCR911 does not use this capability internally but currently uses it to communicate with dispatchers at CALFIRE. PROPOSERS shall indicate the ability of their proposed consoles to maintain this functionality.

6.1.8.5 Cross Mute

It shall be possible to acoustically cross mute channels on an operator-by-operator basis in order to eliminate acoustic feedback between select operators. This acoustic cross muting shall be automatically disabled on selected channels when a headset is plugged into the headset jack. Cross muting shall be field programmable. Cross muting information shall be changeable without interrupting dispatch operations.

6.1.8.6 Patch

Simplex PATCH is not currently utilized at SCR911 and is not necessarily required. However, if this function is available, the Proposal should describe its capability and operation and it should meet the following requirements: permit patch control of two or more radio resources by the console operator. A patch status indicator shall be provided on the active status indicator for each PATCH function. A resource may be added to or removed from a PATCH with a maximum of two input operations, by choosing the active status indicator on the screen. The operator shall not need to enter numbers for each resource added or removed from a patch.

A patch shall not inhibit the operator from continuing with normal dispatching functions. A dispatcher must be able to force a patch under poor signal conditions. The dispatcher must be able to transmit on patches and monitor patch activity. The PROPOSER shall specify the maximum number of patches that can be simultaneously constructed and the maximum number of resources in each patch.

6.1.9 Console System Installation

The CONTRACTOR shall furnish all accessory cables, wiring, grounding, and installation hardware necessary for a complete communications center. The wiring among consoles and common equipment racks shall be accomplished by means of connectorized cables. All cables shall be of sufficient length to permit location and arrangement of this equipment any place within the designated console room floor space area.

The CONTRACTOR shall provide console system drawings as part of the DDR. The drawing package shall include dispatch center floor plans, console control equipment room floor plans, console position rack ups, and console control equipment rack ups. The CONTRACTOR shall provide console as-built drawings as part of the final documentation.

6.2 Communications Dispatch Center Equipment

Final determination of Dispatch Center floor plans shall be coordinated with the OWNER prior to installation.

The CONTRACTOR, to the extent necessary, shall be responsible for all installation and integration of a completely functional and operational communications control center. This shall include such elements as removing existing equipment, installing new and re-use equipment, interfacing with other equipment as required, testing, cutover, wiring, grounding, and interconnecting main and standby power.

6.3 Dispatch Center Master Clock

The CONTRACTOR shall provide equipment that will interconnect and synchronize to the master standard clock used for all equipment in the communications center, a Spectracom Ethernet Time Clock. All clocks, operational equipment, and recording equipment shall maintain the same time within one second. This equipment shall include consoles, CAD display terminals, NCIC terminals, telephone systems, E-911 systems, logging recorders, computer processors, wall clocks, and any other device in the dispatch center that displays or records time events.

6.4 Grounding

The CONTRACTOR shall properly bond all equipment provided under the contract to the existing communications center grounding system. Grounding and bonding shall be performed in accordance with the latest version of the equipment manufacturer's grounding standards (such as Motorola R56 or Harris AE/LZT 123 4618/1) and industry standards (including ANSI J-STD-607).

6.5 Surge Suppression

If not already installed at the dispatch center, surge suppressors shall be supplied to protect each electric and communications circuit to/from the provided dispatch console equipment.

6.6 Heating and Electrical Loads

The CONTRACTOR shall provide the OWNER a list of equipment electrical and heat loads. The list shall be formatted similarly to TABLE 6-1 and shall clearly indicate equipment electrical and cooling needs.

7.0 MAINTENANCE AND WARRANTY

The CONTRACTOR will be required to support replacement, maintenance and services for at least 12 years, even if the CONTRACTOR decides to discontinue the product line.

7.1 Procurement Submittal Items

A. The PROPOSER shall list the location of their maintenance shops in the Proposal. If the PROPOSER plans to use subcontractors for maintaining any or all of the associated equipment, the PROPOSER shall also list the address of these facilities.

