BCG
Buffalo Computer Graphics

Web Based Emergency Management Information System
WV Homeland Security and Emergency Management
RFP #HSE 1900000001

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CONTENTS

TITLE PAGE

RFP Subject: Web Based Emergency Management Information System
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Buffalo Computer Graphics, Inc. (BCG) appreciates the opportunity to respond to West Virginia Department of Homeland Security and Emergency Management's (WVDHSEM) request for proposal for a web-based statewide EMIS enterprise solution.

BCG has been privileged to provide emergency management focused software solutions for American and Canadian governments and private entities for sixteen years, and maritime training, simulation, and communication software and hardware for thirty-six years. We have become very familiar with the requirements and technology landscape of emergency management agencies and departments during that time and believe that we can provide a tailored configurable-off-the-shelf software solution that meets or exceeds the needs of WVDHSEM, all levels of government, and private sector partners involved with the State's EMIS platform.

BCG's proposal includes a configurable software solution based on its COTS DisasterLAN (DLAN) emergency management information system software platform that can serve as a central emergency response platform and EMIS software system with scalable state-wide coverage. This solution will accommodate all WVDHSEM's projected users including FEMA, Region III States, Federal Agency Reps, WV State Agencies, Local Jurisdictions, Non-Governmental Organizations, and other organizations and partners in terms of both scalability and feature sets designed for multi-agency collaboration. The DLAN system facilitates both day-to-day and emergency incidents by providing a modern web-based software solution with mobile applications.

BCG's DLAN products have already been successfully implemented at multiple States and Provinces in North America including New York, Vermont, and the Province of Alberta Canada. As a current example, the New York State Department of Homeland Security & Emergency Service currently uses BCG's software as part of their NY-Responds statewide emergency management system, which can be accessed by all 62 New York State Counties as part of the State-wide implementation. The DLAN system is also utilized by all NYS Functional Groups, State Agencies, New York State Division of Military and Naval Affairs (National Guard), and many other stakeholders and organizations. BCG believes a similar model and implementation methodology would be successful for the State of West Virginia.

BCG is a company that is committed to excellence in emergency and incident management. The company requires that all employees that work on DLAN train in FEMA's ICS courses up to the 400 level; many employees exceed this. Additionally, BCG's core management and many engineer staff come from an emergency management or fire background. BCG can provide trained ICS staff and IMAT teams to supplement WVDHSEM's EMIS during a response. BCG understands the Emergency Operation Center environment, field response, and planning better than other software vendors, because we are emergency managers ourselves. This knowledge shines through in DLAN's thoughtful design, its ability to digitize key processes, and its multi-agency ready feature set. The system

allows users to not just capture information for situational awareness and accountability, but to operationalize it in a meaningful way for effective decision making, prioritization, and task completion.

Thank you for the opportunity to present our DLAN system in our response to this RFP which we believe will successfully address WVDHSEM's mission to support statewide use by state agencies, local governments, regional and national partners, and private response partners throughout both day-to-day use and all areas of homeland security and emergency management.

Sincerely,

Patrick J. Cerra
Proposal Manager, BCG
23 April, 2019

4.1 BACKGROUND AND CURRENT OPERATING ENVIRONMENT

The DLAN software system is designed in such a way as to allow all levels of government, organizations, agencies, departments, jurisdictions, and partners to collaborate, visualize, and share critical information in one centralized platform. DLAN is interoperable by nature, and can integrate with other EMIS systems, IT systems, and disparate databases in order to provide a common operational environment for planning, response, decision making, situational awareness sharing, and reporting. DLAN allows local governments to make resource requests of WVDHSEM using DLAN's Resource Request Tickets, and have WVDHSEM staff triage those requests, handle them at the state level or forward information to Regional or Federal level if appropriate. WVDHSEM managers and other designated roles will be able to view summary and critical situational awareness information on visual Status Boards and the DLAN GIS Premium map viewer. The DLAN system also provides the capability to generate both automated and manually triggered notifications internally on the system and externally via email and text message. Notifications and alerts are available for key conditions such as incident creation, resource requests routed to a role for completion, and Situation Report contribution due from your role.

This real-time coordinating and management of situational information, ESRI based GIS common operating picture map, and resources during an emergency will allow WVDHSEM to share real-time situational awareness with localities and partner agencies across the State. We believe that BCG's approach and DLAN software system will allow WVDHSEM to deploy an EMIS with a modern proven web and mobile enabled technologies that is interoperable with other Federal, State, Local, and Private EMIS solutions using standard communication technologies, and that can leverage existing proven toolsets and data that WVDHSEM has, such as ESRI ArcGIS layers, maps, and other integration points.

4.2 PROJECT GOALS AND MANDATORY REQUIREMENTS

BCG will use a knowledge transfer and system configuration approach to deliver a successful project implementation for WVDHSEM. BCG shall work with WVDHSEM's project team and steering committee (stakeholders) to deliver knowledge transfer on the Software and receive knowledge transfer on WVDHSEM's requirements. Together, BCG and WVDHSEM will configure the Software to best meet the State's needs. BCG's project implementation will consist of four phases: Planning, Configuration, Training, and Deployment. BCG shall provide onsite instructor led training; this will provide WVDHSEM everything it needs to become self-sufficient with the use of the DLAN software system, including future configuration adjustments, product administration, user account management, end user training, and system use after project Go Live.

BCG understands the scope of this project to include the items listed below:

System Installation

BCG will install the latest version of its DLAN Software in WVDHSEM's datacenter with replication to BCG's Cloud datacenters (NOTE: BCG could also provide a fully managed cloud hosted solution if desired).

Needs Analysis & Knowledge Transfer

BCG will, in conjunction with WVDHSEM perform knowledge transfer to WVDHSEM personnel, imparting understanding of the software's general and specific capabilities with the goal of the State becoming self-sufficient in the operation of the software.

BCG will, in conjunction with the State, conduct a kickoff and needs analysis meeting to determine how the State operates during day to day and emergency situations, how the EOC functions, how information flows between users/roles, and key paper or electronic workflows that can be digitized with the use of DLAN software.

Project Management

BCG will appoint a project manager. The project manager will be responsible for developing the documentation required by WVDHSEM as well as for conducting project status meetings. BCG will track issues in an issue ledger or software system. It will be the responsibility of the project manager to facilitate communication between the BCG and State of WVDHSEM teams.

Installation

BCG will install the DLAN software for WVDHSEM. Installation includes the following modules:

- Ticket Manager Premium
- Status Board Builder
- Communication Center
- Mass Notification
- Mobile Responder
- GIS Premium

- Social Media Premium
- Phonebook Premium
- ICS Forms Module
- Incident Action Plans
- Situation Report
- Damage Assessment
- Reference Library

- Incident Folders
- Role Checklist
- Finance
- Resource Database
- Asset Tracking
- Shelter Management Form, Report, & Board

- Road Closure Form, Report, Board
- Role/Task Status Report & Board
- Chat
- User List
- System Administration
- Online Help
- System Documentation
- Training Site

Replication to Cloud

BCG will provide replication to BCG's cloud with primary, secondary, and tertiary replication sites available at three geographically separate and secure datacenters. The uptime on the solution will be 99.9% excluding scheduled maintenance windows. All data will be backed up in 15 minute increments with full backups nightly. This backup strategy protects against any potential data loss. If the state needs a higher uptime availability, that can be arranged.

Application Support / Help Desk

Application support and help desk will be provided through BCG support services. Any issues reported to the help desk will be tracked via a ticket tracking system. If an issue cannot be resolved via the support staff it will be escalated to engineering in accordance with the severity levels. Fixes will be deployed in patches; timelines for deployment will be communicated to WVDHSEM staff prior to deployment.

Updates / Maintenance

BCG will provide for ongoing update and maintenance of the system. This will include any bug fixes and updates that take place during the contractual period. BCG will coordinate any software updates and hardware maintenance with WVDHSEM in order to minimize impact to daily ongoing operations. If WVDHSEM is experiencing an emergency, they can request that BCG hold any updates until concluded.

System Configuration

BCG will configure the DLAN system to match WVDHSEM's desired status boards, forms, workflows, and settings to meet the State's needs. BCG will configure the software to match the desired State EOC organizational structure and operations. BCG will also work with WVDHSEM to identify key workflows, reporting requirements, communication chains, and system outputs and then configure the system in a way to meet these needs. BCG will work with WVDHSEM IT to configure accounts, roles, and security rights for administrative personnel end users. System configuration is a process that occurs over several weeks with information exchange and demonstrations between BCG and WVDHSEM. BCG will complete most configuration remotely. BCG will also provide one day of onsite instructor led configuration with WVDHSEM to plan or review configuration settings.

Data Importation

BCG will work with the State to import the following data into the system:

- User account data (can be imported from a CSV template or integrated through LDAP, ADFS, SAML, or Shibboleth)
- Contacts data (staff, suppliers, departments, etc.)
- Resource data (known / stockpile resources)

System Training & Documentation

BCG shall deliver the following training to WVDHSEM four (4) consecutive days of onsite, instructor led training broken down into: Administrator Training (2 days), Advanced User (1 day), and Basic User (1 day). BCG can provide flexible topics and training plans tailored to fit WVDHSEM's organization. BCG will provide the following training materials: Quick Reference Guides for system administrators, basic users, and advanced users. BCG will also provide a training agenda document to assist WVDHSEM in scheduling their training activities and a PowerPoint training presentation that can be used to train future staff as they are on boarded.

Support & Maintenance

BCG's Software Development Lifecycle for DLAN Updates is an agile development process that produces update patches every eight to ten weeks. These updates are coordinated with the State and will only be installed after an approved maintenance window has been determined by the State and BCG. The State is entitled to all software updates for the duration of their contract.

Technical support is provided by BCG's Client Services team. For this project BCG proposes Platinum Plus Level Support and Maintenance Package. This level of support package includes the following products and services.

- Business Day (9am - 5pm MST) Email Support
- Business Day (9am - 5pm MST) Phone Support
- 24/7 Support by Phone and Email (BCG will provide a separate 24x7 support phone number for emergency after hours support).
- New Releases of Product
- New Release Review Webinars
- Point Patches for New Releases
- Hot Fixes for New Releases
- BCG Assisted Imports using BCG Templates - 4 per year
- Individualized Web Trainings (1 hour per training session) - 4 per year
- Custom Imports by BCG Staff - 40 hours per year
- BCG Assisted Configuration of Dynamic Forms - 40 hours per year
- BCG Assisted Data Feed Integration - 40 hours per year
- Client Configuration Debug via Gotoassist - 40 hours per year
- Server Configuration Debug via Gotoassist - 40 hours per year
- Onsite Support Per Year - 8 hours per year
- **Rush Delivery of Hot Fixes Specific to Organization's Site or Installation**

All reported issues will be addressed by the BCG Client Services team. Customer service is a key component to any solution. BCG understands some customers prefer self-service features over working with customer service. BCG also understands a solid help desk is essential to providing top tier support. BCG's best in class support model and software utilize both methods to provide ease-of-mind as well as ease-of-use.

The BCG Software System includes an online help section that allows users to reference help articles for all pages in the system. Users will also have access to the training materials and quick reference guide developed by the BCG Team for this project.

In addition to this self-service help, the BCG Team will provide a business day customer support help desk that is available to the State. The help desk will include a ticketing system, phone, and email support as needed. In the

event that BCG Team engineering support is required during an EOC activation, the BCG Support Team can provide the State with a 24x7x365 emergency support services phone number they can call for emergency after-hours support. This will connect the State directly with a BCG engineer. This streamlines the support process, eliminating the need to progress through multiple tiers of support to obtain problem resolution. All BCG Team engineers are equipped with the skill set required to adequately troubleshoot, and diagnose issues. It is the BCG Team's assumption that help requests that are submitted by users would be collected and vetted by the State before escalation to the BCG Support Team.

The BCG Team believes that the technical support we provide to our customers sets us apart from our competition. We pride ourselves on being not just a product vendor, but also being an emergency management partner with our customers. From the time of award, BCG will work closely with both the IT and Emergency Management departments to ensure that we configure and field a solution that will perform both technically and operationally. We spend considerable time up-front on-site to ensure that we adequately understand your operations so that we can best configure our system to work as you desire. Once our system is installed and configured, we work to ensure that users and system administrators are properly trained. This is done via on-site hands-on end user, advanced user, and administrative training.

BCG provides numerous types of on-going support once the application is in production. First, users can always call or email our support desk for assistance with any task. Access to our support desk is included with your maintenance contract and is available during normal business hours. Should after-hours support be required during a declared emergency, you can contact the after hour emergency support number which is also included as part of your maintenance contract. The BCG Team support technicians can typically resolve any issues you may have, and employ desktop sharing tools to aid in evaluating your situation and resolving your issue. If our support technicians cannot immediately resolve your issue, they will engage our engineering team in order to work towards a resolution.

Typical Support Steps:

- *Step 1* – Call or Email BCG Support.
- *Step 2* – BCG enters help ticket into customer support system.
- *Step 3* – Help ticket is routed appropriately to support staff, engineers, and managers
- *Step 4* – Issue is escalated if needed.
- *Step 4* – State is notified of progress.
- *Step 5* – State is notified when issue is resolved.

If an issue is not immediately solvable by the BCG customer support team member or if an issue remains open for a period of time, the Client Services team will escalate the ticket to a team of BCG Engineers for prompt resolution. Escalation is handled according to the plan presented below.
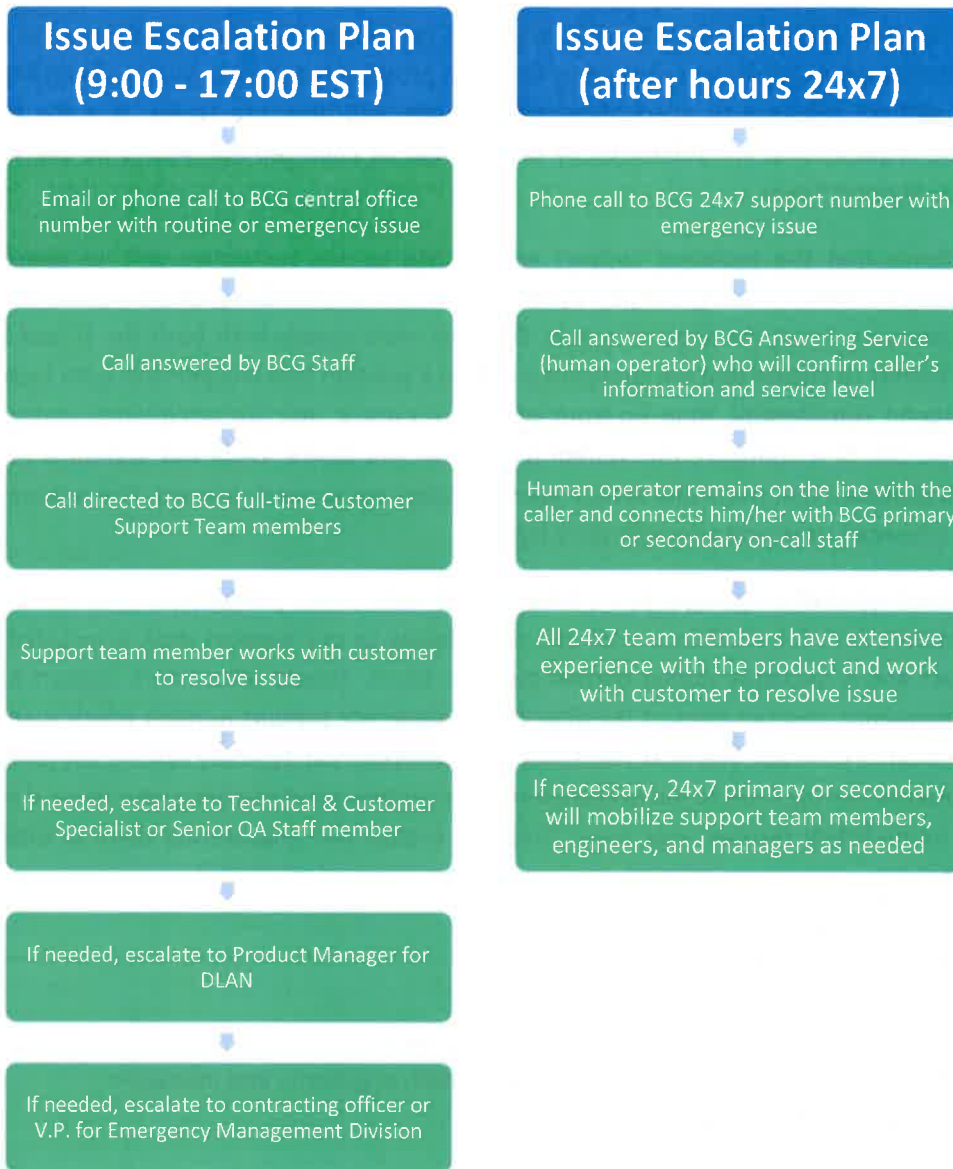
Table 1: Escalation Plan

Issue Escalation Plan (9:00 - 17:00 EST)	Issue Escalation Plan (after hours 24x7)
Email or phone call to BCG central office number with routine or emergency issue	Phone call to BCG 24x7 support number with emergency issue
Call answered by BCG Staff	Call answered by BCG Answering Service (human operator) who will confirm caller's information and service level
Call directed to BCG full-time Customer Support Team members	Human operator remains on the line with the caller and connects him/her with BCG primary or secondary on-call staff
Support team member works with customer to resolve issue	All 24x7 team members have extensive experience with the product and work with customer to resolve issue
If needed, escalate to Technical & Customer Specialist or Senior QA Staff member	If necessary, 24x7 primary or secondary will mobilize support team members, engineers, and managers as needed
If needed, escalate to Product Manager for DLAN	
If needed, escalate to contracting officer or V.P. for Emergency Management Division	

Table 2 - Technical Support Service Level

Problem Severity	Severity Code	Impact	Description and Resolution Support Requirement
1	Critical	Mission Critical	System is not operational: BCG will commit a full-time resource to resolve the problem as soon as possible. All efforts will be made to resolve the issue within a twenty-four (24) hour period.
2	High	Major	Critical functionality is not operational: BCG will commit a full time resource, or team of resources, during normal business hours to resolve the issue as soon as possible. All efforts will be made to resolve the issue with a forty-eight (48) hour period.
3	Medium	Moderate	Non-critical functionality is not operational: BCG will commit a resource during normal business hours to restore service to a satisfactory level. All efforts will be made to resolve the issue within five (5) business days.
4	Low	Minor	Specific issue or questions exist but there is little or no impact to the organization's business operations: BCG will provide information or assistance during normal business hours as requested, and where possible. In most cases such assistance will be immediate, but where this is not possible, all efforts will be made to resolve the issue/question within twenty (20) business days.

Milestones / Time Frames / Schedule

BCG proposes the following schedule, it is based around a contract award date.

Table 3: Suggested Milestones

Milestone	Description	Date
Contract Award	Contract Awarded	Week 1
Project Kick Off Meeting	BCG shall conduct a virtual or onsite project kick off meeting.	Week 2
Planning	BCG shall host a series of virtual planning meetings with the State's project team and IT staff to ensure smooth project management, configuration, and data import. BCG shall also provide weekly project status update meetings and track action items in an issue log.	Week 3
Software Install	BCG will deliver technical and server specifications to WVDHSEM IT for their primary site and shall install the software in BCG's datacenters for the replication sites.	Week 4

Configuration Kickoff Meeting	BCG shall conduct a series of virtual software configuration meetings.	Week 6
Remote System Configuration	BCG shall configure the software based on results of the configuration kickoff meeting and any subsequent clarification meetings.	Week 7
Data Import	BCG shall import user accounts, contact information, and resource data for WVDHSEM using BCG standard Excel templates.	Week 8
System Testing	BCG shall provide post-implementation testing to ensure all system functions perform as expected.	Week 9
Training Documentation	BCG shall prepare quick reference guides and training materials.	Week 10
Final Configuration Review (Onsite)	BCG shall provide one day (8 hours) of onsite configuration review with WVDHSEM to ensure the system functions as expected and that WVDHSEM's desired workflows and data have been setup.	Week 11
Training (onsite)	BCG shall provide four days (32 hours) of onsite instructor-led training classes for system administrators (2 days), advanced users (1 day) and basic users (2 sessions of 4 hours each).	Week 11
Go Live /Deployment	BCG shall remotely support WVDHSEM's DLAN "Go Live" deployment of the software for Production level use.	Week 12
Close Out Meeting	BCG shall conduct a remote project close out meeting.	Week 12

Note: If the project requires integration with other platforms, software, or IT systems, the implementation schedule may need adjusted to account for those activities.

