

**North Central Region Project Group,  
Pennsylvania**

**Request for Proposal (RFP)  
for Regional Emergency  
Services Internet  
Protocol-based Network  
(ESInet) via  
Fiber Connectivity**

**April 9, 2017**

# **North Central Region Project Group (NCRPG) Request for Proposal for Regional Emergency Services Internet Protocol-based Network**

## ***Background and Introduction***

Notice of Invitation – The North Central Region project group (NCRPG) invites qualified vendors to submit a proposal to provide fiber connectivity for a regional ESInet solution.

There are 8 counties in the northcentral region of Pennsylvania participating in this project: Clinton, Columbia, Lycoming, Mifflin, Snyder, Sullivan, Tioga and Union. Columbia County serves as a host county for the north central region project group.

The counties of Clinton, Columbia, Lycoming, Sullivan, Tioga and Union have been working together for the past year with the goals of improving the efficiency and resilience of their 9-1-1 systems, along with reducing the overall costs for their disparate systems. The result of this work is the plan for a NG9-1-1 ESInet that connects the counties, a CPE system with a geo-diverse switch at its core instead of five separate systems, and a regional logger/recorder system that utilizes a Central Archive Server (CAS) instead of six separate systems. Mifflin and Snyder Counties have joined into the north central project to connect in to the ESInet and share in use of the centralized CPE.

The north central region is planning an ESInet that provides connectivity for the participating counties' 911 centers with sufficient capacity to: (1) enable shared 911 telephony and logging recorder services, (2) allow the transfer of data among the counties, (3) provide redundancy and resiliency for the region's 911 centers, and (4) accommodate additional shared services in the future.

NCRPG is seeking a highly-qualified vendor to provide and manage the infrastructure that must be robust enough to provide the services selected. The reliability must be at 99.999% for critical applications.

It is anticipated that the successful vendor(s) will provide all hardware, software, installation and integration services, training and maintenance. The system will use state-of-the-art technology. The contract will be a firm fixed price contract. The successful vendor will be responsible for integration of all existing equipment interfacing to their proposed network elements. Proposers must submit a turnkey bid for all elements described within this RFP.

The total estimated population for the north central region project group is 400,780. The population profile for the counties of the region is:

Estimated Population as of July 2016	Clinton	Columbia	Lycoming	Mifflin
	39,233	66,420	115,248	46,342
	Snyder	Sullivan	Tioga	Union
	40,468	6,137	41,467	45,465

The total land mass for the region is approximately 5,239.13 square miles. The land area profile for the counties of the region is:

Estimated Land Area in Square Miles as of 2010	Clinton	Columbia	Lycoming	Mifflin
	887.98	483.11	1,228.59	411.03
	Snyder	Sullivan	Tioga	Union
	328.71	449.94	1,133.79	315.98

The distribution of population per square mile for the counties of the region is:

Estimated Population per Square Miles as of 2010	Clinton	Columbia	Lycoming	Mifflin
	44.2	139.3	94.5	113.6
	Snyder	Sullivan	Tioga	Union
	120.8	14.3	37.0	142.2

The addresses for the participating county 911 centers requiring fiber connectivity are as follows:

Clinton County  
311 Frederick Street, Suite A  
Lock Haven, PA 17745

Snyder County  
30 Universal Road  
Selinsgrove, PA 17870

Columbia County  
26 West First Street  
Bloomsburg, PA 17815

Sullivan County  
6864 Route 220  
Laporte, PA 18626

Lycoming County  
542 County Farm Road, Suite 101  
Montoursville, PA 17754

Tioga County  
99 William Farrell Drive  
Wellsboro, PA 16901

Mifflin County  
20 North Wayne Street  
Lewistown, PA 17044

Union County  
155 North 15<sup>th</sup> Street  
Lewisburg, PA 17837

The sole contact for the north central project group and the sole contact for questions regarding this proposal will be the region's consultant:

Michael McGrady  
MCM Consulting Group, Inc.  
681 Maurus Street  
Saint Marys, PA 15857  
412-580-7632 (Phone)  
724-941-3137 (Fax)  
[mmcgrady@MCMConsultingGrp.com](mailto:mmcgrady@MCMConsultingGrp.com)  
[www.mcmconsultinggrp.com](http://www.mcmconsultinggrp.com)

Vendors are not permitted to contact north central region project counties or employees with questions regarding this proposal. Vendors who do so will be disqualified.