B. The PROPOSER shall list in the Proposal the name, address, key contact personnel, and capabilities of the service center(s) providing warranty service.

C. The PROPOSER shall describe in the Proposal escalation procedures to be used in the event OWNER does not feel problems are being resolved in adequate time.

D. The PROPOSER shall state the method for handling and the turn-around time for the repair of the supplied consoles during the warranty and maintenance periods in the Proposal, reference Response Times in this section of the RFP.

E. The PROPOSER shall certify in the Proposal that compatible and equivalent board and component level parts for all equipment proposed shall be available during installation and shall continue to be available for the period of production of that equipment, or for a period of 12 years following contract execution, whichever is greater.

F. The PROPOSER shall state in the Proposal the locations and level of parts availability for all permanent parts depots serving the OWNER'S area.

G. The PROPOSER shall address in the Proposal, their approach to providing Contractor Support as described in this section of the RFP.

7.2 Maintainability

The following shall apply for maintainability of the entire system:

A. All equipment installed as a result of this RFP shall be maintainable to the extent practicable by commonly available test equipment. Specialized test equipment shall be identified, as required, and quoted.

B Maintenance shall be on a card or board level exchange basis. Cards or boards that are not field repairable shall be so identified. Turn-around time for return-and-repair boards shall be described in the Proposal.

C. All warranty and annual maintenance on the system fixed equipment shall be provided seven days a week, 24 hours a day, included weekends and holidays.

7.3 Maintenance/Warranty Periods

7.3.1 Pre-Acceptance Period

The system described herein shall be the total responsibility of the CONTRACTOR prior to system acceptance. During this period, any costs or expenses for maintenance shall be included in the cost of the project as provided for in the Price Proposal. The CONTRACTOR shall maintain and upgrade the operational software and hardware at its current or public-released level until the completion of system staging.

7.3.2 Warranty Period

A. The PROPOSER and subsequent CONTRACTOR shall warrant that the system, provided in response to this RFP, be substantially uninterrupted or error-free in operation and shall be guaranteed against faulty equipment and workmanship for a period of one year starting upon final acceptance of the entire system. During the warranty period, defects in the equipment or workmanship shall be repaired, fixed or replaced by the CONTRACTOR at no cost or expense to the OWNER.

B. The PROPOSER and subsequent CONTRACTOR shall also provide maintenance including preventative maintenance during the warranty period. This shall include maintenance and repair, including related labor for the installed system at no cost or expense to the OWNER. The items described in the Maintenance Standards of this section shall apply during the warranty period.

C. During the installation and warranty period, the CONTRACTOR shall provide, at no additional cost, commercially available upgrades of any and all software sold to the OWNER as part of this project. The frequency and timing of installation of upgrades during this period will be at the sole discretion of the OWNER based on availability by the CONTRACTOR.

7.3.2.1 Equipment Failures during Warranty

If a console fails more than twice during the warranty period, the CONTRACTOR shall meet with the OWNER to discuss and explain such failures. If, in the opinion of the OWNER, these failures indicate that the equipment is potentially prone to continuing failures, the CONTRACTOR shall replace such equipment at no cost to the OWNER.

7.3.2.2 New Equipment Purchases

Any new equipment purchased after system acceptance will be covered by its particular warranty period. Any maintenance contract shall accommodate the new equipment on a prorated basis from the date of installation to the expiration of the term of the maintenance contract in place at that time.

7.3.3 Annual Maintenance Period

The PROPOSER shall provide details and cost of maintenance contracts in the proposal. The first contract shall begin at the date and time of the expiration of the Warranty period. The PROPOSER shall also provide the details and cost of four additional, successive annual renewable maintenance contracts.

7.3.3.1 Hardware Maintenance Contract

The PROPOSER shall offer a maintenance contract for the consoles in their Proposal. The maintenance contract shall take effect immediately following the expiration of the warranty period, and be renewable on a yearly basis. The items described in the Maintenance Standards of this section shall apply during all hardware maintenance periods. The maintenance contract shall include preventive maintenance for the infrastructure.