Project Approach

BCG will use a knowledge transfer and system configuration approach to deliver a successful project implementation for WVDHSEM. BCG shall work with WVDHSEM project team and steering committee (stakeholders) to deliver knowledge transfer on the Software and receive knowledge transfer on WVDHSEM requirements. Together, BCG and WVDHSEM shall configure the Software to best meet WVDHSEM's needs. BCG shall provide administrator and end user training; this will provide WVDHSEM everything it needs to manage configuration, product administration, and user account management after project Go Live.

BCG's implementation will consist of four phases: Planning, Configuration, Training, and Deployment.

Planning

The planning phase will consist of a kick-off meeting, kick-off knowledge transfer, project schedule refinement, server environment provisioning, and Software installation and testing.

BCG's Responsibilities:

1. BCG shall lead a virtual kickoff meeting. The Kickoff will consist of staff introductions, discussion of project schedule, discussion of knowledge transfer, and the arrangement of virtual weekly project status meetings.

    a. BCG shall provide meeting action items and issue tracking for weekly project status meetings.

2. BCG shall provide a demonstration of the product and features to WVDHSEM Stakeholders. This will provide general project knowledge for those who were not involved in RFP process.

3. BCG shall install the latest version of the Software

4. BCG shall perform functionality testing on the DLAN website to ensure the install functioned correctly.

WVDHSEM Responsibilities:

1. Establish a project team that will need to receive knowledge transfer from BCG.

2. Establish a working group that will represent WVDHSEM and other key stakeholders that will need to receive knowledge transfer from BCG.

Configuration

The purpose of the Solution Configuration phase is to understand the business, notification, and incident management goals of WVDHSEM and adjust the configurable settings in the Software so that the Software functions in a manner tailored to WVDHSEM's operations.

Key Configuration Elements

Software Knowledge Transfer – Detailed product and functionality explanations

Initial System Configuration – Configure Software & modules settings based on results of knowledge transfer

Data Importation – Import user data, contact information, equipment/resources

During this phase, BCG shall conduct an analysis of WVDHSEM's current and desired EOC and emergency operations. BCG shall transfer detailed DLAN product knowledge to WVDHSEM incident management end users and administrators. BCG shall provide an initial Software configuration based on the results of the knowledge transfer, BCG's product expertise, and any ad hoc configuration conference calls or emails deemed necessary by BCG or WVDHSEM to clarify knowledge transfer. BCG shall import user accounts, contact information, and Resource Data into the Software.

The outcome of the solution configuration phase of this project will be a configured Software system.

BCG's Responsibilities:

1. BCG is responsible for doing an analysis of current and desired operations

2. BCG is responsible for the Software knowledge transfer to WVDHSEM's team

3. BCG will provide the initial Software configuration

4. BCG will import user accounts, contact information, and Resource Data into the system

WVDHSEM's Responsibilities:

1. WVDHSEM is responsible for providing knowledgeable EOC staff who can answer questions and make decisions regarding EOC operations, workflows, and software settings.

Training

The training phase of this project shall consist of development and delivery of reference and training materials, final configuration review, basic user training, advanced user training, and administrator training.

Quick Reference Guide Documents – QR Guides are brief documents designed to show users through text and screenshot images how to perform basic functions within the Software. BCG shall prepare and deliver to WVDHSEM one quick reference guide for each in-scope module.

Training Documents – BCG shall provide a training course documents to WVDHSEM for basic user, advanced user, and system administrator focused training. This includes a training agenda (training plan) for each course which will allow the state to review the training topics and assist the state in scheduling the correct personnel for each course. BCG will also provide training PowerPoint courses that reinforce the quick reference guides and provide a simple way to onboard new staff and train them up in the DLAN system after initial implementation. The goal for training documents is to provide WVDHSEM with the extensible materials necessary for them to become self-sufficient in onboarding future staff.

Deployment (Warranty, Go Live, & Support)

After completing final configuration review and training, the Software shall be ready for production use. WVDHSEM's users as well as other partner agencies can begin use of the system. BCG shall provide remote support during Go-Live. A final close-out meeting will be conducted after Go-Live. Post Go-Live WVDHSEM will be considered migrated to regular BCG solution support and should be self-sufficient with the Software.

BCG's Responsibilities:

1. BCG shall provide Software support to WVDHSEM for the Go-Live event.

2. BCG shall provide ongoing Maintenance & Support services after project Go Live pursuant to this Statement of Work.

3. BCG shall facilitate a project close-out meeting with WVDHSEM's project team and key stakeholders.

WVDHSEM Responsibilities:

1. WVDHSEM shall monitor system use and communicate any issues to BCG Client Services.

2. WVDHSEM shall identify and assign appropriate staff for the project close-out meeting.

Project Assumptions

BCG assumes the following statements to be true:

If WVDHSEM needs to perform User Acceptance Testing against DLAN they may do so upon coordination with BCG who will provide reasonable remediation to ensure the software conforms to the system documentation. However, BCG will not provide test plans, UAT documents, or onsite support specific to WVDHSEM UATs without an adjustment to the fee proposal.

If WVDHSEM needs to perform Security / Penetration Testing against DLAN / BCG hosting environment they may do so upon coordination with BCG who shall provide reasonable remediation according to industry standards and the level of service specified in the agreement. However, BCG shall not provide security engineer support or security documentation exceeding one day (8 hrs.) of effort without an adjustment to the fee proposal.

WVDHSEM shall provide resources for project kick-off, knowledge transfer, system configuration, and training who are knowledgeable about EOC activations for emergency and planned events and WVDHSEM's responsibilities and operations during such.

BCG Unique Advantages / Added Value

BCG's proposed software and services provide several key advantages. First, BCG's DLAN application provides a proven and modern software solutions for emergency and incident management. DLAN supports both ICS based and non-ICS based EOC processes and excels at digitizing paper-based processes, forms, and status boards. Current electronic processes and applications such as email, mapping, dispatch, duty officers, daily meetings, finance tracking, etc. can be integrated simply in a way that provides valuable situational awareness sharing and communication. DLAN can centralize the complex environment of emergency management in one easy to use platform on the web or on mobile that can be shared by all.

Second, BCG's DLAN software is flexible ad configurable while still providing a commercial off the shelf solution that is intuitive and quick to learn and requires minimal training. Every module in the system can be configured by WVDHSEM administrators to function in the way that best meets WVDHSEM's needs. As directives and requirements evolve over time, WVDHSEM has the ability to change DLAN's settings to match without needing to pay for customizations or options. This provides a longer useful lifespan of the software and reduces total cost of ownership over time.

Third, BCG is a company that is committed to excellence in emergency and incident management. The company requires that all employees that work on DLAN train in FEMA's ICS courses up to the 400 level; many employees exceed this. Additionally, BCG's core management and many engineer staff come from an emergency management or fire background. BCG can provide trained ICS staff and IMAT teams to supplement WVDHSEM's EOC during a response. BCG understands the EOC environment, field response, and planning better than other software vendors, because we are emergency managers ourselves. This knowledge shines through in DLAN's thoughtful design. The system allows users to not just capture information for situational awareness and

accountability, but to operationalize it in a meaningful way for effective decision making, prioritization, and task completion.

Project Goals and Objectives

4.2.1.1. The Successful Vendor should provide a solution that is easy to use for all projected users, to include representatives of federal agencies, state agencies, local jurisdictions, non-governmental organizations, and other organizations with minimal or "just in time" training packages to be provided.

DLAN is an extremely intuitive and easy-to-use system. Familiar data entry methods, responsive design, and consistency in look and feel ensure that users only need a short amount of training to gain proficiency. BCG models the way people interact with the system with tools they use every day like email, social media, instant messaging, and other mass market applications. Additionally, built-in help articles on every page guide users through interacting with the software in case they forget how to perform an action.

Another way DLAN simplifies the user interface is through the use of the Ticket Wizard. It guides users through the process of properly submitting a ticket by using a simple step-by-step interface. The Wizard presents users with a series of questions that allows them to provide the necessary information more intuitively. The feature can be turned on or off on an account, role, or system wide basis by an administrator giving them more control over the end user experience.
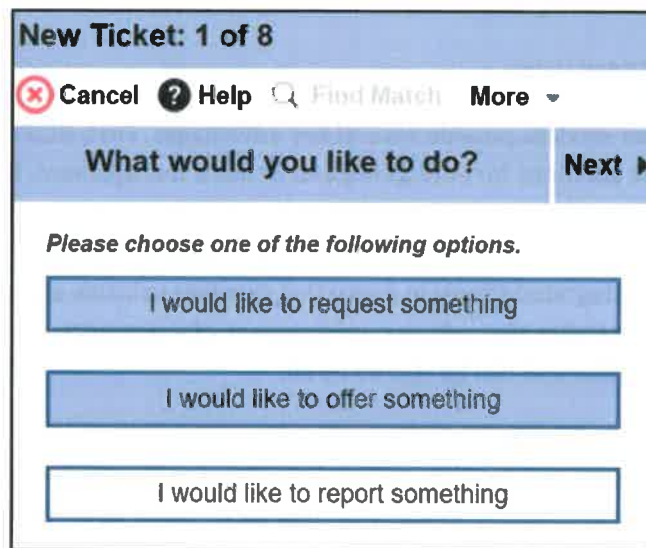

Figure 1: Ticket Wizard

Additionally, separate dashboard landing pages can be created for each agency ensuring that users receive a tailored experience that presents them with the information and tools they need.

4.2.1.2. The successful Vendor's solution may also provide for customization of displays or reports, based on the needs of the users.

DLAN is a highly configurable system designed to make filtering of data easy for users. There are numerous ways that customized views, dashboards, landing pages, status boards, and reports can be created on the system. The following are just a sampling of the many ways that displays and views can be customized by users:

- *__User, Role, and Task Based Status Boards__* – Customized views can be created out of any of the modules and situational awareness panels on the system to allow for user, role, and task specific views to be created and re-used on the system. These dashboards can also be set as a user's or role's landing page (homepage) in the DLAN system. Combined with Workflow Mappings, this presents a completely tailored user experience for each federal or state agency, local jurisdiction, NGO or other organization on the system.
- *__Customizable Ticket Reports__* – In the Ticket Manager, ticket reports are used to filter the list of available tickets down into meaningful sets of similar tickets so that they can be more easily tracked, worked upon, and completed. Customized views of ticket data (reports, requests, donations, etc.) can easily be queried based on date time range, incidents, priority settings, status settings, jurisdiction data, user submission data, location data, routing information, keywords, attachment data, and other information. Users can select the columns they wish to see in the report, using any data within the ticket or any dynamic forms created for or by WV staff (i.e. damage assessments, debris clearance forms, sheltering forms, etc.). These queries can easily be saved for use by other groups of users in map reports, in ticket manager grids, in status boards, and as personal reports. This ability to quickly filter and present data for temporary or permanent use allows the Ticket Manager to be a core data management system for customer displays and views on the system.
- *__Customizable Phone Book Reports__* – Like the ticket reporting tools, phone book data can easily be filtered by users to display organizations and people based on filterable criteria such as location, trainings completed, skills possessed, categories, text, and other filters. These reports can then be saved for use by other users on the system in order to easily find contact information on vendors and staff that is specific to require emergency management needs.
- *__Filterable Grids__* – Every table of data on DLAN includes filters to find textual data within the grid. Additionally, many grids include advanced filtering capabilities such as date/time ranges, category filters, location filters, routing filters, active/de-active data filters, organization filters, status filters, and other types of filters. Additionally, any grid is re-sortable by clicking on the headers of a particular column. These advanced capabilities make it easy for any table of data on DLAN to be filtered as per the needs of the users.
- *__Map Reports__* - In addition to the dashboard, landing pages, and situational awareness views that users can create, Map Reports can be used to display specific map information. GIS administrators can configure map reports including basemap and layer settings to be viewed in the COP Viewer or as part of the Status Board.

4.2.1.3. The Successful Vendor should provide a solution that provides for safe and secure sharing of emergency information, resource management, and related information in an environment to be evaluated by the panel.

DLAN is a proven solution that has been used in emergency management settings since 2002. The DLAN system includes several modules and features designed for safe and secure sharing of information. The Reference Library Module permits users to upload, view, and download documents and files and includes full security on folders and files for secure sharing with others in your agency or group. The Ticket Manager and Resources Modules allow users to request and manage resources in a secure fashion where tickets can only be updated by roles to which the ticket has been routed (tasked).

Due to the nature of the data stored in DLAN, it is important that data in the system is capable of being locked down to just those users that require the ability to view or edit that information. There are a number of mechanisms in place to ensure that data maintained in the system is accessible to only those users that require it. These protections include:

1. Least Privilege Methodology

The principle of least privilege is the guiding methodology for security in DLAN. Users are only provided the minimum level of access necessary to perform their job functions in the areas of the system that they are required to use. By preventing users from accessing data in the system that they have not been granted rights to see, data is protected by default throughout the system.

2. Data in Transit Protections

Since DLAN is primarily a web based solution, the primary means of protecting data in transit is TLS between the client and server. TLS is also used when communication leaves the data center, for instance when checking an external email system. Passwords are never sent clear text, even within the encrypted data stream.

3. Data at Rest Protections

Data not in transit is protected in a number of ways. The underlying authorization mechanisms of DLAN prevent requests to transmit data without authorization. Database accounts are granted minimal access to necessary stored procedures to perform information access for the given module. The DLAN database includes an encrypted data store for storing sensitive information such as passwords. Access to the necessary keys to access the data store is controlled by the operating system, not the application. Additional measures can be taken when using recent versions of Microsoft SQL Server at the server level, including full database encryption. This would be the responsibility of WV if hosting on their own servers.

4. Multiple Response Confidentiality

When using DLAN to respond to multiple incidents at once, the confidentiality of data between incidents can be enforced using the incident locking system. This allows the user to be granted access to information within specific ongoing incidents in the system, while restricting access to others. Information can be shared between incidents, which allows selective sharing of information.

5. Field / File Security

Fields within records, such as resources, organizations, personnel, and contacts, can be locked down at both a record and field level to control the level of access that groups of user have to data within the system. Administrator can allow users to access complete records or partial records including controlling the ability to view or edit data within any of those records.

6. Secure Tickets

Each ticket in the incident can also be locked with a sensitive lock. This will prevent access to the ticket or any information in the ticket by users that do not have the right to view sensitive tickets.

4.2.1.4. The Successful Vendor should provide initial training for the following categories of uses. This training should be accompanied by easy to use and follow system documentation for each category of user.

4.2.1.4.1.   System Administrators to include user access management - up to ten (10) users.

BCG will provide 1 day of onsite instructor led system administrator course training. BCG will provide administrator training course documentation in the form of quick reference guides. Documentation will be delivered electronically.

4.2.1.4.2.   State Agency representatives - up to fifty (50) users.

BCG will provide 1 day of onsite instructor led advanced user course training for state agency representatives. BCG will provide advanced user course training documentation in the form of quick reference guides. Documentation will be delivered electronically.

4.2.1.4.3.   Local Jurisdiction representatives - up to two hundred (200) users.

BCG will provide 2 total days of onsite instructor led basic user course training for local jurisdictions and NGOs. The day of training will be broken up into multiple sessions. Users will only need to attend one session. Session length is variable based on the number of users to attend, but is typically a minimum of 2 hours and a maximum of 4 hours depending on group size and the configuration of the state's DLAN site. This training will be shared between Local Jurisdictions and NGOs who are expected to have a similar level of access. BCG will provide basic user training course documentation in the form of quick reference guides. Documentation will be delivered electronically.

4.2.1.4.4.   Non-governmental Organization Representatives - up to one hundred (100) users.

Please see the answer to 4.2.4.3 above.

4.2.1.4.5.   Federal Agency Representatives - up to twenty-five (25) users.

BCG will provide a PowerPoint based training course document and quick reference guide for Federal Agency Reps that is designed to provide a self-paced learning path for Federal Reps. Documentation will be delivered electronically. These users are expected to have an observer level of access and should need limited training. However, Federal Reps who need or desire a higher level of access can attend the basic user training course.

4.2.1.5. The successful Vendor should also provide refresher training for current users. The method of delivery will be evaluated.

BCG will provide two (2) days of onsite instructor led refresher training per year. Training will be delivered at the State's facility and will cover refresher courses for all levels of users. BCG will provide updated quick reference guide training materials for classes. Refresher training revisits core lessons including entering an information report, requesting a resource, task management, use of status boards, use of mobile app and forms, and GIS. Refresher training for administrators also consists of a "what's new" session where BCG will cover new and recent features and changes to the product. BCG's Clients Services Team will work with the State's IT department ahead of refresher training to ensure the development site is updated to the most recent release and approved for training. If the state would like BCG to cover specific topics or workflows during refresher training the course topics can be adjusted to accommodate this.

4.2.1.6. The Successful Vendor should provide 24 hours availability for system technical support. The method of delivery and availability will be evaluated.

As part of our core values, BCG provides comprehensive customer service for all of our products including the DLAN system. The customer service team is comprised of full time BCG employees with extensive experience and knowledge of the DLAN product. BCG is proposing its Platinum Plus level support package for West Virginia. The State can call or email BCG 24/7/365 if they need help identifying and resolving an issue with the DLAN software,

hosting, or services. For BCG's support procedures, service levels and issue escalation chart, please see **Table 1: Escalation Plan** and **Table 2 - Technical Support Service Level** in section 4.2 above.

4.2.1.7. The EMIS should be fully interoperable with the Federal Emergency Management Agency (FEMA) systems at Regional and National levels.

BCG is not just a software vendor, it is an engineering firm with decades of experience in custom engineering projects. BCG is part of the certified Microsoft developer program and currently employs multiple teams of full time software and test engineers who are ready to meet your integration and interoperability needs.

Unlike many other solutions, DLAN is interoperable by design; it follows NIEM and NIST guidelines with common protocols and standards for meaningful information exchange available out-of-the-box without requiring external servers or third party plug-ins. The DLAN software can achieve interoperability with FEMA systems at National and Regional levels through the use of standard interoperability protocols and technologies included out of the box with DLAN, including FEMA's IPAWS system, Email, CAP 1.2 Messaging, EDXL-DE, EDXL-RM, and ArcGIS Online. DLAN also supports customized integrations with specific field mappings through the use of our API. For additional information on existing out of the box integrations, please see the response to question 4.2.1.2 above.

4.2.1.8. The EMIS should be fully interoperable with EMIS solutions in all FEMA Region III states and other neighboring states.

DLAN is interoperable with EMIS solutions at FEMA Region III States and other Neighboring states out of the box using standard communication and messaging technologies. For additional technical information, please see the response to question 4.2.1.2 above.

4.2.1.9. The EMIS should be fully interoperable with Emergency Management Assistance Compact (EMAC) Operations System (EOS) for all functions.

The DLAN system is interoperable with the EMAC Operations System. Through the DLAN Ticket Manager Premium Module, specifically, the preparedness toolkit feature, the system supports EMAC including the planning process, creation, and implementation of Mission Ready Packages using FEMA NIMS Typed Resources.