## ***Instructions to Vendors***

### ***Submission of Proposals***

It is intended that each proposal furnish the information requested by this RFP. Unless specifically requested, promotional literature is not wanted and will not be considered to meet any of the requirements of this RFP. Each proposal shall include a Letter of Conveyance, not to exceed two pages in length. The proposal must bear the signature of an authorized representative of the prime Contractor and must designate by name not more than two individuals authorized to negotiate and sign the contract with NCRPG on behalf of the prime Contractor. The Letter of Conveyance may also briefly set forth any particular information the Proposer wishes to bring to NCRPG's attention.

The Contractor shall deliver one (1) original and four (4) copies of the proposal to:

Regional (ESInet) Fiber Connectivity  
Columbia County  
11 West Main Street  
Bloomsburg Pa 17815

Faxes or electronic copies will not be accepted. NCRPG reserves the right to accept or reject any or all proposals.

### ***Schedule of Events***

<b>April 9, 2017</b>	First Advertisement
<b>April 21, 2017</b>	Last date for questions/clarifications for Proposers. All questions must be in writing, email is acceptable.
<b>May 3, 2017</b>	RFP Response due by 4:00 p.m. (No Proposals accepted after this time)
<b>May 4, 2017</b>	Responses will be opened on May n, 2017 at the Commissioners Meeting.

### ***Voluntary Site Inspections***

Prospective Proposers can request to inspect the participating counties' 911 centers for the location of the proposed equipment.

### ***Proposers Examination of the RFP***

Proposers shall examine all information and materials contained in and with this RFP. Failure to do so shall be at the Proposers risk.

### ***Proposals Considered Firm***

All proposals in response to the RFP will be considered firm and cannot be withdrawn until 90 days after the scheduled proposal due date or until the award of a contract to a Proposer, whichever comes first.

### ***Withdrawal of Proposals***

Proposals may be withdrawn by written notice received by NCRPG prior to the proposal due time and date.

### ***Incurring Costs***

NCRPG shall not be liable for any costs incurred by the Proposers in preparing, submitting or presenting proposals to NCRPG, or in satisfying any other requirements. NCRPG shall not reimburse any costs incurred by Proposers in anticipation of being awarded the contract under this RFP.

### ***Insurance, Penalties, Payment Terms, Litigation***

**Contractors Liability Insurance.** The Contractor, during the progress of the work and until or upon completion of the entire contract, shall purchase and maintain such insurance as will protect it from claims set forth below which may arise out of or result from the Contractor's operations under the Contract, whether such operations by Itself or by any sub contractor or by anyone directly or indirectly employed by any of them or by anyone for whose acts any of them may be liable:

1. Claims under Worker Compensation Disability Benefit and other similar employee benefit Acts:
2. Claims for damages because of bodily injury, occupational sickness or disease, or death of its employees, and claims Insured by usual personal injury liability coverage:
3. Claims for damages because of bodily injury, sickness or disease, or death, of any person other than its employees, and claims insured by usual personal injury liability coverage; and
4. Claims for damages because of injury to or destruction of tangible property including loss of use resulting there from.

**Insurance Limits.** The Insurance required shall be written for not less than \$1 million. The insurance shall also name Columbia County as an additional insured as its interests may appear.

**Certificates of Insurance.** Certificates of Insurance acceptable to Columbia County shall be filed with the County prior to the commencement of onsite work. These certificates shall contain a provision that coverages afforded under the policies will not be canceled or changed until at least ninety (90) days written notice has been given to the County.

In addition to these insurances, the successful Contractor will incur a penalty for failure to meet the contractual implementation deadline. This penalty will be in the amount of 1% of the final Contract Amount for each week or portion thereof the implementation deadline is not met.

**Payments.** Columbia County shall pay 90% of each properly submitted and accepted invoice within thirty (30) days of receipt. The County may withhold all or any part of payment if the Contractor is not performing in accordance with the contract. The final payment and release of retention shall become due and payable thirty (30) days after the date of completion and acceptance of the work, provided that Contractor is in compliance with the contract.

Any litigation pertaining to this section shall be under the laws of the Commonwealth of Pennsylvania and litigation shall take place in Columbia County, Pennsylvania.

# ***General Conditions***

## ***Pricing, Payments and Retainage***

Negotiated prices shall be firm and not subject to increase during the term of any contractual agreement arising between NCRPG and the successful Proposer as a result of the RFP. Pricing should include both the non-recurring costs, i.e., new fiber build, router installation, fiber connectivity, as well as monthly recurring costs, such as transport and managed router costs and network monitoring services.

Pricing should be effective for 5 years from date of contract signing to enable additional NCRPG counties to connect to the regional ESInet network subsequent to the initial implementation. Therefore, any anticipated cost increases per year for a period of five years should be included.