7.3.3.2 Software Maintenance Contract

A. Any annual software license fees or software maintenance fees should be clearly identified in the Price Proposal and should either be included in this software maintenance contract fee or priced in full separately.

B. The PROPOSER shall offer in the Proposal a software maintenance contract to take effect immediately following the expiration of the warranty period, and to be renewable on a yearly basis.

C. During the software maintenance contract periods, the CONTRACTOR shall provide, at no additional cost, periodic upgrades of any and all system operational software. The frequency and timing of these upgrades during this period shall be at the sole discretion of the OWNER. This covers only upgrades by the CONTRACTOR or through its designated Original Equipment Manufacturer (OEM) or Software Provider that are:

- remedies for defective software;
- new releases that are corrective revisions for earlier versions; and/or
- no-cost enhancements to earlier releases.

D. New software releases that contain enhancements (i.e., new features and capabilities) shall be offered for purchase at agreed upon prices.

E. The CONTRACTOR shall make every effort to separate corrective revisions from enhancements. If the CONTRACTOR is unable to do so, and new releases are necessary to correct problem(s), then the entire release (including enhancements) shall be provided to the OWNER at no additional cost.

F. All back-up CD-ROMs and revised software manuals shall also be provided to the OWNER at no extra cost at the time of any software revisions. If deemed necessary by the OWNER, the CONTRACTOR shall perform software upgrades during evenings or weekends at no expense to the OWNER.

G. All software releases for all program-controlled devices shall be brought to the same release level prior to the conclusion of the maintenance period. All system definition parameters and other unique information (data sets) used to operate the mobile radio system or any associated sub-system included shall be backed-up onto removable media on a quarterly basis during the maintenance period by the CONTRACTOR at no cost to the OWNER. These media shall be turned over to the OWNER for safe, off-site storage. Backup functions shall be designed to run in an unattended mode with no requirement to change media during the process.

H. Any notices either generated and circulated internally by the CONTRACTOR or received by the CONTRACTOR from the OEM or Software Provider, alerting the CONTRACTOR to software problems that impact the OWNER's system, shall be passed on to the OWNER within 30 days of receipt of such material.

I. All conditions above also apply to all firmware installed in any products included as part of this system.

J. The PROPOSER shall provide in their Proposal a Software Support Package that provides periodic non-corrective upgrades that enhance the proposed software package. This package shall be separate from the corrective software support required as part of the maintenance contract and listed separately in the Price Proposal.

7.4 Maintenance Standards

A. The approach to maintenance of this system shall be preventive in nature.

In addition to preventive maintenance, it is expected, following cutover to the OWNER, that some system optimization and adjustment will be required. This work shall be coordinated through and with the OWNER'S Project Manager or other designated representative.

B. As a minimum, replacement parts shall be equal in quality and ratings to the original parts.

C. Equipment shall be maintained in clean condition. Oil, dust and other foreign substances shall be removed on a routine basis.

D. Equipment and system performance shall be maintained at the level initially described in these equipment and systems specifications. The service organization shall maintain records to confirm that this has been performed.

Records shall be available for OWNER'S inspection upon request. Records shall be maintained by the CONTRACTOR'S radio maintenance shop throughout the initial maintenance and warranty periods (and any subsequent maintenance contract period), and shall revert to the OWNER upon termination of the warranty (or maintenance contract).

E. Routine maintenance procedures recommended by the equipment manufacturer shall be followed.

F. The CONTRACTOR shall provide only factory trained and authorized maintenance personnel.

G The CONTRACTOR or authorized service organization(s) shall maintain comprehensive installation and instruction manuals for all system equipment. These manuals shall be the property of the OWNER, and shall revert to the OWNER at such time as the OWNER assumes the maintenance responsibility for the system.