4.2.1.10. The vendor shall make training available at the State for all levels of EMIS users (User, Administrator, Technical, and Maintenance) during deployment. The vendor shall identify the following:

BCG will make training available at the State for all levels users of the DLAN EMIS as part of the EMIS project implementation. BCG trainers are not just experts in the technical aspects of the system, but also in its applications in emergency management. All of our trainings will be tailored to WV's specific organizational workflows and DLAN site configuration.

4.2.1.10.1 Course names.

Four (4) days of onsite, instructor led training broken down into:
Administrator Training (1 days).
- General DLAN Functionality overview
- New Incident Creation
- User & Role Management
- Security Groups and Record Security

- System Setup and Configuration
- Module Administration
- Status Board Building
- Form Building
- Sysetm Reports Creation
- Workflow Creation

Basic User Training (2 days).
- Introduction to DLAN
- Login & Navigation
- Landing Pages and Status Boards
- Ticket Wizard
- Ticket Manager
- Mobile App
- Communication Center
- GIS Mini-map
- Calendar & User List
- IAPs, Phonebook, Resources, & Assets

Advanced User Training (1 day).
- Ticket Manager Premium, Templates
- Resources & Assets
- Communication Center External Messages
- Status Board Content Curation
- IAP Creation
- Situation Report Creation
- GIS Premium Map Viewer
- User Reports Creation

Training Materials Provided:
- Training Agenda for basic, advanced, and administrator training courses
- Training Quick Reference Guides for all DLAN Modules owned by West Virginia
- PowerPoint training courses

Additional training resources included:
- DLAN Online Context Help
- DLAN Reference Library Materials (storage for DLAN Manual and all current quick reference guides and training materials)
- DLAN In-Board Help (Situation Report Builder Board & IAP Builder Board)

4.2.1.10.2 Delivery methods.

Training delivery methods typically include onsite instructor led training using a mixture of lecture and hands-on activities where students perform operations and exchange data with others using the DLAN software. Training can be delivered either virtually or at WV's facility of choice.

Alternative services: BCG can provide virtual trainings, webinars, one-on-one coaching, train the trainer sessions, custom training videos, and custom training documents to meet West Virginia's specific needs.

For several clients, BCG also develops and runs tabletop or full scale exercises annually as part of their refresher training.

4.2.1.10.3 Length of each course.

The DLAN Administrator Training Course is designed to run one full day for a state level system. Time may vary slightly depending upon the number of modules and features included in the State's DLAN system.

The DLAN Advanced User Course typically runs one day.

The DLAN Basic User Course is designed to run in either a 2 hr or 4-hour session based on the number of modules and features included for Basic Users in the State's DLAN system as well as the group size. BCG will run multiple basic user training course sessions over a two-day period to accommodate larger audiences and ensure all staff is trained. Users only need to attend one session.

4.2.1.10.4 Schedule for standard yearly training courses.

BCG can provide DLAN Refresher Training on a yearly basis. Refresher Training consists of condensed versions of the administrator, advanced, and basic user training courses as well as coverage of new features and functionality introduced over the last year with DLAN system updates.

If annual onsite instructor led training is not the best approach for the State based on the number of users to be trained or their geographic dispersal, BCG can provide an alternative solution such as online webinar or video based training as a yearly refresher course.

4.2.1.10.5 Type of course material that will be provided to the State (ie, course handouts, electronic power point presentations, etc.).

- DLAN Training Agenda (Training Plan) for Basic User Course, Advanced User Course, and Administrator Course.
- DLAN Quick Reference Guide Documents (Training Materials) for Basic User Course, Intermediate User Course, and Administrator Course.
- DLAN Training Course PowerPoints for Basic User Course, Intermediate User Course, and Administrator Course.

4.2.1.10.6 Methods for ongoing, continuing, and on-demand training.

Online Help – The DLAN system includes a built-in online help system which features approximately 375 articles that cover all aspects of the software's use and functionality with text, images, and step by step instructions. The help system is context sensitive, ensuring that when a user clicks the help button he or she is directed to a relevant article based on the feature or page with which the user was interacting. The help system works with both an online and offline connection. The help system serves as a real-time updated user manual and fosters self-paced learning and as training refresher on system functionality.

BCG Support's Help Desk available 24/7

Ongoing, Continuing and On-demand training – regularly scheduled new release review webinars on demand with knowledgeable BCG Test Engineers and QA staff.

BCG will also provide two days of onsite instructor led DLAN refresher training per year.

4.2.1.11. The EMIS should enable users to assign members of the contact lists to associated message groups to facilitate rapid dissemination of messages to specific sets of recipients.

Distribution Groups are an easy way to incorporate a set of contacts of any type into one easy selection when sending out a Message from the DLAN Communication Center. Distribution Groups can consist of DLAN Users, Phonebook Contacts, Custom Recipients, COG's (Collaborative Operating Group's), or any mix of them all. Distribution groups can be used to send an email, ticket, incident action plan, or ICS form.
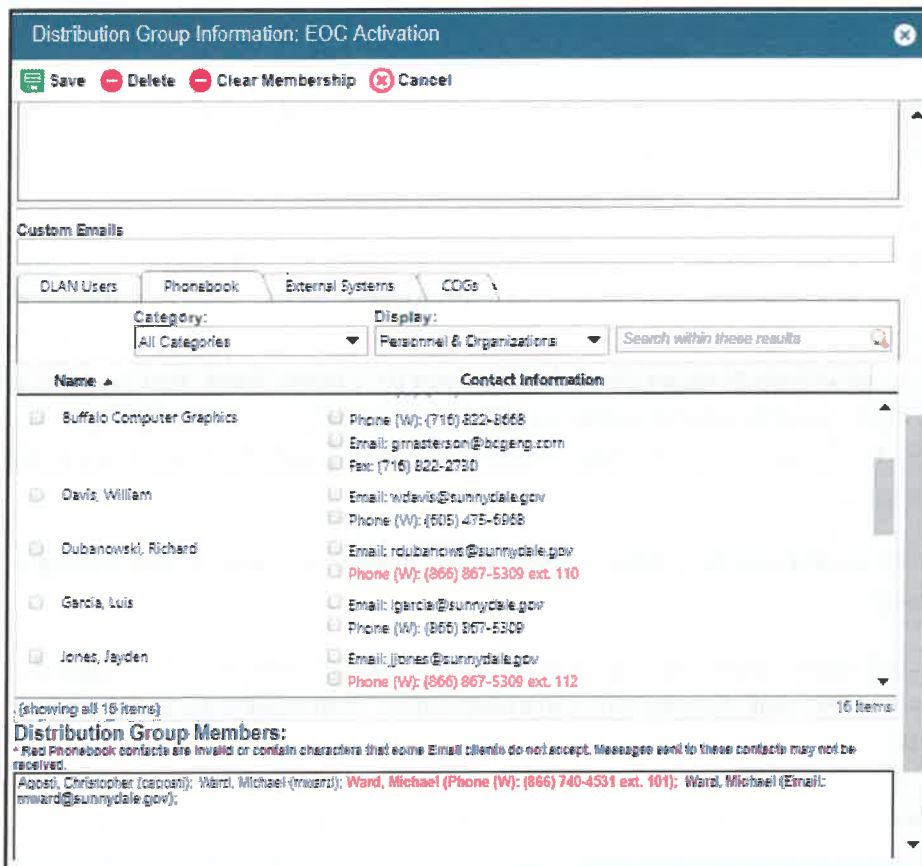
Figure 2: Distribution Group

4.2.1.12. The EMIS should enable users to access situation reports and visual situation displays [Common Operating Picture (COP)].

DLAN's Situational Awareness tools give users a number of ways to view and work with situation reports and visual situation displays. This includes an unlimited number of custom status boards/dashboards, GIS COP viewer/GIS Premium, and the Situation Report module.
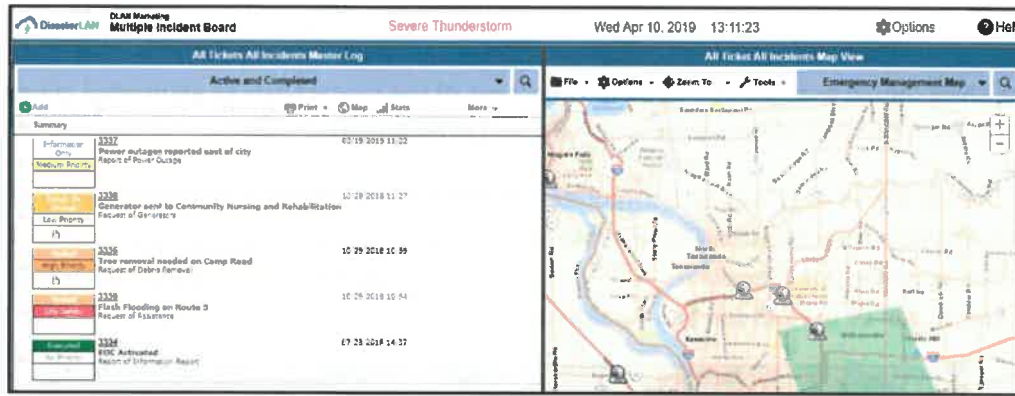
Figure 3: Status Board - Multiple Incidents Board

4.2.1.13. The EMIS should enable users to access Road Closure Notifications and reports from the West Virginia division of Highways and other agencies and display them in the EMIS solution and the Common operating Picture (COP).

DLAN is designed to be interoperable with many common information sharing technologies and can enable users to access Road Closure Notifications and reports from WV Division of Highways and other agencies from within DLAN. Data from 511, National Weather Service, and Twitter can be displayed on DLAN Status Boards. For example, the 511 and WVinterstate feeds can be displayed on a board. DLAN also supports the display of CAP messages, Atom feeds, GeoRSS, GeoJSON, KML and other sources that can be visualized on the DLAN GIS Premium Map. If none of these existing technologies meets the state's needs, then BCG can provide a customized integration point using our API.

4.2.1.14. The EMIS should enable logistics support users to plan and monitor the routing and movement of supplies from a supply facility to the destination.

DLAN support supply chain logistics and transit of vehicles, equipment and supplies through the use of the Assets and GIS Modules. Logistics support users can plan a route on the map, mark it up, and share it with other agencies or parties as a static map image, interactive map report, or as a downloadable KML file. If West Virginia has GPS tracking devices that they use on their equipment or vehicles (ex: magnetic slap and track devices), those can be integrated and displayed on the GIS Map. The DLAN Mobile Responder App can also be used as a GPS tracking device. This allows vehicle operators transporting supplies to download the app (free from the app store) and they can be tracked in real time in DLAN.

4.2.1.15. The EMIS should enable logistics support users to monitor and manage stocking levels of supplies held in supply depot facilities.

The DLAN Resources Module is designed to allow users to pre-populate DLAN with known supplies and resources along with their location and contact person/ordering information into a known "Stockpile." Each supply depot facility can also be entered into DLAN as a record and displayed in resource reports, phonebook contact reports, and on the DLAN GIS Map. This provides three ways to monitor and manage stocking levels. Additionally, the Resources Module allows users to decrement and track quantity, cost, and other basic supply information.

4.2.1.16. The EMIS should enable authorized users to provide administrative support for procurement of materials and services including the ability to:

4.2.1.16.1. Identify local sources for equipment rentals.

The Find Match feature in the DLAN ticket matches a resource request entered by a user with a known supplier of that type of resource. It matches a request ticket with a resource record and phonebook contact for the supplier. This includes equipment rental services.

4.2.1.16.2. Identify local sources for material supplies.

The DLAN Resources Module is designed to track suppliers and supplies of equipment. Users can view contact persons, location, purchasing information, cost, and quantities for equipment rentals.

4.2.1.16.3. Record orders and receipts for equipment and supplies.

All orders and receipts for equipment and supplies can be tracked within a DLAN Ticket. The Ticket serves as a central place that aggregates all information related to a task, from the initial resource request, through logistics, procurement, resource deployment, demobilization, and finance recovery. Orders and receipts for equipment and supplies can be uploaded to the ticket as an attachment.

4.2.1.16.4. Provide capability for the upload/import of database of existing or acquired inventories.

As part of WV's project implementation, BCG will import a database of existing or acquired inventories into DLAN. This is typically achieved through the upload of an excel or CSV file of data. BCG can provide a recommended import template for resources. After initial implementation, WV's DLAN maintenance and support plan entitles the state to several imports or refreshes per year to maintain the data.

4.2.1.17. The EMIS should enable authorized users to provide cost analysis services including the ability to:

4.2.1.17.1. Identify material and personnel that require payment.

The finance tab in a DLAN ticket can be used track the material, personnel and required payments associate with a finance cost. The ticket's statues can be used to track payment progress and can be adjusted as a cost moves through the system. For example, the ticket status may be set to Procurement Needed, Approved, Payment Pending, Paid, Reimbursement Pending, etc. These statuses are configurable by a system administrator.

The DLAN Incident Ledger page also provides data for reimbursement payments including 25% and 75% reimbursement rates and total sums.

4.2.1.17.2. Enter and record all cost data.

The DLAN Finance Module provides the necessary tools to help users and administrators track costs for missions, tasks, and resources. It is based on FEMA's reporting standards and can also be configured to the state's needs. Finance records can be entered either from the finance tab in a ticket or through the Incident Ledger page. Each finance item is associated with a particular incident and with a ticket that tracks the finance request and its current status. DLAN comes pre-loaded with a resource list and cost codes that are based upon FEMA's equipment list costs. Custom resource codes and costs can also be added by an administrator. Information about the item, delivery info, wage info, and invoicing are all recorded by the system.

4.2.1.17.3. Maintain accurate records of incident costs.

The DLAN Finance Module's Incident Ledger feature allows users to quickly generate custom reports about financial items for the current incident. All finance pages support searchable and sortable data columns, exporting data to Excel, Word, or CSV files, and automatic subtotaling and totaling sums. This means that the current spend level for the incident is always totaled and available.

4.2.1.17.4. Support planning activities through preparation of estimates for resource usage.

DLAN supports planning activities including the preparation of estimates and expected resource usage through the use of the Preparedness Toolkit features. This functionality allows an authorized user or administrator to prepare templated tickets ahead of time for common resource requests and standard mutual aid requests such as mission ready packages. These templated tickets can include all finance information and costs relevant to equipment and personnel involved with the task or mission. Templated tickets can be activated individually or in bulk (mass activated) by an administrator as needed. Templates can also be used by basic users as a way to enter a standardized ticket with pre-filled information in a quick and accurate manner rather than building a resource request ticket from scratch. Finally, templated tickets are associated with a scenario / incident category and can be automatically activated when an incident of that type is created. This provides an immediate action plan and important tasks at the beginning of an incident response when time is most critical.

4.2.1.18. The EMIS web application should allow functional user groups to easily bulk import and export information including resource data.

Please see the answer to 4.2.1.16.4 above for importing resources. All resources are tied to an "owner" organization in the system. The records for these organizations are secure, but can be edited by members of the organization (or an administrator) in the DLAN Phonebook and Resources Module. Each functional user group can have its own record and manage its list of resources as well as what other groups can view their data.

4.2.1.19. The EMIS should allow users to plan, manage, track, observe status and costs incurred as well as plan future resource allocations.

DLAN's Finance module provides the necessary tools to help users and administrators track costs for missions, tasks, and resources. It is based on FEMA's reporting standards and can also be customized to your organizational needs.

Finance items can be entered either from the finance tab in a ticket or through the incident ledger dashboard page. Each finance item is associated with a particular incident and with a ticket/task within that incident for easy tracking. Current resource cost codes are available for all default resource types based upon FEMA cost codes and custom resource codes can also be added by an administrator. Information about the item, delivery info, wage info, and invoicing are all recorded by the system.

Figure 4: Finance Form

The Ticket Manager's finance tab includes information about each cost item associated with that ticket and the incident ledger shows all cost items associated with an incident. The incident ledger allows users to quickly generate custom reports about financial items. All finance pages support searchable and sortable data columns, exporting data to Excel, Word, or CSV files, and automatic subtotaling and totaling sums.

4.2.1.20. The EMIS should have the capability to interoperate with the State's financial administration system to report material transactions including order and receipt of ordered material.

DLAN can export resource reports to common formats such as excel and CSV which can be uploaded into the State's financial administration system. If a more automated approach is desired, BCG could develop a custom integration with the State's financial administration system, however, scope, schedule, and cost, would need to be determined depending upon what software the finance system uses.

4.2.1.21. The EMIS should generate reports as requested on the levels of material at the report time and usage or consumption over a defined time interval to enable consumption to be addressed.

The DLAN Resources Module provides a view of all resources used during the incident. It can be searched or filtered by NIMS Type, Category, or Location. The Resources Module provides several standard reports that can be generated as needed. These include a master resources inventory list, detailed organization resource inventory list, and summary organization resource inventory list.

4.2.1.22. The EMIS should be able to receive, record and log incident intelligence and security reports from identified and verified external agencies.

DLAN can log intelligence and security reports from external agencies through the use of the DLAN Mobile Responder App. External Agencies can use the app to submit an incident intelligence report, security report, or any other type of information. This information is filled out on the app using customizable forms. When saved, the data is synchronized to DLAN in real time and populates a Status Board with the relevant information. It can also populate tickets and trigger notifications and alerts.

4.2.1.23. The EMIS should allow users, according to established role and authorization to post and retrieve information to/from a shared information space.

The DLAN Reference Library provides a centralized folder and file storage repository that is secure and easily accessible. Folders in the Reference Library can be locked down so that only authorized groups of users can view them and access the files stored under that folder. Because DLAN is web-based, this shared information space is accessible from any location or device.

4.2.1.24. The EMIS should disseminate incident information automatically to authorized users/team members.

DLAN supports user alerts via multiple methods including both in-app alerting and external email, SMS (text message), and phone call notifications. Alerts can be triggered manually, or automatically based on system configuration settings. This includes the ability to automatically send out incident information.

4.2.1.25. The EMIS should enable authorized users/team members to track incident locations and information and develop trend data over time during and incident.

Users can track incident locations on the DLAN GIS Premium Map. This allows users to recognize developing trends based on geographic location, proximity, severity, and other factors. Through the ArcGIS sync feature, this data can be sent to ESRI's ArcGIS Online for further analysis and visualization such as the creation of heat maps. In addition to mapping trends, DLAN also supports Twitter integration so that trending social media concerns, hashtags and information can be monitored for better decision making.

4.2.1.26. The EMIS should disseminate the authorized users/team members real time status updates as the reports are received.

The DLAN "Stakeholder Notifications" functionality is designed to improve situational awareness among individuals not directly responsible for working on a task or ticket, such as team members, executives and outside agencies. It provides the ability to share ticket information with internal and external staff as an Email. This helps to keep all essential personnel informed about requests, tasks, reports, or donations without needing to log into DLAN. This is especially useful for sharing information with stakeholders that do not need to have direct access to your DLAN system but whom you want to keep informed on particular occurrences.

When either an external stakeholder or staff member replies to a CC notification email their reply email can be appended directly into the ticket log in DLAN, keeping all essential information in one place regardless of the source of the information, even if the CC recipient does not have a DLAN account.

4.2.1.27. The EMIS should provide the means for visually presenting situational information in dashboard and Common Operating Picture (COP).

The Status Board is designed to display multiple types of situational awareness information in a dashboard format. It leverages both user updated content (e.g. incident messages) and automated external data sources (e.g.