## ***Open Procurement***

NCRPG reserves the right to lease and/or purchase more or less of each item or service at the unit price offered in the Proposers system, unless the Proposer specifically and explicitly limits the response in this regard. NCRPG reserves the right to negotiate with Proposers regarding variations to the original proposal(s) that may be in the best interest of NCRPG. NCRPG reserves the right to accept or reject any or all proposals.

## ***New Equipment, Software Version***

NCRPG shall accept only new equipment and the latest version of firmware, software and/or operating systems. Used, reconditioned, refurbished and/or remanufactured equipment will not be accepted. Beta version of systems and software are also not acceptable.

## ***Contractor Commitment***

The Contractor shall maintain, manage and upgrade the operational software and hardware at its current or public-released level for the term of the contract or any subsequent maintenance contracts with NCRPG, pursuant to this RFP.

The Contractor shall agree to provide a minimum of one (1) and a maximum two (2) hour response time on emergency repairs for all equipment and software as defined by NCRPG, 24 hours per day, 7 days per week. Response can be via remote access to the network or on-site presence as determined by the issue being experienced and actions needed for resolution. Normal operation of all equipment and software shall be restored within 24 hours. Failure to comply with response time intervals shall result in liquidated damages in an amount to be agreed upon in the final contract.



The Contractor shall also provide access to a 24/7/365 network operations center (NOC) to report outages or issues.

Notification of the opening of a Trouble Ticket through the help line shall occur within 15 minutes of the call being placed to the help line. A Trouble Escalation Process must be defined by each Proposer to ensure satisfactory problem resolution will occur. There should be a web portal available for tracking reported issues.

### ***News Release***

Proposers shall at no time make any news or advertising releases pertaining to this RFP for any purpose without the prior written approval of NCRPG.

### ***Statement of Time***

A period of time, unless stated as a number of workdays, shall include Saturdays, Sundays, and holidays.

### ***Qualifications of Proposers***

NCRPG may make such reasonable investigations as deemed proper and necessary to determine the ability of solicited and unsolicited Proposers to perform the work. Proposers shall furnish NCRPG all such information and data for this purpose as may be requested. NCRPG reserves the right to inspect Proposers' physical plants prior to award to satisfy questions regarding Proposer capabilities. NCRPG further reserves the right to reject any proposal if the evidence submitted by or investigations of such Proposer fails to satisfy NCRPG that such Proposer is properly qualified to carry out the obligations of the contract and to complete the work contemplated herein. In addition, the Proposers must comply with any requirements to be licensed to do business in the Commonwealth of Pennsylvania and must demonstrate they are in compliance with all state, county and local laws and ordinances and are not delinquent with all taxing agencies including federal, state, county and local throughout the United States. Proposers must provide evidence that they are authorized dealers or distributors and warranty centers for all hardware and software components included in their proposal.

## ***Proposal Format***

The proposal shall contain the following sections, each clearly labeled with the section number at the top of the page, in the order and format described:

<b><u>Section</u></b>	<b><u>Description</u></b>
1.	Letter of Conveyance, signed by a principal of the vendor who is authorized to negotiate on behalf of the vendor.
2.	Executive Summary.
3.	Exceptions to General Conditions Section.
4.	Response to each section heading and/or numbered paragraph in Technical Specifications Section.
5.	Explanation of "Exceptions" taken in (4) above. Note that any "clarifications" provided for sections or numbered paragraphs that have been asserted to be in compliance in (4) above will generally negate a "comply" statement; this will cause the Proposer to be judged non-compliant with that section or paragraph. This does not necessarily mean, however, that the proposal will be rejected.
6.	Complete description of the proposed system hardware and software (if applicable).
7.	Complete description of any recommended system hardware, other than that proposed, that the NCRPG must purchase.
8.	Company description, qualifications to include: Dun & Bradstreet number, Federal IRS Number, and Bank reference.
9.	At least 3 reference sites, with 1 being in the last two years, of similar projects with contact name, phone number, address, applications installed, department size, average calls for service, population served, date of installation and actual project timeline from award of contract through final system acceptance. NCRPG reserves the right to contact these clients as references.
10.	Proposed services. Proposers should include a diagram showing the major components (hardware, software, basic network layout), accompanied by short descriptions of the proposed components in terms of their value/benefit to NCRPG 911 centers and their efficiencies and scalability in the regional design, data conversion and migration, implementation, documentation, and training, as well as ongoing technical support,

warranty, maintenance and system upgrade support services. Proposed services should include details regarding the new fiber construction required to connect each of the counties.