7.5 Response Times

B. The CONTRACTOR shall have a qualified technician available to respond to the location of major failures within 1 hour during normal working hours (8 AM to 5 PM weekdays), and within 2 hours at other times. Major failures not caused by outside effects such as acts of God are expected to be resolved within 2 hours after arrival of the technician. Major failures are defined in Section 5 of this RFP.

C. Certain major failures may occur as a result of extraordinary multiple and/or sequential failures of individual parts, systems, or components, or as a result of secondary events (e.g., fire) which are beyond the reasonable control of the CONTRACTOR.

D. In such instances, where specially fabricated parts or components are required to repair the consoles or where necessary repairs clearly exceed those which are reasonably considered as "field repairs", the CONTRACTOR will not be required to make necessary repairs within the 2 hour time frame noted above. The CONTRACTOR, or his designated representative, will be required to meet with the OWNER'S representative within that time frame however, to develop a mutually agreeable timetable for both interim repairs and total system restoration.

E. Minor Failure Response Times

Report Time	Correction Goal- Response Time
00:00-12:00	Same working day – overtime if needed
12:01-24:00	Next working day – start job in AM

F. At any time that the OWNER declares a major failure that proves not to meet the criteria listed above, the OWNER will pay the prevailing rate for the labor hours of the CONTRACTOR technician responding to the trouble.

G. For each occurrence where the CONTRACTOR cannot meet the above response time criteria for minor failures for any reason, the CONTRACTOR will provide legal remedy for that month, to be the cost associated with one-twelfth of the non-discounted value of the first year of maintenance. This may be either an extension of warranty and maintenance periods or the cost value, at the option of the OWNER. Each extension of the warranty and maintenance periods shall be cumulative and no extensions so required shall run concurrently. This legal remedy applies only to the failed equipment in the case of minor failures.

H. If the failure is major, as defined in this RFP, and the CONTRACTOR fails to respond within the specified time frame, the legal remedy described in the preceding paragraph shall apply to the entire system. The legal remedy for the entire system shall be limited to three occurrences of failure to meet the response times for major failures. On the fourth occurrence, the CONTRACTOR may be deemed to be in default, and the OWNER may, at their option, enforce the default provisions of the contract.

I. Response times for all minor failures shall be the same during the 30-day performance test period.

7.6 Preventive Maintenance

All maintenance programs provided by the CONTRACTOR shall provide routine preventive maintenance of the infrastructure on a regular basis as the consoles require.

7.7 Spare Parts

A sufficient supply of spare parts shall be readily available to allow immediate restoration of minimal operation of the consoles on a rolling repair-and-return basis. Other parts shall be available via emergency request and air freighted within twenty-four hours of the equipment failure. The CONTRACTOR may draw upon this spares inventory as necessary during the warranty/maintenance period, replacing those used on an as used basis

The PROPOSER shall provide the cost of recommended critical spare parts in the Price Proposal. The CONTRACTOR shall provide a detailed list of critical spare parts at the DDR.

At the end of the warranty/maintenance period, the full complement of spares shall be delivered to the OWNER in a repaired condition.

Further, if during the one-year warranty period, less than 95 percent of repair and returns are not completed in ten days or less, the spares inventory counts shall be doubled at no additional expense to the OWNER. These additional spares shall also be delivered to the OWNER as specified above. The purpose of this requirement is to ensure that adequate quantities of available spares are maintained on the shelf.

7.8 Contractor Support

The CONTRACTOR is expected to provide support for the life of the consoles (12 years from contract execution) in the areas of service, modernization, and updating at minimum cost to the OWNER. In this regard, "support" shall be considered to include professional and timely service in the repair, maintenance, and modifications of the system during Warranty; immediate availability and provision of new parts, materials and equipment beyond that specified herein; service and design/engineering counsel following Warranty for the life of the system; and any such response as is customary and expected of a service-oriented business. The PROPOSER shall address this issue in the Proposal, describing also the mechanisms for reporting the availability of upgrades and for procuring and implementing those upgrades.