Twitter). All content is live and updates continuously for real time situational awareness. All board elements are interactive and the content view can be customized by the user for his or her current session without affecting other users.
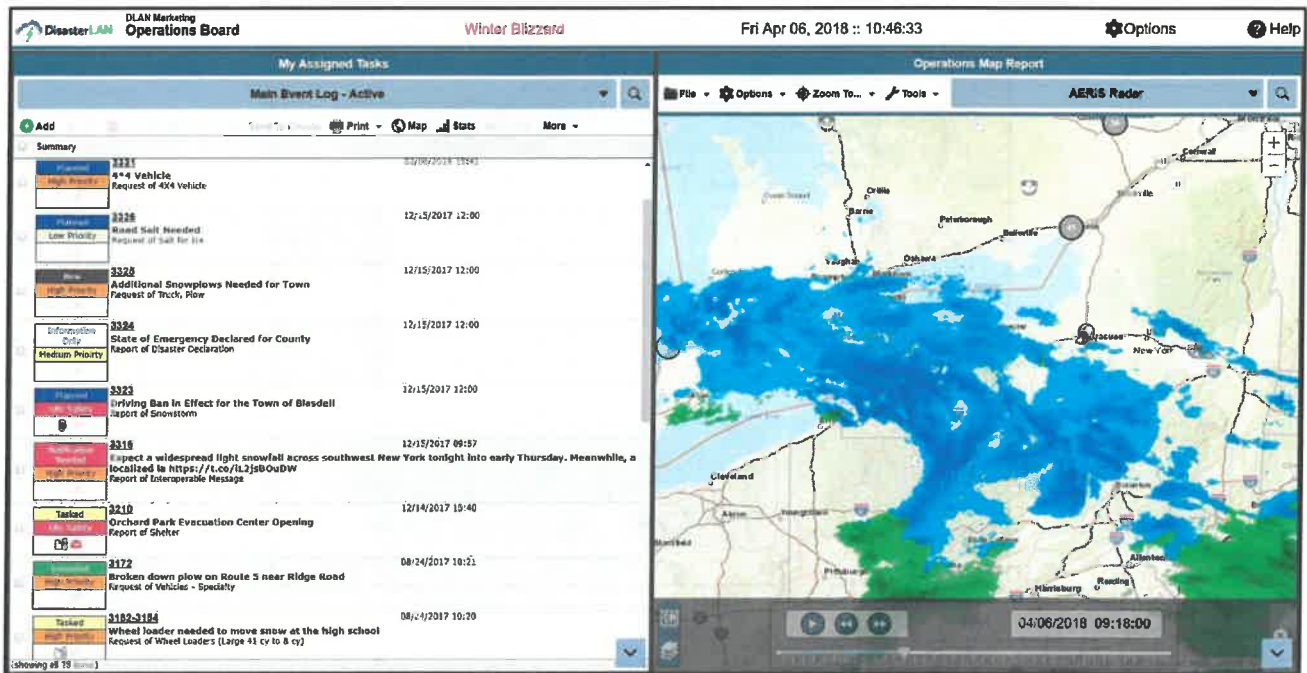

Figure 5: Status Board - Operations

Many subscription (data) types are available to populate each panel. Boards can also display user curated content such as critical decision messages. Boards can be created to display summary or detailed information from multiple incidents in one display. This mixture of different data sources and display types means the number of status boards an organization can make is practically endless, creating a truly customized experience.

The Status Board is specifically designed to be easily viewed on mobile devices, desktops, and projector/television displays. Each individual board panel can be popped out into its own window for full screen viewing.

4.2.1.28. The EMIS's geographic component should have a geographic application capable of supporting the resource request management process during an incident or emergency. This geographic application shall contain dynamic maps for displaying information such as the status of the resource request and the delivery location. The dynamic maps must deploy in real time the resource request status on a map and in a table view. The application shall permit dynamic search by address, toponyms, coordinates, and resource type. The application shall work on PC, tablet and mobile devices.

DLAN provides all the tools necessary for resource management, including the ability to save resource stockpile information to an organization record in the contacts phonebook; view the resources stockpile ledger for an incident; track resource requests and resource offers throughout their lifecycle in Ticket Manager; and display resource ticket locations on the GIS map.
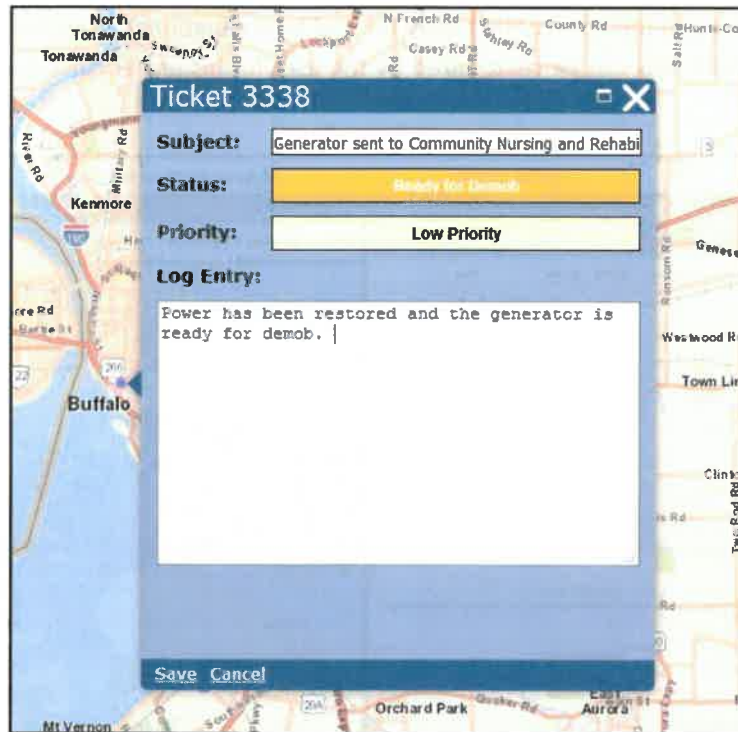
Figure 6: GIS Premium - Resource Location

Mapping tools will allow you to view the status of the resource request and delivery location on either a map or table. DLAN's dynamic search allows users to search by address, toponyms, coordinates, and resource type.

All areas of DLAN scale to work on PC, tablet, and mobile devices.

4.2.1.29. The EMIS should provide for data views that users can select, while removing old active information from sorted views.

Customizable views allows all users to drill down to whatever data is most relevant to them, this includes removing old active information from sorted views.

4.2.1.30. The EMIS should provide the means to communication easily with one or more remote users (by name or by function) using real time text messaging that is logged and recorded.

The Chat Module is DLAN's internal instant messaging system and is included with all systems. It can be used to send and receive user-to-user messages. When sending a chat, the system will display other users that are online as well as their role (function) to make finding the correct person simple. All chat history is saved and can be viewed by the participants as well as by an administrator with advanced permissions. Users can also initiate chat rooms for multiple participants. Chat rooms can be initiated independently or from within a ticket and saved as part of the ticket log, eliminating the need for duplicate data entry and creating a more complete record of decisions.

4.2.1.31.   The EMIS should have the ability to send automated text messages, voice chat messages, or video messages to mobile devices that are voice only capable.

DLAN can send automated or manually triggered text messages, voice phone calls, and emails to landlines, mobile phones, and users' devices. This includes voice only capable devices. DLAN provides automated text and email messaging when an incident is created, when a situation report is due, and when a user is offline but a ticket has been routed to his or her role. Any messages sent to the device that is voice only capable will be handled by the device's native operating system.

4.2.1.32.   The EMIS should have the ability to select privacy options according to member preference.

Each user in the DLAN system can go to their My Profile page for their account and adjust their privacy settings for email and text message notifications as well as change settings for other personalized functionality. This provides users a way to "opt-out" while still maintaining their DLAN account.

4.2.1.33.   The EMIS should provide access to properly authorized users via non mobile devices, such as smart phones.

In general, DLAN is designed to be accessible from any mobile browser that fully supports JavaScript, session based cookies, HTML 5 technologies, and other modern web browser features. DLAN's responsive design interface allows many mobile devices to support DLAN natively (i.e. no app required) including Apple iOS Devices, Windows Mobile Devices, and Android Devices.
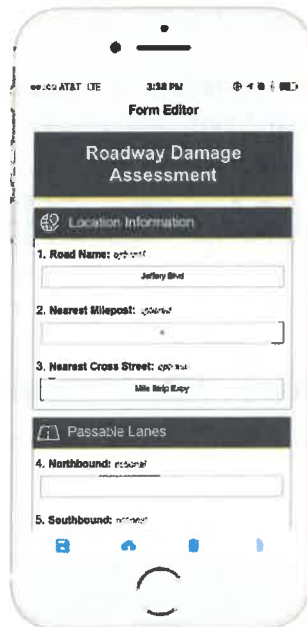

Figure 7: Mobile Responder

4.2.1.34.   The EMIS should provide detailed user activity reports.

DLAN provides detailed user activity reports.

Figure 8: Security Report - User Activity

4.2.1.35. The EMIS should provide ad hoc user-defined reporting.

Many of the modules in DLAN allow users to create custom reports. BCG's easy to use tools allow administrators to lay out new documents, boards, forms, links, and other pages as needed, giving DLAN users a powerful way of managing the various reporting and input needs of each incident.

System reports allow administrators to save reports that are accessible to all users, such as a "completed tickets" report showing only tickets in the incident that have been completed. Users can also create custom reports to show whatever information is of interest to them.

Figure 9 - User Defined Reporting

In the Ticket Manager, ticket reports are used to filter the list of available tickets down into meaningful sets of similar tickets so that they can be more easily tracked, worked upon, and completed. Customized views of ticket data (reports, requests, donations, etc.) can easily be queried based on date time range, incidents, priority

settings, status settings, jurisdiction data, user submission data, location data, routing information, keywords, attachment data, and other information. Users can select the columns they wish to see in the report, using any data within the ticket or any dynamic forms created by WV staff. These queries can easily be saved for use by other groups of users in map reports, in ticket manager grids, in status boards, and as personal reports. This ability to quickly filter and present data for temporary or permanent use allows the Ticket Manager to be a core data management system for customer displays and views on the system.

Figure 10: Ticket Manager Report

Like the ticket reporting tools, phone book data can easily be filtered by users to display organizations and people based on filterable criteria such as location, trainings completed, skills possessed, categories, text, and other filters. These reports can then be saved for use by other users on the system in order to easily find contact information on vendors and staff that is specific to their emergency management needs.

Every table of data on DLAN includes filters to find textual data within the grid. Additionally, many grids include advanced filtering capabilities such as date/time ranges, category filters, location filters, routing filters, active/de-active data filters, organization filters, status filters, and other types of filters. Additionally, any grid is re-sortable by clicking on the headers of a particular column. These advanced capabilities make it easy for any table of data on DLAN to be filtered as per the needs of the users.

Mandatory Project Requirements

4.2.2.1 Vendor shall develop and provide an enterprise level web-based emergency management information sharing software solution that can be used by federal, state and local governmental, and non-governmental emergency response partner organizations and agencies. The solution will be hosted on a Level 1 Data Center with a combination of local servers at the agency and have could-based hosting, as an option.

BCG's proposal describes a customizable software solution based on our COTS DisasterLAN (DLAN) crisis information management software platform that can serve as a replacement for your Crisis Information Management system with scalable state-wide coverage. It will facilitate WV Homeland Security and Emergency Management by providing an interoperable platform for use by all levels of government and private sector response partners. DLAN is designed to be central hub for Emergency Management that can pull in data and real-time information, fully integrating different databases, systems, and reporting functions into a single common operational environment through the use of secure proven tools and modules. DLAN provides a modern web-based software solution with mobile application that can provide situation reporting across all WV localities.
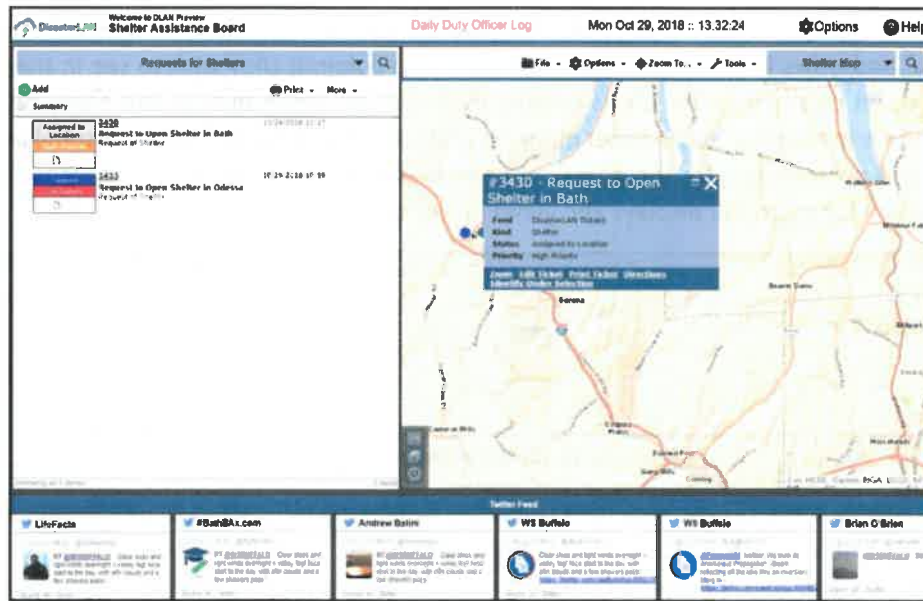
Figure 11: Status Board - Shelter Assistance Board

DLAN is available in a traditional on premise solution, as a cloud based Software as a Service (SaaS) Platform managed by BCG and hosted in Level 1 Data Centers, or as a hybrid local/cloud solution. DLAN is available through several datacenter service providers in order to meet client preferences, security requirements, and price points. For current clients BCG hosts DLAN with datacenters from CenturyLink, CentriLogic, Amazon AWS, and Microsoft Azure. All hosted DLAN datacenters provide high availability, redundancy, resiliency, physical and digital security, and full and incremental backups. DLAN also supports multiple datacenters at different geographic locations, disaster recovery, virtualization, active/active solutions, and load balancing.

4.2.2.2 Vendor shall provide such a solution that can be integrated and interoperable with the Federal Emergency Management Agency's web-based solution and those of all FEMA Region III states, the District of Columbia, and other contiguous states.

DLAN can exchange information with FEMA's web-based solution, FEMA Region III states, the District of Columbia, and any other systems that utilize common protocols for communication and information exchange such as Email, CAP, EDXL, ArcGIS Online and IPAWS. DLAN also has a flexible XML driven API that allows BCG to create new custom integrations and message interoperability quickly and with less expense than many other solutions can offer. This power and capability is streamlined for ease of use into one email like interface with inbox and outbox folders and a single intelligent New Message window that lets users forward content or write and send messages and email in a straight forward manner. The New Message page will insert relevant fields dynamically based on the recipients the user selects or their outgoing message channel (Text Message, IPAWS, Email, etc.).

When it comes to integrations and interoperability, BCG's DLAN engineers believe that an emergency management system should be able to be integrated with other solutions quickly and easily by following accepted data and communication standards rather than proprietary formats. Unlike many solutions out there, DLAN follows NIEM and NIST guidelines with common protocols and standards for meaningful information exchange available out of the box without requiring external fusion servers or third party interoperable plug-ins. Interoperability and integration features are built into the DLAN software modules wherever possible, including: tasks, resources, mapping, situational awareness information, communications, planning documents, and more.

When customers choose DLAN they will have a solution that interoperates with the various tools that they rely upon to run their day-to-day and emergency operations.

All DLAN systems are interoperable with each other, allowing ticket and data to be directly updated between systems in real-time. There are numerous ways to get data into and out of DLAN from external applications, including both API based integrations and non-API based integrations.

For GIS Integrations with Third Parties the following API-less integrations are supported to share data with DLAN:

- KML / KMZ files (two-way data sharing)
- WMS Services (inbound only)
- ESRI ArcGIS Server Feature Services (two-way data sharing)
- ESRI ArcGIS Server Image Services (inbound only)
- ESRI ArcGIS Server Map Services (inbound only)
- ESRI ArcGIS Online Map Services (inbound only)
- AERIS Tile Services (inbound only)
- CSV files (two-way data sharing)
- Shapefiles (inbound only)
- GeoRSS Feeds (inbound only)

For Text Based Integrations with Third Parties, the following API-less integrations are supported to share data with DLAN:

- CSV files (two-way data sharing)
- RSS feeds (inbound only)
- Email via SMTP (outbound only)
- Email via IMAP (inbound only)
- Email via POP3 (inbound only)
- SMS text message via SMTP (outbound only)
- MASAS (inbound only)
- IPAWS-OPEN (two-way data sharing)
- Twitter (two-way data sharing)

For Security Integrations:

- LDAP (outbound authentication)
- LDAP pre-registration (inbound user list synchronization)
- Federated Services (SAML 2.0, Shibboleth via ADFS)
- API based Integrations with Third Parties:
- Ticket Data API (two-way data sharing)
- EDXL-DE API (two-way data sharing)
- EDXL-CAP API (two-way data sharing)
- EDXL-HAVE API (inbound data sharing)
- EDXL-RM API (inbound data sharing)
- CAP API (two-way data sharing)

If none of the out of the box options will work for WV, BCG's talented engineering team can create a custom integration channel.

4.2.2.3 This system shall supply reports on the following factors of emergency management: event and incident reporting; resource requesting and management; response inventory management; infrastructure reporting, including road closures, hospitals, shelters, other critical infrastructure; damage assessment; and, a references section for documents, user directory, organization charts, etc.

Event and Incident Reporting

The DLAN system provides reporting for individual tasks, missions, and after action reports the whole emergency event or incident. Reporting on individual tasks or missions (groups of related tasks) through a report generator

tool that allows users or administrators to search, filter, select columns and data, and produce a tabular report of all important information. Tabular reports can then be visualized as graphs or charts or broken down into statistics using the Stats tool.

Figure 12: Status Board with Stats

For reporting on the whole incident, DLAN includes an after action report tool that provides customizable AARs that produce a chronological report of every action taken by users during the emergency, including: resource request tickets, situational information update tickets, messages, status board (dashboard) entries, broadcast messages, situation report documents, incident action plan documents, file uploads, reference folder creations, and recorded GIS map screenshots.

Resource Requesting & Management

DLAN Ticket Manager Module allows users to request resources using a simple ticketing system and then route requests to other roles on the system for fulfillment. A Ticket Wizard option makes entering a request a simple step by step process. Resource requests routed to a user's role will automatically appear on their status board (dashboard) or in their Ticket Manager report. Users can triage request tickets including adding statuses, priorities, attachments, locations, contact information, and other valuable information. As tickets are completed they will fall off of the users' dashboards or ticket reports, keeping information to a focused and management level. Ticket Reports allow users to view completed tickets or information routed to other roles for situational awareness purposes.

Figure 13: Ticket Wizard - Resource Request

Response Inventory Management

The DLAN Resources Stockpile Module will allow WVDHSEM to pre-populate known resources and inventory equipment into the system and assign them to the agency or organization that owns them. This stockpile inventory can then be referenced or searched with the "Find Match" button when entering a resource request ticket. Users entering the request or a user in a logistics role can use find match to pull up the contact record for vendors, suppliers, departments, or agencies that own that type of resource. This makes sourcing equipment a quick and painless process. Stockpile inventory can also be viewed when looking at organization records in the DLAN Phonebook Module to see what resources that organization or agency owns.

Figure 14: Ticket Manager - Resource Match

The DLAN Assets Module provides further tracking of inventory through the resource deployment, demobilization, and recovery phases of a resource request. Assets allows users to track the specific personnel or piece of equipment that was deployed to the field as part of a request, it's current location, its status, images, and other key information on the GIS map. This asset tracking is also integrated right into the original resource request ticket, giving full visibility and accountability to the original requestor and managers that are coordinating resources. The Assets Module can also provide real-time AVL tracking for vehicles equipped with a tracking device or personnel using a GPS tracker. The DLAN Mobile app can also be used to track the location of personnel using the app, provided tracking is enabled on the device.

Infrastructure Reporting

- Road Closures

DLAN's Status Board Module provides terrific visualization, coordination, and management of key information such as infrastructure reporting in a user focused dashboard. DLAN comes out-of-the-box with a Road Closure Status Board that is designed to populate information automatically from report of road closure tickets or road closure forms submitted from the mobile app. The board includes a tabular view of affected roads with columns for specific road closure data (nearest milepost, northbound/southbound, reason closed, etc.) color coded road status (open, closed, partial, etc.) and a map of the area displaying real-time traffic information from public sources such as ESRI and Google. This board is included with DLAN by default, but can be changed or edited by WVDHSEM as needed to display other real time road closure information.