11. A project management proposal including overall project schedule and methodology which describes project tracking, reporting, resource planning, contingency plans, etc.
12. Delivery and implementation schedule.
13. Completed Cost Sheets with comprehensive, itemized pricing for each element of the Proposers bid and a summary of the total cost for all bid elements. Both non-recurring and recurring costs shall be listed.
14. Resumes of key staff involved in the design, implementation, and management of the project. NCRPG reserves the right to have on-site vendor personnel as well as any off-site vendor personnel who may be remotely accessing system to submit to a criminal background check and to meet CLEAN/CJIS use standards.
15. The Proposer will attach a copy of the Technical Specifications Section.
16. Proposer must provide proof of having installed and maintained (currently) equipment substantially similar to the equipment they are proposing.
17. Proposer must provide a detailed plan indicating information on the servicing agency that will maintain the system, an outline on this organization's capabilities and a plan to provide the required responses to service requirement. If proposer or servicing agency provides network monitoring via a network operations center or similar functionality, a detailed description of monitoring services should be included in the proposal.

The proposal shall be submitted in sealed envelope with proper identification. Proposal packages shall be opened by NCRPG's Consultant and tabled for review.

### ***Selection Process***

The selection of an ESInet to provide the necessary connectivity and serve NCRPG's needs is an important and complex task. NCRPG recognizes that several Proposers can provide the equipment, services, software, and support that would adequately meet the needs of NCRPG. NCRPG selection committee will, thus, exercise both objective and subjective rationale in this selection process. This process is outlined in the following subsections. This RFP is intended to provide interested Proposers with uniform

information concerning the conditions for submitting proposals. In responding to this RFP, Proposers shall adhere to the established format. By so doing, comparable objective data will be provided for NCRPG's review and analysis.

### **Proposal Evaluation Criteria**

The criterion upon which the evaluation of the proposals will be based includes, but is not limited to, the following:

1. Total cost of the equipment and services required by NCRPG, and all other items constituting total price to NCRPG. A contract will not necessarily be awarded for the lowest price.
2. Responsive and innovative future migration design features and contractor's history with similar systems installed and/or maintained.
3. Contractor's overall past performance and support including reputation with similar customers, responsiveness to NCRPG's unique requests, innovations, reports, and overall ability to commit to this project.
4. Contractor's past performance in management and monitoring of similar networks.
5. Completeness of proposal.
6. Quality and depth of references.
7. The ability of the contractor to provide Support Service to system.
8. Special services the contractor might supply.
9. Quality and extent of the documentation to be provided.
10. Delivery and Installation timeframe commitments.
11. Warranty, maintenance and ongoing technical support terms and conditions.
12. Fewest exceptions to RFP specifications.

NCRPG will select the Proposer whom, in the opinion of NCRPG has made the best overall proposal and shall award the contract to that Proposer. Final selection will be made by NCRPG. NCRPG may reject any or all proposals.

## ***Taxes***

NCRPG will be tax exempt from both Federal and Commonwealth of Pennsylvania sales taxes.

## ***Technical Specifications/Scope of Work***

NCRPG is planning a regional ESInet network that will connect the 911 centers at Clinton, Columbia, Lycoming, Mifflin, Snyder, Sullivan, Tioga and Union Counties, with the potential for additional counties to join the regional ESInet implementation in the future. The regional deployment should offer efficiencies in system configuration and a robust network capacity that will enable the participating counties' 911 centers to share information and transfer data from multiple core services.

NCRPG is seeking a highly-qualified vendor to provide, manage and monitor the infrastructure that must be robust enough to provide the services selected. The reliability must be 99.999% for critical services.

The information provided here should serve as a guide to the proposer in developing a proposal for the network and connectivity required.

### ***ESInet Implementation Schedule Requirements***

The implementation schedule must support completion of the ESInet connectivity for the counties of the regional group by July 31, 2017.

### ***ESInet Fiber Connectivity Description***

NCRPG is seeking a regional ESInet network which the participating counties can connect via fiber to a private wide area network (WAN) that is a MPLS-based, 100Mbps (minimum) managed router network with full diverse fiber entry and fiber route diversity. The exception to this fiber diversity will be the connectivity to Mifflin and Sullivan counties, where there will be a single-entry fiber connection to each (microwave will provide the alternate path for redundancy). Columbia and Lycoming counties will serve as the primary points in the network and thus should be provided with high-capacity connections, i.e., 1 Gps., into their facilities. The resultant ESInet fiber network for NCRPG must be redundant and resilient.

### ***System Basic Requirements Back Up Power***

The system must have provisions for battery backup in all components that allow the system to function for a minimum of two (2) hours after commercial power is lost.