In the event that the CONTRACTOR develops and announces for sale to the public, equipment, system components, or software that are newer, less expensive, or better suited to the OWNER'S needs after the date of the contract, and prior to the DDR, the OWNER shall have the right to cancel any portion of the system under that contract (subject to mutually negotiated cancellation charges, impact on schedule, or related effects) and be granted a credit toward the

purchase price of any such newer components as hereinafter specified. The CONTRACTOR shall provide the OWNER with timely notice of the availability of such equipment or components.

8.0 Training

8.1 Contractor's Responsibilities

8.1.1 Types of Training

The CONTRACTOR shall provide the types of training specified below to the indicated number of personnel:

Type of Training	Number of Personnel
Console Operator	48
Console System Administration	5
Console System Maintenance	5

When multiple training sessions are required, each session should be given during a different week in order to compensate for scheduling conflicts.

PROPOSER: Provide the following details on the training offered:

- **Course synopsis**
- **Course outline**
- **Recommended class size**
- **Recommended number of sessions**
- **Estimated duration**
- **Class schedule (when class should be held in relation to project implementation)**
- **Class location**

In the price forms, provide a quote for each type of training as a separate line item.

8.1.2 Training Materials

The CONTRACTOR shall provide all training materials, manuals, schematics, and other documentation.

The CONTRACTOR shall customize console operator training and training materials, including any quick-reference guides, to the PURCHASER's system configuration. The CONTRACTOR shall provide draft training materials 20 days prior to the beginning of class sessions for the PURCHASER's review and approval.

8.2 Purchaser's Responsibilities

8.2.1 Personnel's Travel and Lodging

The PURCHASER will be responsible for travel and lodging expenses incurred by the Purchaser's personnel in the course of the training program.

8.2.2 Review of Training Materials

The PURCHASER will review console operator training course content and materials, and provide comments. When all comments have been addressed, the PURCHASER will approve course content and materials.

8.2.3 On-the-Job Training

As part of on-the-job training, the PURCHASER's technicians may work alongside the CONTRACTOR's personnel during installation, testing, and warranty phases of this project.

8.3 Training Descriptions

8.3.1 General

The use of audio and visual aids, as well as actual equipment demonstrations, is required for all courses. The PURCHASER will not accept a course consisting primarily of a trainer lecturing trainees.

The CONTRACTOR shall provide professionally produced training materials to all students. The manuals shall contain clean, legible copies of all written material and visual aids used by the instructor.

8.3.2 OPTION: Continuing Education

The CONTRACTOR shall provide on electronic medium a training session specifically developed for the PURCHASER's system for use in continuing education.

PROPOSER: Provide pricing for generic training sessions on electronic media where available, for the proposed equipment.

8.3.3 Console Operator Training

Target audience: Dispatchers, supervisors and system managers

Location: On-site, on the PURCHASER's operational consoles, with no more than two people on a console

Schedule: Prior to system cutover

Duration: Four to eight hours

Description:

- Hands-on familiarization with console operation, including all features and functionality of the console or those which the PURCHASER is implementing.
- An overview of the PURCHASER's system
- Hands-on familiarization with the use of the backup control stations furnished with the new system

8.3.4 Console System Administration Training

Target audience: Engineers, supervisors and managers involved in radio system administration, management and control

Location: On-site

Schedule: Prior to system cutover

Duration: As recommended by the CONTRACTOR

Description:

- At the end of the training, the participants will be able to administer and manage the console system. The training should include a system overview and theory of operation of the entire system.
- Provides hands-on training on the system management, support equipment, and support functions of the console system.
- Covers system programming, including console configuration.

8.3.5 Maintenance Training

Target audience: Maintenance technicians and supervisors

Location: Combination of factory training or on-site formal training

Schedule: During system implementation

Duration: As recommended by the CONTRACTOR

Description: Training shall be sufficient to enable a competent technician to troubleshoot, maintain and program all consoles and ancillary equipment to the board level.