- Hospitals

Hospitals can be tracked in DLAN Phonebook records which allow users to capture key facility information, resources, personnel, and other data. This can be viewed in the DLAN Phonebook, or in a Status Board (Dashboard) Panel. Additionally, DLAN offers a bed tracking module (not included in the direct cost of this proposal, but available as an option) which offers real time automated and/or manually updated bed status tracking information, hospital facility capabilities, and bed occupancy information as well as ambulance transport tracking. Bed tracking is based on the Hospital Availability Exchange (HAVE) / HAvBED standard from OASIS.

In the recent past, DLAN has been used to integrate advanced syndromic surveillance report into the bed tracking and GIS map modules to show the top syndromes reported at area hospital ER departments, deviations, trends, ER capacity surges, and warnings related to public health. These integrations were implemented for the Ministry of Health in Ontario and track bed status and facilitate emergency communications between all 350 public hospitals in the Province.

- Shelters

Similar to BCG's Road Closures board, DLAN includes a Shelter board that is designed to pull in shelter information such as shelter name, location, capacity, etc. and display that data in a color coded tabular view in one nice visual dashboard. Users can edit and update shelter information from the board or submit entries through the Mobile App, for example, staff on location working at a shelter can update their capacity and have it sync that information in real-time back to the EOC where it will be displayed on the Shelter Board.

- Critical Infrastructure

The DLAN Phonebook Premium Module will allow WVDHSEM to track critical infrastructure and facilities in a record, capture point of contact information for a responsible person or agency, geolocate the facility to an address or point, and display it in both the Phonebook and on the GIS Map. Facility and infrastructure reports can be created dynamically as needed or pre-built. These reports can be used to color code facilities and infrastructure on the map based on their status (red, yellow, green, etc.). Finally, Assessments (damages, risk assessments, rapid assessments, spot reports, etc.) can be created for each facility and submitted through the Mobile App by field staff going out to do those assessments.

Damage Assessment

The DLAN Mobile Responder App is a flexible multi-purpose two-way communication and information reporting app that runs as a native app on iOS, Android, and Windows devices such as smartphones, tablets, and laptops. The App can be used for a variety of tasks including situation reporting from the field and task distribution, but it's primary use case is for completing Damage Assessments and syncing that information back to the DLAN system. The Mobile App has a form based data entry solution, allowing WVDHSEM to design, build, and deploy

any form that they want to user's mobile device. BCG provides a tried and tested Damage Assessment mobile form that is available out of the box. Users can open the app on their device and fill out a damage assessment on this standardized form. The app will automatically capture the user's location and provides the ability to use the map or an address to adjust it if needed. The app also allows users to take pictures and video and attach them to the Damage Assessment. When complete, the damage assessment is synchronized back to the DLAN system. If the user does not have cellular or wireless internet connectivity the app will function offline and automatically syncs completed assessments once connectivity is resumed.

On the receiving end, DLAN comes with an out-of-the box Damage Assessment Status Board (dashboard) that populates a report and a map automatically as assessments come in from the field. Incoming damage assessments are automatically converted into actionable damage assessment report tickets and users can manage and update them through the Damage Assessment Status Board or their Ticket Manager page as needed.

Reference Documents

The Reference Library is DLAN's main file storage area and is designed to make files and documents available to staff anytime, anywhere. The Reference Library is not incident specific and is designed to store persistent data that needs to be accessible for all incidents, such as policies, procedures, chemical and radiological reference information, emergency evacuation plans, or any other reference document. Three features that differentiate DLAN's Reference Library from other file storage applications are that it is fully accessible from mobile devices; its intuitive security settings which allow folders to be locked down by security group to protect sensitive information; and that it can be used to upload any type of file (unless specifically prohibited by an administrator).

The Incident Folders Module is a secondary file storage feature that works similarly to the Reference Library, but is designed to save incident specific documentation, such as disaster scene photos, press releases, news articles, static GIS Maps, and agency generated documents. Documents uploaded to the incident folders during an emergency become part of the incident record and after action report. Incident Folders are archived when the incident is archived in DLAN. A pre-set folder structure can be defined and is auto-created for each new incident to create a consistent organizational structure for saving incident specific files. Other DLAN modules have quick-links to store items in Incident Folders or to post documents from Incident Folders to other modules, such as the Status Board. At the end of the Incident, all materials stored in Incident Folders can be downloaded, rolled into a report, or Emailed out.

User Directory

The DLAN User List Module shows which users are currently online/offline and provides a link to message them via DLAN Mail Message (DMail) or Chat message. The User List displays the offline or online status, proper name, username, current role (EOC manager, logistics chief, Red Cross liaison, etc.), Email, and phone number of each user. Users can filter the user list by online or offline users for easier viewing.

Organization Charts

The DLAN Incident Action Plan (IAP) Module enhances the functionality of ICS forms by allowing users to compile them into IAPs following FEMA's guidelines. This includes the ICS 203 and 207 forms for organization charts. An IAP can be published with just the org chart form or as a compilation of any ICS forms that are useful for the current incident. IAP Templates allow users to select a pre-filled IAP org chart that already has key information entered. Or, the user can copy/clone a previous org chart and use it as a starting point for a new one.

4.2.2.4 The system shall be designed and equipped to accept upload of GIS information for spatial display in the form of shape files, layer files, web map services (WMS) files, and .kml or .kmz files, as well as allow for querying of multiple data sets that may be exported from the system in the aforementioned GIS formats as well

as tabular or delimited form which will enable editing and spatial order for good presentation of maps or reports.

GIS Premium Module

DLAN's GIS Premium Module goes beyond the mapping basics allowing users to fuse together geospatial information from virtually any external or internal source onto one common display. Unlike other solutions that require costly per-user accounts to a third-party GIS platform, DLAN's GIS Premium is accessible to all your DLAN users with no hidden fees. Other benefits of DLAN's GIS system over similar products include: interoperability, ease of use, and full integration with other system components creating a unified common operating picture. GIS Premium is based on the ESRI ArcGIS technology with the map viewer designed and built by BCG to ensure it ties in fully with other DLAN features and data. Because it is based on ESRI ArcGIS, WVDHSEM gets full interoperability with any ESRI based maps, layers, data, geocoders, and other information that may already exist at your organization, simply paste in the URL to those data sources and it works.

DLAN's GIS map supports extensive geospatial file types for layer data including Shape Files, Layer Files (overlay services), Web Map Services (WMS), KML&KMZ static files, KML&KMZ web services, KML based AVL tracking devices, REST/SOAP endpoint services, GeoRSS feeds, GeoJSON files and services, and static delimited data files such as CSV's with addresses or location data.

Data Querying & Export

The DLAN GIS Map's Identify tool allows the user to query multiple underlying data sets underneath a point or selected area (drawn polygon or buffer) and then view and extract that attribute data for each layer and export it to another format such as CSV or Excel for analysis.

DLAN's integration with ESRI ArcGIS Online (AGO) also means that DLAN ticket data (resource requests, donations, reports of critical information, etc.) can be pushed up to ArcGIS Online where it can be viewed in real-time and shared with an authorized set of people or agencies, or opened up for public consumption. DLAN data being shared to AGO can be specifically filtered so that sensitive information remains with WVDHSEM and is not visible or shared to AGO. Once in AGO, all of ESRI's tools are available, meaning the data can be manipulated or visualized in nearly any method desirable, for instance fused into a regional heat map along with other outside data sources. That heat map can then even be pulled back down DLAN for display in a Status Board.

DLAN also provides tools to allow users to download KML/KMZ files, CSV's, and Shape files that have been uploaded or created in DLAN. This gives a simple way to share GIS files with other agencies that are using open toolsets like Google Earth and Excel.

4.2.2.5 This system shall be capable of assigning user-based permissions to data. These permissions will be based on security levels determined by the agency. The system will be capable of determining access to data based on user permission level. The system shall allow users to share information to other users in Word, Excel, PDF, or equal formatting.

Security

DLAN includes a robust and flexible security utility that is part of the system administration module. It provides for multiple layers of security and access control throughout every level of the system. The permissions structure

in DLAN is tiered and can be configured by the customer to have granular security permission, broad security permissions, or any range in between. DLAN accomplishes this flexible and intuitive security structure by implementing administrator defined security groups which are separate from user accounts and roles. These security groups are composed of several individual security permissions.

The principle of least privilege is the guiding methodology for security in DLAN. Users are only provided the minimum level of access necessary to perform their job functions in the areas of the system that they are required to use. Other areas of DLAN remain invisible or inaccessible. In addition to securing information, this also simplifies the number of options on the end-user's user interface, which makes just-in-time training quick and easy. It also encourages an ICS based workflow process for handling information flow in the EOC as each end-user has a clearly defined job duty and passes information along to the next person in the chain.

Administrators may configure an unlimited number of user accounts, groups, and roles. Groups and roles may be assigned to a user account through the use of a simple checkbox system. Users may have multiple groups and roles if they are trained for multiple positions, this allows them to retain one account and toggle between views as needed. DLAN comes with several default security groups already created, and during the configuration period BCG trainers will work to create other security groups and user accounts as needed. Administrators can change user's security permission on the fly and it will apply instantly without the need for the user to log out. This flexible and intuitive security system will cover all of your needs and allow system administrators to change or add privilege levels on the fly during an incident.

<u>Export Button</u>

DLAN includes an export feature that is available on all data tables, lists, and reports. With one click users can export data out of DLAN to MS Word, Excel, CSV, or PDF formats for further analysis. Data can also be emailed to outside stakeholders by clicking the Forward button. This attaches the document, file, or ticket to an email and sends it off the system to the selected or entered recipients.

4.2.2.6 All data shall remain the property of the state and will not be available for dissemination by the vendor.

All data entered into DLAN will remain the property of West Virginia and will not be disseminated by BCG.

Functional Requirements
4.2.3.1 The vendor shall provide all training opportunities and/or exercises against the State's Development platform of the EMIS solution.

BCG can perform all training and exercises using the State's DLAN Development/Test Site. The Development Site can also serve as a test bed for new releases and updates so that the State can test them in a controlled environment before applying the update to the production EMIS site.

4.2.3.2 The vendor shall provide training for:

For more information on training courses, please see BCG's response to 4.2.1.4 and 4.2.1.10 above.

4.2.3.2.1 Users.

BCG will provide basic user course training for these users.

4.2.3.2.2 User Support Staff.

BCG will provide basic user course training for these users.

4.2.3.2.3 System Operators.

BCG will provide basic user course training for these users.

4.2.3.2.4 Trainers.

BCG will provide basic, advanced, and administrator course training for these users.

4.2.3.2.5 System Administrators.

BCG will provide administrator course training for these users.

4.2.3.2.6 Technical Staff: to include Information Technology, Programming, and GIS staff.

BCG will provide administrator user course training for these users. BCG will also provide necessary knowledge transfer during project implementation to assist these technical users.

4.2.3.3 The EMIS shall enable users to manage and coordinate the efforts and resources of the response and management organizations engaged in a specific incident, planned event, training event, or exercise, regardless of scope.

DLAN can be used to manage incidents, trainings, exercises, events, and daily activities of any size or scope. Whether used to manage a pre-planned event, severe weather, a crisis situation, or a disaster, DLAN provides tools for creating situational awareness on many levels – both for on-site personnel and those in the field. With task, mission, and resource management tools, emergency communication tools, and custom status boards, DLAN makes it easy to track, manage, and report on multiple incidents and events from one unified mobile ready solution. Templates, workflows, and modules can be configured to support the various needs of exercises, disasters, and events. Incident security features allow administrators to easily lock down an event or incident to just the people that need access to it. Filters within the system make it easy to look at data specific to the incident the user logged into as well as giving them the ability to look at data across multiple incidents simultaneously.

DLAN has been used to manage incidents and events of all sizes and scopes such as hurricanes (e.g. Hurricanes Irene and Sandy), large scale special events (e.g. the Republican National Convention and Super Bowl), large exercises (e.g. Vigilant Guard and Vermont Yankee Nuclear Power Drills), and daily activities and local emergencies (e.g. duty office logs, wildfires, and localized floods). Additionally, many organizations use the software to track on going in-house projects like grants, equipment maintenance, trainings, and other internal projects. Doing so allows customers to be on the system in a daily capacity, allowing for better familiarity with the product when a true disaster happens.

4.2.3.4 The EMIS shall enable users to manage daily activities and to monitor and track all aspects of an incident or event.

DLAN is specifically designed to support daily operations and emergency response. DLAN provides several tools that can be used on a daily basis for normal operations, including event logging, social media monitoring, email monitoring, webpage/RSS feed monitoring, documentation library folders, role based briefing notes, and several other tracking tools. DLAN's robust toolsets will allow users to monitor and track all aspects of an incident or event.

4.2.3.5 The EMIS shall enable users to direct or task resources and or receive and monitor reports received in response to directives.

The Ticket Manager is DLAN's main resource, issue, and task management module. It also includes tools for monitoring reports received in response to directives. The Ticket Manager creates a common area for collaborative issue tracking and real-time information sharing using straightforward color coded statuses and priorities. The Ticket Manager provides user-friendly data entry tools to make logging and tracking critical information quick and easy. It allows both task and mission information to be entered, prioritized, and followed from start to completion.
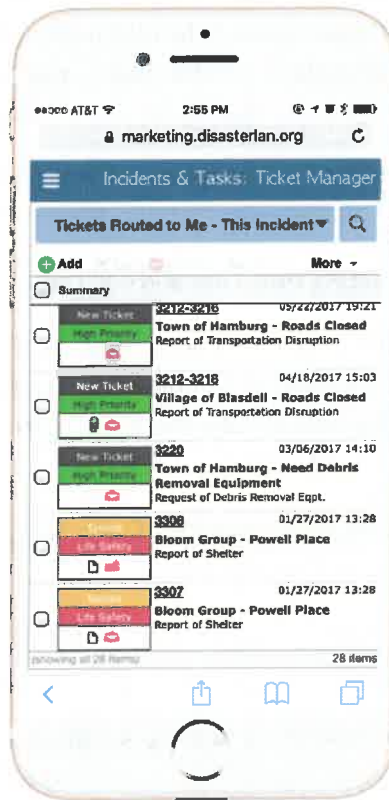
Figure 15: Ticket Manager on iPhone

4.2.3.6 The EMIS shall enable users to create contact lists for emergency management staff and external contacts.

DLAN's Phonebook allows users to create contact lists for emergency management staff and external contacts.
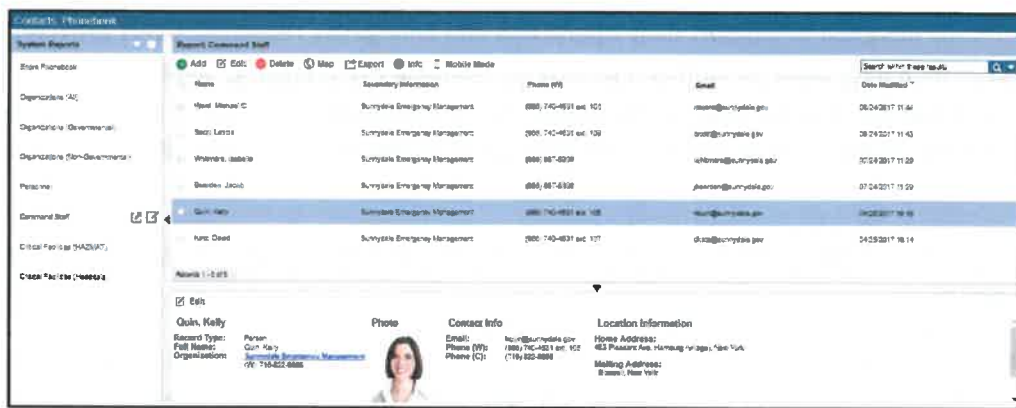
Figure 16: Phonebook Report

DLAN's Phonebook report engine allows users to easily create reports on personnel and critical facilities that are important to them. Tools allow reports to be created based on filters such as trainings, skill sets, categories of personnel, categories of facility, and locations. Once created, these reports immediately become available for use in other modules, such as GIS Premium or Status Board Builder. They can be used as layers on maps, bookmarked locations in map reports, and panels in status boards or landing pages. With this feature you can easily build real time views of staff that have specific qualifications, facilities that provide particular types of services, vendors that provide a required resource, and other types of critical facility reports that would be beneficial during an incident.

These lists can also be turned into distribution groups for easy messaging, see 4.2.1.11. on page 23 for additional details.

4.2.3.7 The EMIS shall enable users to access Duty Logs and Call Logs.

Duty Logs and Call Logs can be accessed through Ticket Manager Reports. DLAN is often used by Duty Officers to monitor escalating events. It can also be used by call takers as a call center system to log phone calls and information requests. DLAN provides full tracking of logs that are kept by all user positions under specialized ticket reports such as "Tickets Added or Edited By My Role."

4.2.3.8 The EMIS shall enable users to access Procedures, Check Lists and Organization Charts, as defined by the agency.

Procedures, checklist, and organization charts can be accessed through the Reference Library, described in detail in 4.2.3.20 on page 47.

4.2.3.9 The EMIS shall enable approved individuals to designate groups of individuals, by name or by functional position.

DLAN administrators can create groups within the system. Groups are flexible and can be used to define a selection of individuals, an organization, department, functional position, etc.. Groups can be used to provide security permissions and access to features, or they can be used to identify which groups of users should be able to view an incident, status board, report, folder, file, or document.

4.2.3.10 The EMIS shall enable the logistics support users to plan and manage the acquisition and distribution of personnel, equipment, and material required to sustain an incident operation.

Logistics support users can triage and mange resource requests, personnel requests, acquisitions, equipment and other materials related to an incident. The Find Match button allows them to match up a request ticket with a stockpile resource or vendor. The Assets Module, allows logistics support users to track equipment assigned to the field including its current location and status (ex: en-route, on-location, ready for demobilization, etc.). This type of logistics function is an area where DLAN truly excels above other EMIS software through its Ticket Manager, Resources, and Assets functionality.

4.2.3.11 The EMIS shall enable logistics support users to plan the pre-position and manage supplies in facilities in advance of an incidence occurrence.

The DLAN Phonebook allows logistics support users to build out vendor, organization, and facility records including what resources are owned by that organization or currently located at that facility. This is especially useful when setting up staging areas and forward command posts. These records can be populated ahead of time and displayed on the DLAN GIS Map for geospatial planning and analysis.

4.2.3.12 The EMIS shall enable logistics support users to task transportation resources to transport and deliver supplies.

The DLAN Ticket Manager module is designed to allow users to task out responsibility for an action to another role. Logistics users can receive a resource request ticket, source the equipment, and then route the ticket forward to a transportation role for delivery of the supplies. Each role plays their part in completing the ticket. At each stage notes and actions are logged, the ticket status is updated to reflect its current spot in the process, and users are alerted when a new ticket lands on their dashboard or report.

4.2.3.13 The EMIS shall enable the logistics support users to monitor and forecast the consumption of supplies.

The DLAN Resources Module allows logistics users to decrement known stockpile resources as they are consumed so that additional supplies can be sourced when stocks get low. Additionally, the Statistics feature allows user to view resource request tickets broken out by type, kind, role responsible, and other trends so that users can forecast future supply needs.

4.2.3.14 The EMIS shall provide for the following:

4.2.3.14.1 Financial administrative support for procurement of material and services,

The Finance Module provides all necessary information to track procurements, purchase orders, receipts, and payment information for materials and services. Finance information is viewable in a tabular page or on a dashboard or mobile device.