### ***System Management Software***

In-depth detail should be provided with specific operations detail on the system management software, and demonstration programs or power point presentations to deliver a representative demonstration would be helpful. The ability to provide a webinar if required would also be to the advantage of both the county and the vendor.

## ***System Backup Requirements***

The router itself should not be a potential single point of failure (SPOF). The proposed solution should include consideration for redundant power supplies and dual router cards and connections to ensure there is sufficient redundancy.

## ***Required Services***

### ***Implementation***

The Contractor will provide a schedule and project management plan for the implementation phase of this project including a personnel plan with resumes of key project personnel to be submitted. The Contractor shall also provide a complete set of as-built documentation including system/sub-system block diagrams, cabling diagrams, circuit IDs, port assignments, etc.

### ***Training***

The Contractor will provide an overview of the equipment installed and connectivity, as well as basic troubleshooting techniques to help the counties in determining there is an issue and in obtaining relevant information that can be provided for inclusion in a trouble ticket or call

### ***Systems Testing and Acceptance***

Acceptance of the final system shall be based upon satisfactory performance in the actual NCRPG operating environment. The Contractor shall perform the testing and acceptance procedures described below.

At least forty-five (45) days prior to commencement of the acceptance testing, the Contractor shall submit for approval a detailed acceptance test plan based on the general procedures described herein. The test plan shall document how each functional specification is to be tested, the method of testing, and the anticipated results.

Within fourteen (14) days after completion of acceptance testing, the Contractor shall provide a written report to document compliance with the test, and to indicate test results, problems, solutions, and a schedule to affect such solutions.

The Contractor shall demonstrate every element of the hardware configuration and shall exercise every assembly or sub-assembly in the course of the test. The intent of the functional acceptance test is to ensure that every circuit is activated and demonstrated to be operational at some point. This can be done most efficiently with several well-planned end-to-end operational tests.

The Contractor shall demonstrate every functional attribute of the software, including system software, operating system, utilities, and all ancillary application program modules. Tests will include if applicable, but shall not be limited to the following and the results included in the test report:

- Verification of all alarm monitoring and reporting functional specifications. (System alarm codes and definitions will be provided by the vendor.)
- Verification of all commands to external systems.
- Verification of all hardware performance according to manufacturer's specifications.
- Verification that all installed hardware and cabling meet all applicable safety related codes and functional specifications.
- Verification that all hardware is properly grounded to a low impedance (< 5 ohms) single point earth ground.
- Verification that IP packets can successfully navigate throughout the NCRPG ESInet.
- Automatic backup switching and recovery of any redundant subsystems or components under failure.
- Demonstration of all management information and reporting requirements.

The Contractor shall demonstrate every functional attribute of any interfaces. After successful completion of the above tests, the Contractor shall participate in a thirty (30) day operational test of the system. This shall consist of normal utilization of the entire system. During this period, the system shall experience no major component failures and no major software malfunctions.

In the event the Contractor alerts the user in advance that the system will be experiencing a specific software degradation for a particular period (for example, while implementing new software revisions or troubleshooting for problems that have not yet exhibited themselves in operation), the 30-day operational test may be suspended for the duration of that period, then re-established where it left off.

In the event that the system experiences a major unanticipated hardware or software failure, the Contractor shall correct the hardware or software failure, after which a new 30-day test period may be initiated, at the option of NCRPG.

No disruption of day-to-day operations may occur during implementation of this project.



## ***Maintenance Qualifications***

1. Proposer must provide a detailed ongoing maintenance plan to ensure that NCRPG's equipment is maintained in a satisfactory fashion. This plan is to include the following.
  - a. Description of Proposers capabilities.
  - b. Details of plan on providing 24 by 7 services to the NCRPG's facilities.
  - c. Identification of equipment and specific individuals available and qualified to service the centers equipment.
  - d. Response time guaranteed commitment to service on site equipment of the center.
  - e. Commitment of spare equipment on shelf for maintaining the NCRPG's network.
  - f. Description of the experience dealing with equipment similar to the proposed equipment by Proposer's personnel.
  - g. Proposer should provide a list of the suggested spare parts and components required to maintain this system and provide pricing for these materials.
  - h. Proposer should provide delivery time lines for spare equipment to determine the appropriate turn around on spare and replacement materials.
  - i. Proposer should provide a list of the materials and equipment produced by them and a detailed list of materials (key components, not simple materials) along with delivery times and actual source details.

## ***Final Engineering and System Presentation***

The final Proposer or Proposers may be required to make a final presentation with detailed engineering and systems descriptions. This session would be designed to finalize the system, its specifics and technical aspects, operating features and final capabilities.