4.2.3.14.2 Monitoring and reporting of costs related to an incident.

All costs associated with an incident are tracked in the Finance Module. This includes individual line items for resources, equipment, personnel, and services with quantity, unit costs and expected total costs. The Finance Incident Ledger also automatically totals all running costs for the incident so that the State knows when their obligations are met and when federal will become available. The Finance Module also allows finance users to create configurable reports to get detailed information on specific resource types, categories, purchase orders (with multiple items), vendors, statuses, date filters, and DRP eligibility.

4.2.3.14.3 Providing cost analysis services.

DLAN's Finance Module is designed to track all costs and display running totals for each task, mission, and the incident as a whole. Customizable finance reports help with analysis of trends. DLAN also tracks displays promised payments, payable by, and expected costs as well as delivery, wage info (normal/overtime), and invoicing information. With all this information in the system, the backup data for reimbursement is simple and at the state's fingertips.

4.2.3.15 The EMIS 's administrative and management functions shall be available to designated Administrator groups.

One of DLAN's greatest strengths over competitive software products is that it gives system administrators full control over configuration, presentation, and security features at no additional charge. Universal system changes can be made from one easy to use menu. These features will be made available to designated Administrator groups.
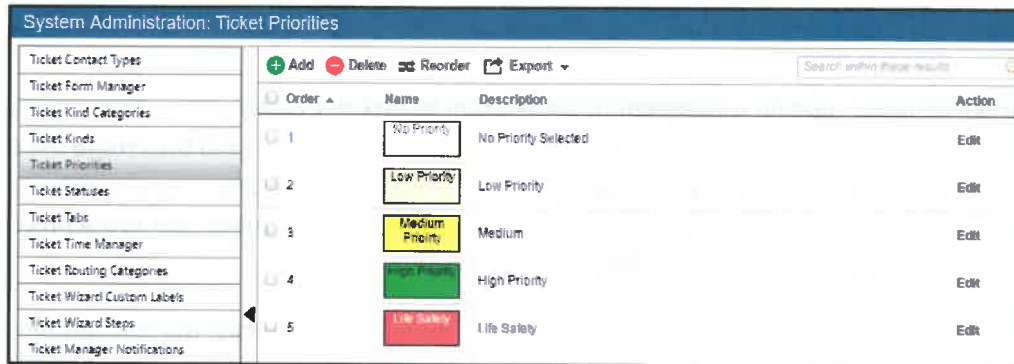
Figure 17: System Admin - Ticket Manager

4.2.3.16 The EMIS web application should allow functional user groups to easily bulk import and export information including resource data.

Please see 4.2.1.18 on page 26.

4.2.3.17 The EMIS should allow users to plan, manage, track, observe status and costs incurred as well as plan future resource allocations.

Please see 4.2.1.19 on page 26.

4.2.3.18 The EMIS shall provide the State EOC electronic and printable forms for logging and reporting the ordering, receipt and issuance of material.

Asset Tracking provides a way for users to track deployed assets and resources for a particular incident and quickly view the status, quantity, and location of all deployed assets in the asset ledger. All forms and reports can be printed.

Figure 18: Asset Form

4.2.3.19 The EMIS shall receive, log and report to the authorized users/ teams the status of human, equipment and logistics resources throughout an event.

Reports can be created within the system and made accessible by authorized users/teams on the real time status of all resources throughout an event.

4.2.3.20 The EMIS shall enable the authorized users to develop deliberate contingency plans in advance of and/or during an event.

The Reference Library is particularly designed to store and distribute pre-planning documents such as contingency plans. Three features that differentiate DLAN's Reference Library from other file storage applications are that it is fully accessible from mobile devices; its intuitive security settings allow folders to be locked down by security group to protect sensitive information; and that it can be used to upload any type of file (unless specifically prohibited by an administrator).
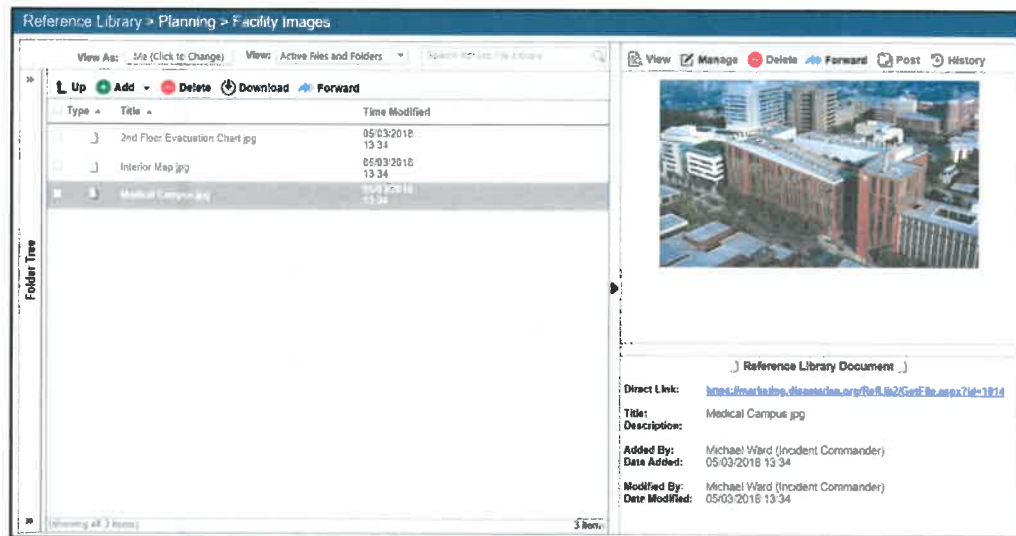
Figure 19: Reference Library

4.2.3.21 The EMIS shall provide the electronic fillable and printable forms for the authorized users to prepare, share, present, electronically sign, and print their components of the contingency operations plan.

DLAN allows administrators or authorized users to design, build, and deploy custom fillable forms such as a contingency operations plan. Forms can include fields, tables, drop-down lists, text, images, and other attributes as well as electronic signature capture fields. DLAN can also track dates and times for a form field, for example automatically record when a form is signed. This can be used to trigger workflows or build in automation. All forms created in DLAN can be deployed to the Mobile App for users in the field or at other locations to fill out forms and sync the data back to the DLAN system where it can be displayed on a report or dashboard and them managed accordingly as either a ticket or an assessment.

4.2.3.22 The EMIS shall receive, record and log incident situation reports submitted by authorized users or local users, including external agencies or external EOCs.

DLAN's Situation Report module is designed to allow users to create and track reporting periods and generate one or more situation report(s) for each period faster and more simply than building them manually from disparate agency reports. Information from external agencies/EOCs can easily be incorporated into Situation Reports.
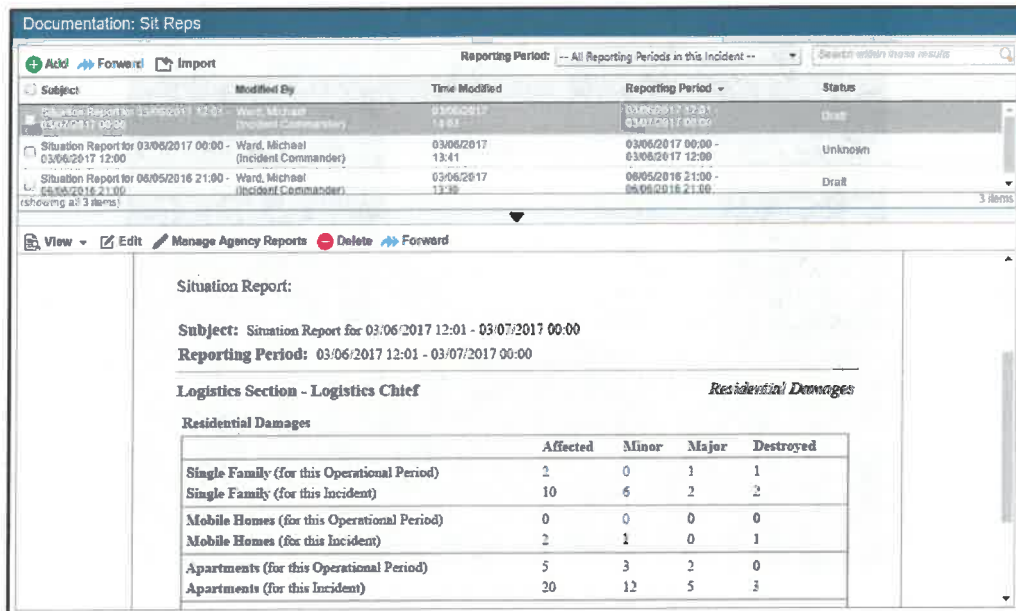
Figure 20: Situation Report

4.2.3.23 The EMIS shall enable authorized users/team members to prepare and disseminate situation assessment information and recommendations.

DLAN allows users to prepare and disseminate situation assessment information and recommendations to both internal and external stakeholders through the Situation Report module. Agency Reports can be submitted by the roles responsible, the Situation Report document can be compiled by the planning section or a relevant position. Finally, the individual reports or the Sit Rep can be viewed in DLAN, forwarded out to stakeholders via email, or posted to a Dashboard for consumption as situational awareness information.

4.2.3.24 The EMIS shall provide ready access to plans, procedures, checklists and other documents.

The Reference Library, described in detail in 4.2.3.20 on page 47, provides easy access to plans, procedures, checklists, and other documents.

4.2.3.25 The EMIS shall be able to provide different views and scales on each of the large- scale situation displays.

DLAN engineers build our modules so that they are responsive; automatically scaling their capabilities, views, and features based upon the screen size of the end user's computer or mobile device. DLAN allows users to utilize multiple windows on monitors or projection displays to view data. In fact, many tools/modules within DLAN have been created to facilitate this type of information viewing. For example, in the Ticket Manager Module, individual situational awareness reports have a pop-out button that launches the data grid in a separate window for display on a monitor or projector. Other tools, such as the GIS and the Status Board have been built and optimized to be displayed on separate monitors and/or projectors.

Figure 21: Status Board Projector Display

4.2.3.26 The EMIS's situation display shall be able to display geographical views with geo- referenced features on map overlays.

All information that includes mappable data can be displayed on our GIS Premium module and in status boards, see Figure 5: Status Board - Operations on page 29.

4.2.3.27 The EMIS's situation display shall be capable of displaying one or more selectable map overlays created by the EOC members.

Map Reports can be used to display specific map information. GIS administrators can configure map reports including basemap and layer settings to be viewed in the GIS display or as part of a status board.
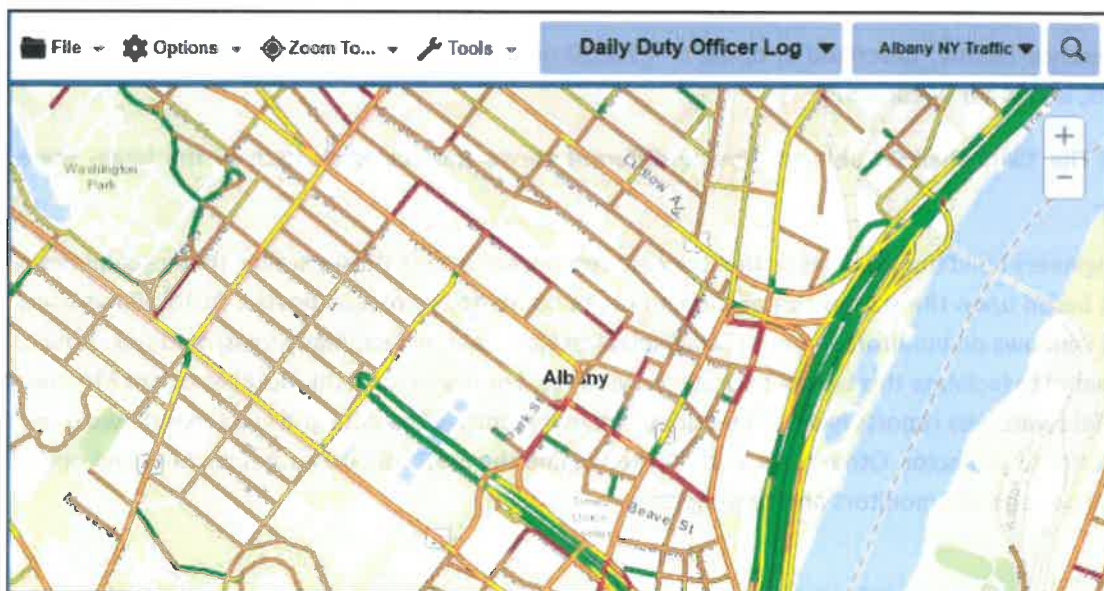
Figure 22: Map Report - Traffic

4.2.3.28 The EMIS's geographic component shall be capable of displaying a dynamic map identifying incidents, events, or emergencies; effects related to those events; and, the responding agencies involved, including agency contact information.

All Incident data that includes GIS information can be displayed and edited on a dynamic map, see Figure 6: GIS Premium - Resource Location above for an example.

4.2.3.29 The EMIS's geographic applications shall allow appropriate users to add new layers to the dynamic map. The dynamic maps shall be editable by users with appropriate permissions.

GIS Administrators will have full access to the admin menu, which will allow them to customize features such as basemaps, overlays, layers, and categories.

Figure 23: GIS Admin

4.2.3.30 The EMIS's geographic application shall permit authorized users to use the geographic analysis functions such as proximity, find the nearest point, and create buffers, to estimate possible human, property, and infrastructure effects.

GIS Premium allows users to use the geographic analysis functions such as proximity, find the nearest point, and create buffers, to estimate possible human, property, and infrastructure effects. Access to these tools can be locked down using group permissions and other security features.

4.2.3.31 The EMIS's situation display shall be capable of displaying a situation report, operational information, status report, or map image received from users.

DLAN's Status Boards can display any information from within DLAN and from multiple external sources, including situation reports, operational information, status reports, or map images received from users.

4.2.3.32 The EMIS's situation display shall include the ability to display selectable levels of detail to enable users and EOC/DOC members to see summaries such as a dashboard display to indicate elements that may require attention.

The DLAN Status Boards (dashboards) allow both overview and macro views of incident status information and detailed status information on roles, teams, tasks, and critical incident messages. Status Boards update automatically in real-time as new information is entered.

Several tools are available on the Status Board to help users drill down to key status information including the Stats page which shows statistics based on role and task; Ticket Reports, which show individual tasks and their completeness; and incident messages, which allow users to post situational awareness information or critical decisions.

Some DLAN customers have worked with BCG to configure or customize dashboards that allow users to start at the macro / summary level for an organization and click to drill down into specific departments or facilities for more detailed information.

4.2.3.33 The EMIS's situation display shall be capable of integrating and displaying live images and audio/video feeds from external sources such as traffic monitors, security cameras, surveillance cameras or data feeds.

Streaming Video allows you to access any IP-based video feed, including streaming and snapshot cameras, for improved situational awareness. Video streams can be chosen using an easy drop-down menu and displayed simultaneously on the Streaming Video dashboard or be popped out into their own windows for enhanced viewing. Streams can also be displayed directly on the GIS Premium map.

Figure 24: Streaming Video on Map

4.2.3.34 The EMIS shall be capable of capturing and disseminating the image showing on the situation display to selected user(s).

Images can be shared within the system to selected users and also externally.

4.2.3.35 The EMIS shall enable the authorized users/team to prepare and disseminate the Incident Action Plan.

The Incident Action Plan (IAP) module enhances the functionality of ICS forms by allowing users to compile them into IAPs following FEMA's guidelines. The module guides users through the steps of creating an IAP, using simple drop-down lists, value pickers, and data validation, and allows for information that will be used in multiple areas in the IAP to be entered once, eliminating duplicate data entry and reducing the chance of errors. IAPs can be saved as drafts, reviewed, published, and Emailed to appropriate agencies.

Figure 25: Incident Action Plan

One of the key ways the module streamlines the IAP process is by allowing the use of templates for both IAP cover pages and the IAP itself. The module allows administrators to create and save a default cover page to be used for multiple incidents. When users select the template, the IAP module lets them upload a custom, incident specific image and then automatically incorporates this image along with the incident name and applicable operational period into the cover page.

Administrators can also make default IAP templates that can be used as a starting point when filling out an IAP during an incident. IAP Templates allow for pre-defined text, questions, objectives, and user guidance on any ICS form that is included in that configured template. These templates can save users from having to reenter commonly used organizational information and basic incident information.

4.2.3.36 The EMIS shall enable electronic and customizable paper forms for creating, editing and storing EOC & JCS Reports.

The Incident Command System (ICS) approach to emergency management is the framework for all areas of DLAN. As part of our commitment to meeting FEMA standards for incident management all of the most up-to-date ICS Forms are included in this module. DLAN includes both standard versions and ones customized to a particular organization, in a fillable PDF format that can be printed or exported after completion. Forms can also be secured based on group access, which allows multiple organizations or divisions to each fill out their own version of the forms as needed.

Figure 26: ICS

4.2.3.37 The EMIS shall enable authorized users / team members receive and implement report forms and templates identified by the State of West Virginia (conforming to West Virginia Emergency Operations Plan, State Emergency Operations Center (SEOC) Standing Operating Procedures (SOP) & JCS).

Custom forms, reports, templates, and workflows can be implemented throughout the system. DLAN will be configured to conform to West Virginia Emergency Operations Plan, State Emergency Operations Center (SEOC) Standing Operating Procedures (SOP) & ICS.

4.2.3.38 The EMIS shall provide access to electronic West Virginia Emergency Operations Plan, SEOC SOP & JCS forms, documents and templates for approved user to edit, update and subsequently store within the application in the user interface.

DLAN will allow approved users to edit, update, and store documents and templates within the system.

4.2.3.39 The EMJS shall be capable of storing and managing official documentation to be retained as record.

DLAN is an audit ready system that automatically logs all historical data. In addition to retaining official documentation, DLAN will allow administrators to run incident reports. Incident reports are comprehensive chronological reports detailing all additions and modifications to records and data that occurred during an incident or event. Reports can be filtered down to a specific date range or type of records, including tickets, messages, broadcasts, Status Board items, uploaded Incident Folder Documents, Situation Reports, ICS Forms, Incident Action Plans, and GIS Map Snapshots. Like other DLAN reports, the Incident Report can be exported or printed as needed.

Figure 27: Incident Report

4.2.3.40 The Vendor shall provide, within the application, the ability for the State to maintain and create or import new forms and that any forms created or amended by the State will be retained through any subsequent upgrade of the application.

The State will be able to maintain and create or import new forms. Any custom forms, reports, or other documentation will never be overwritten during a system upgrade.

4.2.3.41 The EMIS shall provide for managing and reporting on injuries and deaths.

The system can provide a way to report on injuries and deaths and manage that information through the use of secure tickets. A secure ticket is locked so that the sensitive information contained inside is only visible to roles that have been specifically routed the ticket (shared with them). Secure tickets can be collated in a Ticket Report designed to capture and display that information on a Status Board. Both the report and the board can also be secured so that only specific users get access to them.

4.2.3.42 The EMIS client software shall enable a user to sign on 'once' for access to all the applications.

DLAN is a unified solution that requires only one sign in to access all areas of the solution.

4.2.3.43 The EMIS shall enable the system administrator to define roles, assign privileges to users, create, maintain and/or delete users.

DLAN includes a robust and flexible security utility that is part of the system administration module. It provides for multiple layers of security and access control throughout every level of the system. The permissions structure in DLAN is tiered and can be configured to have granular security permission, broad security permissions, or any range in between. DLAN accomplishes this flexible and intuitive security structure by implementing administrator defined security groups which are separate from user accounts and roles. These security groups are composed of several individual security permissions.
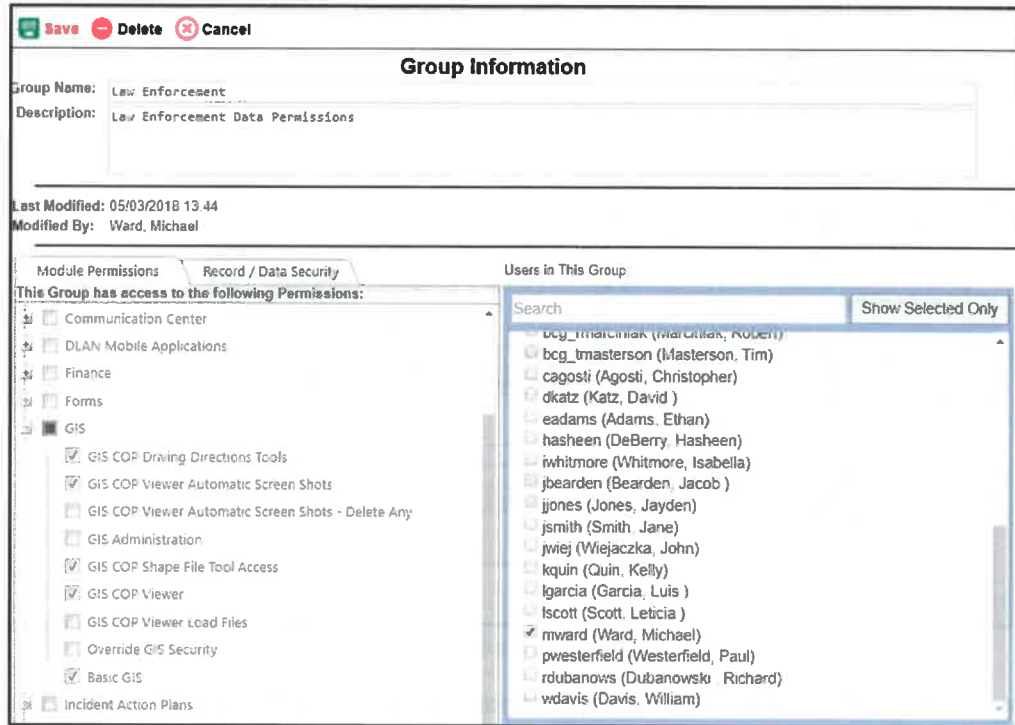
Figure 28: System Administration - Group Security

Administrators may configure an unlimited number of user accounts, groups, and roles. Groups and roles may be assigned to a user account through the use of a simple checkbox system. Users may have one or more groups and roles. Groups are designed to be customized quickly and easily to define user permissions. Roles are designed to establish job duties and to tailor information routing privileges.

Administrators also have the ability to create, maintain, and delete users.

Figure 29: System Administration - Users

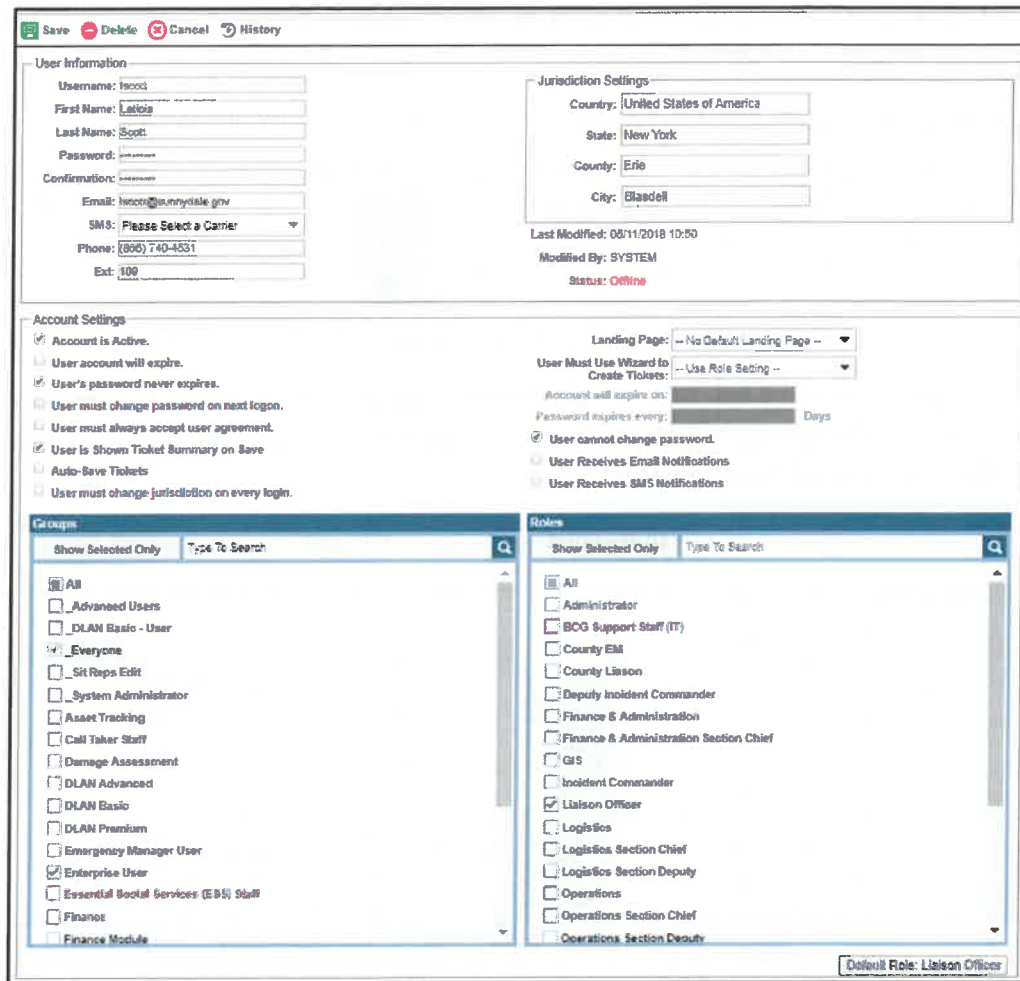**4.2.3.44 The EMIS shall be able to define a structured top-level organization with fully functional sub-organizations that operate in a hierarchy of authority.**

DLAN provides a structured top-level organization and fully functional sub-organizations through the use of its Record-Level data groups. These can be built-out as needed by a state Sysetm administrator. Users, permissions, and security can be assigned to the group.

Technical Requirements

4.2.4.1 The EMIS shall be compatible with multiple factor identification and its use for system access.

DLAN does not currently support multiple factor identification. This can be added as a customization; not included in proposal pricing.

4.2.4.2 The EMIS shall be able to provide for single sign on and for PIV/PIV-1/CAC integration for system access based on Federal Information Processing Standard (FIPS 201) requirements.

DLAN does not currently support single sign on through PIV/PIV-1/CAC. This can be added as a customization; not included in proposal pricing.

4.2.4.3 The EMIS shall log utilization transactions to record when a person has logged in and the device (workstation, etc.) where the person logged in.

DLAN records when a user logs in and the IP Address.

<p align="center">Figure 30: Login Timeline</p>

4.2.4.4 The EMIS shall record the failure of a login attempt. The solution shall have the flexibility to lock the user account after an Administrator-specified number of attempts. The solution shall have the capability of providing unattended password reset capability.

DLAN includes a security violations report that shows failed login attempts.

<p align="center">Figure 31: System Administration - Security Violation Report</p>

Administrators can specify the number of attempts before a user will be locked out in the Security Settings. The system also allows users to reset their password using a question and response method.
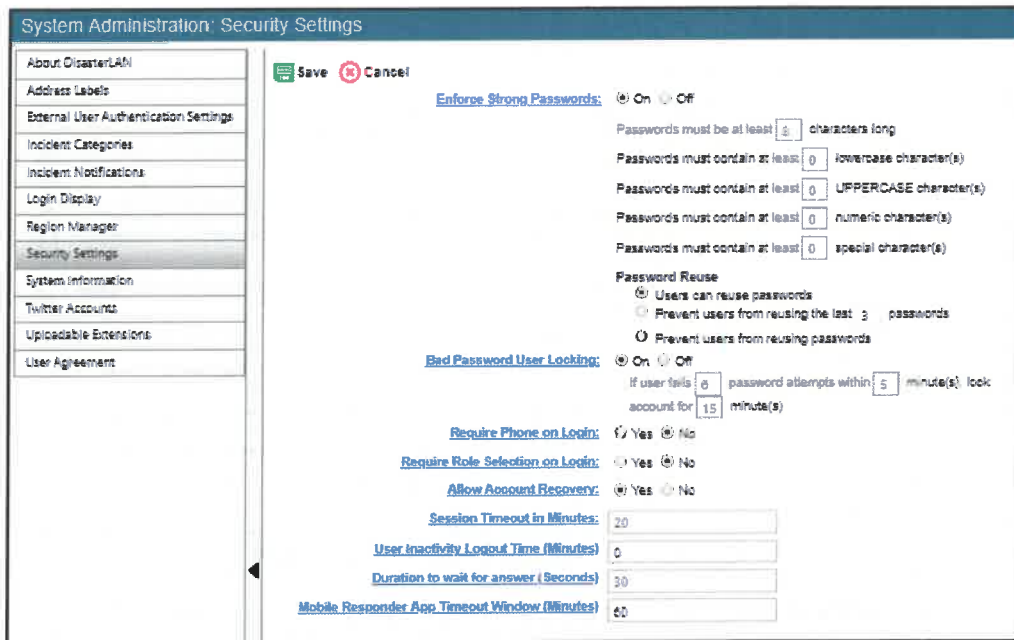
Figure 32: System Administration - Security Settings

4.2.4.5 The EMIS shall have the ability to provide event logging for successful logins, IP addresses of every authenticated user, failed login attempts, IP addresses of every failed login attempt, user database changes, log failures and/or errors.

All of these report types are available within DLAN's System Administration.

4.2.4.6 The EMIS shall include the means of recovering from a system failure using data previously backed-up.

DLAN provides automatic recovery of data in several ways. First, all DLAN tickets have an auto-save feature that backs up a copy of the information the user has entered to their browser's local cache. This means that if the user accidentally closes the ticket without saving, or loses connectivity, they can recover their draft to continue working.

At the technical level, DLAN services are resilient and will automatically self-restart if a service goes down or becomes unavailable. DLAN also supports load balanced servers, automatic or manual failover to another node, and a disaster recovery site.

4.2.4.7 The EMIS client software shall limit access to those users who have valid login permissions and credentials.

All users must have valid login permissions and credentials to access DLAN. Please see 4.2.3.43 on page 5555 for additional information on security features.

4.2.4.8 The EMIS log in procedure shall include a requirement for users to agree to the state's confidentiality agreement prior to gaining access on each log in.

DLAN includes a customizable User Agreement that be setup so each user has to click accept each time they log in. This agreement can either include the full text of the state's confidentiality agreement or link to it, depending on the State's preference.
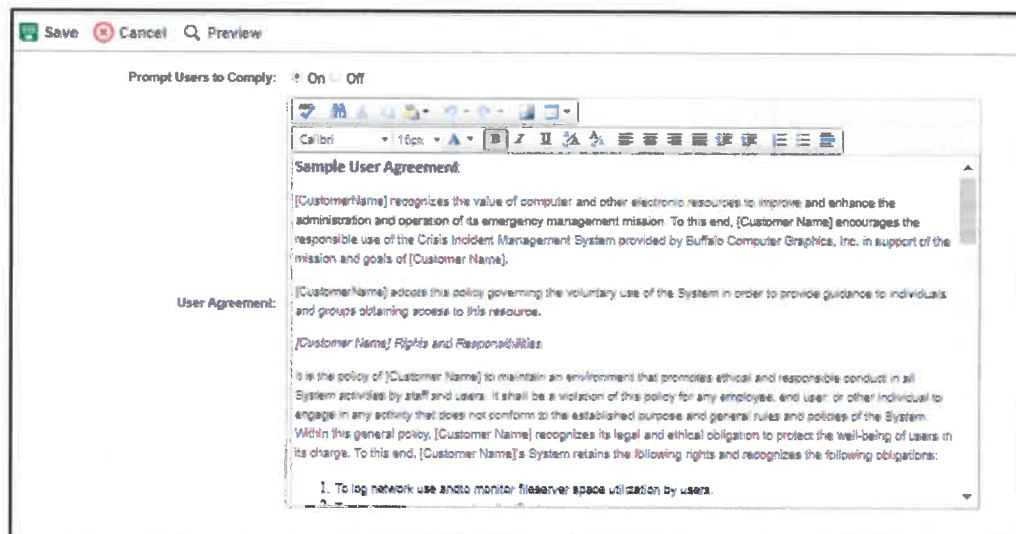
Figure 33: System Administration - User Agreement

4.2.4.9 The EMIS shall enforce strong alphanumeric passwords and periodic password changes.

DLAN includes customizable password settings, please see Figure 32: System Administration - Security Settings on page 59.

4.2.4.10 The EMIS shall provide capability of a user to obtain password reset by administrator and by verification and via approved email and/or text.

Administrators can reset passwords either in bulk or individually. When a user's password is reset they are sent an email notification.

4.2.4.11 The EMIS shall be scalable to automatically accept any number of users (local and remote users) to a maximum of 500 users logged in simultaneously with capability to add additional users with no delay.

DLAN is sold as a single site license and the State will be able to add any number of users. Users can be quickly added by an Administrator using DLAN's intuitive security settings.

4.2.4.12 The EMIS shall adhere to industry standard scalable relational database architectures that are able to provide input or output to other Enterprise systems.

DLAN's database runs on Microsoft SQL Server version 2012 or later (2016 preferred). Any standard method of data exchange supported by SQL should be available to use with the DLAN software system.

4.2.4.13 The EMIS shall be a Windows based interface.

DLAN is a web-based software system that runs on MS SQL and IIS and can be accessed from any computer, laptop, or device that supports a modern web browser (IE 11, Edge, Chrome, Firefox, or Safari) as well as browsers on mobile device such as chrome, android, and safari for iOS. DLAN supports windows based interface as well as use on a mac. The DLAN Mobile Responder App is available for iOS, Android, and as a Windows App.

4.2.4.14 The EMIS shall have a "Development" platform with the same functionality and capabilities of the "Production" platform. This "development" platform will be used for change management, training, development, and scenario modeling.

BCG will provide both a development and production environment. These platforms are separate so that data from the development environment will not contaminate production.

4.2.4.15 The EMIS shall have complete redundancy across all components and a sole Disaster Recovery solution, in the event of data corruption, hardware malfunction, or cyber- attacks.

DLAN supports multi-node configurations, virtualization, high availability, load balancing, and disaster recovery. DLAN is also a secure solution and follows guidelines for NIST 800-53 and NEIM. DLAN receives regular security and penetration testing by multiple customers per year. All tests are run by reputable third parties and BCG works with customers to address any potential threats.

4.2.4.16 The EMIS shall have multi-server fault-tolerant architecture with full redundancy and automatic recovery.

DLAN uses a multi-server fault-tolerant architecture. It can support redundancy through active/active or active/passive servers for load balancing, failover, and automatic recovery

4.2.4.17 The EMIS shall support multi-site architecture that provides' for the following replication sites and supports an Active/Active platform for high- availability and load balancing.

BCG will support an on premise installation of DLAN at WVDHSEM's facility. The on premise installation will be managed by WVDHSEM's IT staff or choice of IT service vendor.

4.2.4.17.1 Primary replication site at least 50 miles from our facility.

BCG will provide a hosted and BCG managed primary replication site at a datacenter at least 50 miles from WVDHESM's facility. The DLAN system will be replicated in an Active/Active manner to the Primary replication site which will run a read only copy of the production database.

4.2.4.17.2 Secondary replication site at least 100 miles from our facility.

BCG will provide a warm node at the secondary replication site that is at least 100 miles from WVDHSEM's facility. Failover to this node will require manual intervention by BCG 24/7/365 support staff. BCG assumes a RTO of four hours at the secondary replication site and a RPO of one hour.

4.2.4.17.3 Tertiary replication site at least 200 miles from our facility.

BCG will provide a cold node at the tertiary replication site that is at least 200 miles from WVDHSEM's facility. Failover to this node will require manual intervention by BCG 24/7/365 support staff. BCG assumes an RTO of forty-eight hours at the tertiary replication site and a RPO of one hour.

BCG is making the following assumptions regarding replication:

- WVDHSEM's on premise node is running MS SQL Enterprise (without that, Active/Active is not possible)
- The primary node is HOT running a live read only copy of the production database

- File System will have an Recovery Point Objective and acceptable data loss on fail over that is agreed to by both BCG and the state.
- WVDHSEM will have enough bandwidth available for replication.
- BCG will use VPN over the public internet for transfer, or simple TLS 1.2 encryption for transport.
- Failover will likely require some brief manual intervention.
- There will be one active web server
- DLAN will be on a Windows domain
- Replication from the primary node to the warm or cold node will be handled by the primary replication node.
- Architecture assumes shared storage.
- 99.9% uptime for system availability.

4.2.4.18 EMIS shall provide data backup to include error checking and correcting during backup to ensure backed-up data is valid.

DLAN supports backups through any software or platform that supports operation on MS SQL server databases. This includes the ability to error check and correct data during a backup to ensure data is valid. BCG is proposing an on-premise installation for this project so the state would be able to implement a backup solution of their choice. Data replicated to the primary, secondary, and tertiary replication sites can also be backed up.

4.2.4.19 EMIS shall provide for records maintenance and retain information until permanently deleted.

DLAN logs all information within the system. Typically, deleted data is "soft deleted" meaning that it is hidden from display to the user, not removed from the database. Typically, there is no reason to permanently delete record data within DLAN as data can be archived or soft deleted when no longer needed.

4.2.4.20 The EMIS shall provide flexible emergency management support functions for day- to-day operations and large-scale multi-agency response.

DLAN is specifically designed to support daily operations and emergency response. Integrating Incident Management Software into daily operations is the gold standard for getting staff familiar with the software and prepared to utilize it during an emergency. BCG highly recommends customers find ways to utilize the software in daily operations and provides several tools that can be used on a daily basis for normal operations, including event logging, social media monitoring, email monitoring, webpage/RSS feed monitoring, documentation library folders, role based briefing notes, and several other tracking tools.

In addition to these daily use monitoring and documentation tools DLAN provides a common platform for task, resource, and information management system that can be applied to various types of needs and workflows. Documentation management and sharing is another area that sees regular system usage within daily operations through the use of our Reference Library. DLAN can be used to monitor incoming information and easily move from event monitoring to emergency activation.

DLAN is designed to work across multiple agencies with features such as location and group based access, user and role based boards, multi-tiered security settings, and incident locking. The permissions structure in DLAN can be configured by the customer to have granular security permission, broad security permissions, or any range in between. Using these same security permissions whole incidents can be locked down to only specific facilities. In this way DLAN balances the need for collaboration and the need for privacy among multiple agencies and

stakeholders. Additionally, DLAN provides for the development of contact lists and personnel databases to support communication across multiple agencies and the custom development of standard operating procedures and checklists to facilitate a unified response.

4.2.4.21 The EMIS emergency management support functions shall enable EOC users to share, analyze, and prioritize information across multiple jurisdictions in text, images, and geo-referenced map formats.

DLAN allows information to be shared across multiple jurisdictions in numerous formats including text, images, and geo-referenced map formats. With DLAN users from different jurisdictions and agencies can work together on a common unified platform to share, analyze, and prioritize information for an improved response effort.

4.2.4.22 The EMIS shall operate as a web application in which Users interact with the EMIS through any web browser.

DLAN is a web-based solution that is able to work across multiple OS platforms, browsers, and mobile devices.

DLAN testers and engineers test DLAN modules and tools on several browsers to ensure that the platform can be used on the greatest number of browsers as possible. This includes testing the product on Internet Explorer 11, Edge, Firefox, Safari, Safari on iOS, Chrome, Chrome on Android, and Android browsers.

In general, DLAN is designed to be accessible from any mobile browser that fully supports JavaScript, session based cookies, HTML 5 technologies, and other modern web browser features. DLAN's responsive design interface allows many mobile devices to support DLAN natively (i.e. no app required) including Apple iOS Devices, Windows Mobile Devices, and Android Devices.

Since modern browsers are regularly updated, BCG developers are constantly reviewing and retesting on all major browser platforms so that they can identify changes or issues and adapt the system to work on the widest range of browser platforms as possible. An agile development process and regular product updates (typically every 8-10 weeks) allows DLAN to remain web and mobile browser agnostic.

4.2.4.23 The EMIS shall meet industry-standard cross-platform, browser independent, and device awareness industry requirements.

Please see 4.2.4.23 above.

4.2.4.24 The EMIS shall be built on a highly secure platform. Proponent shall describe their platform and security measures.

DLAN is fully compliant with the AES256 standard. Passwords and other sensitive information are encrypted in the database using AES with 256 bit keys. In addition, all encrypted data is indexed with a hashed lookup code so it is impossible to determine what the data context is without previous knowledge of the key used to store the information. During transmission DLAN relies on HTTPS using TLS for client to server communications. For Internet mail capabilities transmission can occur in plain text, SSL, or TLS.

DLAN passes a biannual security audit conducted by a State level Department of Homeland Security and Emergency Services who utilize DLAN for their operations. This scan looks for vulnerabilities in IIS, .Net, SQL, and other components of all forward facing websites deployed. DLAN has also passed independent security audits for multiple customers on all system components. Third party system reviews were conducted by established and

reputable audit firms such as C2 and Deloitte. BCG is also a member of the Federal Bureau of Investigation's Infragard team dedicated to identifying and neutralizing threats to critical infrastructure and software and has a full-time CISSP employed on staff.

4.2.4.25 The EMIS shall provide secure usage capabilities such as security reporting, user data access, and email/message.

DLAN provides secure usage capabilities including security report, user data access, and email/message.

4.2.4.26 The EMIS shall enforce secure networking protocols and ports for all activities.

DLAN does adhere to and utilize multiple ratified and draft RFC standards in its implementation. These include, but are not limited to:
SMTP (5321, 6152)
MIME (2045, 2046)
POP3 (1939)
IMAP (3501)
TCP (793)
IP (791)
UDP (768)
RPC (5531)
TIFF (3302)
HTTP (2616, 2617)

4.2.4.27 The EMIS shall maintain an event log of all entries, which makes a time-stamped record of receipt and transmission of messages.

All information within the system is logged and time-stamped. Please see Figure 27: Incident Report on page 55 for an example.

4.2.4.28 The EMIS shall provide the means to employ the event log to create an audit trail.

DLAN is a fully audit ready system with full incident reporting and history tracking, please see 4.2.3.39 on page 54 for additional details.

4.2.4.29 The audit function shall include the event log, the messages and the documents handled by the EMIS.

The audit trail includes tracking of all user entered or managed information handled by DLAN. This includes: tickets, Dmail messages, status boards, broadcast messages, situation reports, forms, incident action plans, documents and files uploaded to the incident folders, and GIS map images. Please see 4.2.3.39 on page 54 for additional details.

4.2.4.30 The EMIS shall maintain a security audit trail to log system usage.

Various security reports are available to show system usage, including the login history report.
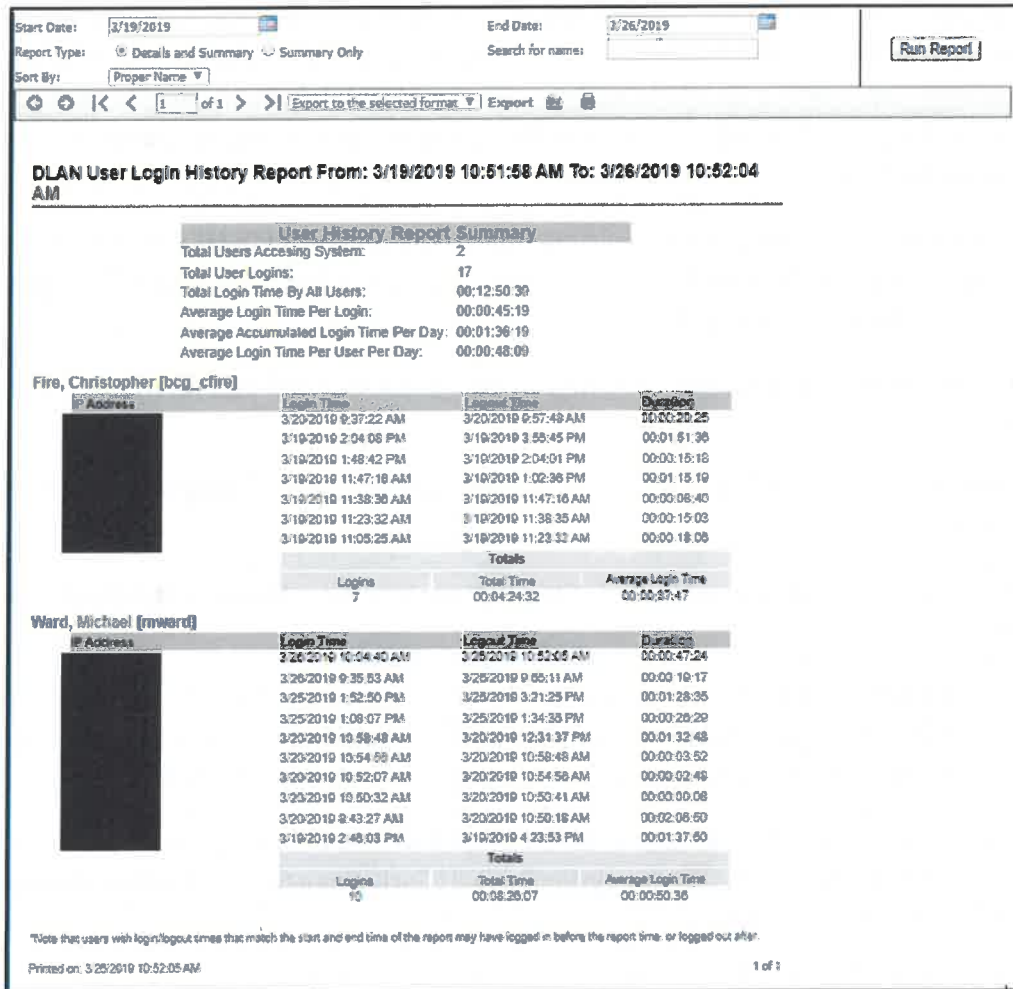
Figure 34: Security Report - Login History

Additional Reports available in the site security module include: currently locked out users, currently logged in users, group modules, mobile responder app users, module users, role associations, security violations, user activity, user agreement compliance, user groups/incidents, user groups/modules, user login history, user login timeline, and user last changed password time.

4.2.4.31 The EMIS shall have an automated and scheduled back up of information.

BCG is proposing an on premise installation for this project so the state would be able to implement a backup solution of their choice. Data replicated to the primary, secondary, and tertiary replication sites can also be backed up. Typically, BCG provides 15 minute incremental backups with daily full backups. These can be set to run at a scheudled time such as off-hours in order to reduce any potential impact to performance.

4.2.4.32 The EMIS shall support interaction with remote users using a workstation, laptop, or tablet type of devices.

DLAN is a web-based application that can be used on a workstation, laptop, tablet, or mobile device.

4.2.4.33 The EMIS shall provide real-time message delivery tracking and response consolidation.

The DLAN communication center tracks message delivery and responses. For internal Dmail messages, full history tracking including read/unread status is tracked. For external messaging sent through, email, the message queue can provide administrators with a list of all messages sent out of DLAN, from, to, subject, time queued, time in queue, status (pending, successful, failed) and the ability to re-queue any message that do not distribute properly. DLAN also automatically tries to re-distribute messages that do not send successfully the first time.

Additionally, for emails, text messages and phone call notifications sent out of DLAN, full reporting is returned and available to view or download from the Communication Center's Sent Messages folder. This reporting includes recipient's responses to questions or polls.

4.2.4.34 The EMIS shall be able to access and integrate with the State's GIS data (ESRI) as a primary source for GIS functionality.

BCG has been providing ESRI based GIS Platforms since 2004 and will be able to integrate with the State's ESRI GIS data out of the box.

4.2.4.35 The EMIS shall have an alternate GIS platform that can be used in the event that the primary GIS source is unavailable.

DLAN is fully integrated with ESRI's ArcGIS Online. Ticket Report data can be synced in real time to ArcGIS Online (AGO) for either public or private viewing and (if permitted) editing on the AGO platform. DLAN's integration with AGO also supports the ability for users to fill out forms on the AGO map and sync the data back to DLAN.

4.2.4.36 Support and Maintenance of the EMIS for the period of the contract shall include all upgrades or enhancements, bug fixes, document changes, system support (including a technical hotline and support services to support the requirements of this CRFP).

For this project BCG is proposing our Platinum Plus Support, which includes:

- 24/7 Support by Phone and Email
- New Releases of Product
- New Release Review Webinars
- Point Patches for New Releases
- Hot Fixes for New Releases
- BCG Assisted Imports using BCG Templates - 4 per year
- Individualized Web Trainings (1 hour per training session) - 4 per year
- Custom Imports by BCG Staff - 40 hours per year
- BCG Assisted Configuration of Dynamic Forms - 40 hours per year
- BCG Assisted Data Feed Integration - 40 hours per year
- Client Configuration Debug via Gotoassist - 40 hours per year
- Server Configuration Debug via Gotoassist - 40 hours per year
- Onsite Support Per Year - 8 hours per year
- Rush Delivery of Hot Fixes Specific to Organization's Site or Installation

4.2.4.37 The vendor shall provide support for versions for the base software as well as enabling EMIS software up to five years after general availability of the next version.

BCG provides a required maintenance and support package for each DLAN system that entitles the customer to receive all updates to the software, including new versions, at no extra licensing cost. All DLAN versions are forward and backwards compatible by design and legacy data is always protected and supported. BCG uses and agile development methodology for DLAN and typically has updates available every 8-10 weeks. The state can choose how often they want to accept these DLAN updates, but BCG recommends at least bi-annually or annually. For security and support reasons, typically BCG does not support legacy versions of the software under standard maintenacne for more than two years from date of issue unless specifically stipulated in a contract.

4.2.4.38 The vendor shall provide a proposed EMIS support model. The proposed support model should identify how the vendor will address the ongoing support functions.

As part of our core values, BCG provides comprehensive customer service for all of our products including the DLAN system. The customer service team is comprised of full time BCG employees with extensive experience and knowledge of the DLAN product. The State can call or email BCG 24/7 if they need help identifying and resolving an issue with the DLAN software.

BCG's focus on developing customer relationships, not selling products sets us apart from our competitors. Each customer receives BCG's attention and dedication to our products and the field of emergency management. Additionally, since our staff is trained in both DLAN and emergency management, they are able to provide richer feedback to our customer's questions and needs. Understanding the environment our customers are working in makes our staff more knowledgeable, more responsive, and better able to respond to customer demands as needed.

BCG has a support program in place to ensure that the State and BCG can maintain explicit communication. A full time BCG Customer Service Team is available to answer questions with an escalation path to engineers and managers as needed.

Issue Escalation Plan (24/7)

Email or phone call to BCG central office number with routine or emergency issue

↓

Call answered by BCG full-time Customer Support Team member

↓

All team members have extensive experience with the DLAN product and work with customer to resolve issue

↓

If needed, escalate to Customer Specialist, Senior QA Staff member, or DLAN Engineer

↓

If needed, escalate to Product Manager or Program Manager for Emergency Management Division

↓

If needed, escalate to contracting officer or BCG V.P. for Emergency Management

Figure 35 - Support Issue Escalation

4.2.4.39 The vendor shall provide a proposed EMIS maintenance schedule and services schedule with costs and any additional service packages.

BCG is providing our 24/7 Platinum Plus Level Support as described above. All pricing is included in our separate price proposal.

4.3 QUALIFICATIONS AND EXPERIENCE

Qualifications and Experience Information

4.3.1.1 Vendor shall provide a minimum of One (1) relevant reference to demonstrate that it has proven experience in managing hosted/on-premise Solutions at a statewide level. All referenced Solutions shall be currently operational in a production environment. This information shall be provided prior to contract award.

STATE-WIDE ORGANIZATION	NEW YORK STATE DEPARTMENT OF HOMELAND SECURITY & EMERGENCY SERVICES OFFICE OF EMERGENCY MANAGEMENT (DHSES-OEM)
SYSTEM	On Premise DLAN Enterprise with Chat, GIS, IAP, Situation Reports, Training Site, and Watch Command Modules. Renamed as NY-Responds for the state of NY, the system is designed to be used by any county or state agency throughout NYS.
PROJECT SUMMARY	Three days prior to the start of the Republican National Convention (RNC) in Madison Square Garden, the director of DHSES called BCG with a statement that DHSES's home-brewed EMIS had failed and that they had chosen DLAN from among 20 other systems as its replacement. They needed DLAN installed and running immediately. To meet this request, BCG staff travelled to DHSES, installed the system overnight, and spent Sunday testing and training core staff. Just-in-time training was provided to end-users and the system was used successfully throughout the RNC with people logged in from Albany, Madison Square Garden, and New Jersey. Over the long duration of its use at the NYS's DHSES, DLAN has transitioned from an early Version 3.1 to the current Version 11.0 and has adapted to meet the mission critical resource requesting and tracking needs for NYS. Ongoing development work for DHSES over the years has helped BCG staff develop the skills necessary to design, build, and implement systems suited for statewide, multi-jurisdictional needs and deliver them on time and within budget. Recently, NYS has implemented the NY Responds system, of which BCG software is a key component. This unique statewide system allows all 62 counties to utilize one unified, feature-rich incident management solution. BCG has worked closely with the State to ensure the success of this ambitious project.
SUPPORT	DHSES has an extended support and maintenance package with BCG. In addition to our typical Platinum Plus Support plan, DHSES has added dedicated blocks of time to support their agency in a number of ways during daily usage, training, exercises, and EOC activations. Since BCG is intimately involved in DHSES workflows and procedures, the agency has also elected to include hours in their contract for onsite work that can be leveraged during trainings, exercises, and EOC activations in order to ensure that they have the vendor support they need to provide services like just-in-time training, workflow training specific to a user's role, new feature training as upgrades come out, and support for onsite meetings for proposed features. In addition, DHSES has such confidence in BCG staff, that they elected to include hours for BCG to support them in diagnosing non-DLAN issues such as client, server, and network problems that may impact their users. With BCG actively involved onsite in EOC activities, our staff is often able to diagnose an issue more quickly than external IT staff, allowing DHSES staff to relay issues to IT more efficiently. Finally, in large activations like Hurricanes Irene and Sandy, DHSES has contracted with BCG to provide around-the clock 24/7 support within the EOC to assist them with both on-site troubleshooting and training during these large activations
CONTACT	Richard French, Chief of Training and Exercise 1220 Washington Avenue State Office Campus, Building 7A Suite 710 Albany, NY 12242 518- 292-2357 Richard.French@dhses.ny.gov

4.3.1.2 Vendor shall provide references for unique projects that started and/or were completed in the past Three (3) years.

ORGANIZATION	Division of Military and Naval Affairs New York State (NY DMNA) Colonie, New York
SYSTEM	DLAN Enterprise with Optional Modules: Watch Command, Situation Reports (SIT REPS), GIS, Reference Library, Briefing Notes
IMPLEMENTATION	DisasterLAN is installed in the Joint Forces Headquarters (JFHQ) for military and naval affairs in New York State. DisasterLAN plays a critical role in the 24/7 Joint Operations Centre managing deployed forces and monitoring potential hazards for the New York State Army and Air Force National Guard as well as naval and maritime forces in New York. The JFHQ is located in Colonie New York a short drive from the capital of Albany where DMNA works very closely with the Department of Homeland Security and Emergency Services for the State of New York who also utilize DisasterLAN for all emergency management and preplanning activities in the state. All DisasterLAN systems are fully interoperable which allows the State and DMNA to exchange missions, resource tickets, and messages during an emergency.

The DisasterLAN Enterprise Edition utilized by DMNA is a feature rich version of the software designed to provide comprehensive end to end incident management abilities. They have chosen to add the optional Watch Command, GIS mapping, and Situation Report modules on top of the enterprise system for an even more advanced incident management toolset.

The Watch Command module functions as a 24/7 Joint Operation Centre watch point to log and manage potential or ongoing emergencies and planned events. It also serves as a dashboard to monitor a variety of incoming communications, which can be posted to actionable tickets. These singularly logged events in the Watch Command can be bundled together into a larger incident if the situation escalates. Alert information is also monitored from this module, including IPAWS messages, Interoperable (CAP & EDXL) Messaging, Weather feeds, NOAA Alerts, and RSS feeds from a variety of sources.

BCG's Geographical Information System (GIS) module enhances DMNA's DLAN system with a variety of highly specific and integrated mapping functions utilizing the services already available through the National Guard and New York State, while allowing them to customize these maps further as they relate to their missions and incident management functions. |
| CONTACT | Shawn P. Peno, CMSgt, NY ANG J3 Senior Enlisted Leader and JFHQ-NY Staff Weather Officer 330 Old Niskayuna Road Latham, NY 12210-2224 BB: 518.817.7163 Office - DSN: 489.4411 Comm: 518.786.4411 Fax - DSN: 489.4922 Comm: 518.786.4922 Email: shawn.p.peno.mil@mail.mil |

ORGANIZATION	TORONTO OFFICE OF EMERGENCY MANAGEMENT
SYSTEM	DLAN Enterprise with Incident Action Plans, GIS, Situation Reports, and Training Site
IMPLEMENTATION	The City of Toronto chose DLAN as their Crisis Incident Management System (CIMS). The used DLAN as a web-based, out-of-the-box solution that could easily integrate within the City's existing business and technical environments with minimal modifications. The City required the ability to streamline the flow of information throughout the EOC, and to electronically link the EOC with Divisional Operations Centres (DOCs), Emergency Site Commanders, other key officials and off-site staff. The chosen system would need to increase efficiency by saving valuable time and resources during an emergency and reducing duplicate efforts, so BCG's DLAN solution fit their needs. DLAN Enterprise System with GIS, Incident Action Plan, and Situation Report Modules and Training Site. Also provided all implementation services and training for the system. BCG installed, configured, and provided customized training for the personnel on the system at Toronto's Emergency Operation Centre.
CONTACT	Laura James, Emergency Manager Coordinator Information Technology Corporate Services 55 John St., 15th Floor STN 1153 Toronto, Canada M5V 3C6 Ljames2@toronto.ca

ORGANIZATION	ALBERTA EMERGENCY MANAGEMENT AGENCY
SYSTEM	DLAN Enterprise with Asset, Chat, GIS, IAP, Situation Reports, Training Site, and Watch Command.
IMPLEMENTATION	The Alberta Emergency Management Agency (AEMA) choose BCG's DLAN as their Emergency Operations Centre Coordination Application because of the numerous built-in configuration features that are available out of the box. They have a large DLAN Enterprise system with Asset, Chat, GIS, IAP, Situation Reports, Training Site, and Watch Command modules that has been uniquely configured to meet their emergency management needs. There are more than 700 users of this system. AEMA leads a wide range of public safety organizations, including various levels of government, communities, industry, and non-governmental organizations, in their efforts to keep Alberta prepared for and able to respond to any emergency. Thy have a system that provides their large and extensive Provincial Operations Centre (POC) staff and stakeholders with one secure environment from which all disaster and emergency coordination activities could be performed regardless of their geographic location. DLAN supports important emergency management functions such as resource, task, and logistics management and incident communications on a secure platform, which logs all information for reporting and review. Since DLAN is web-based it can be utilized by staff physically situated in the POC as well as remotely by those unable to move to the POC.

	This potential to manage emergency events through a 'decentralized' POC is a significant enhancement for Alberta. The mobile nature of DLAN also allows the POC to connect immediately to a team of field officers across the province through any device with internet connectivity. The software is designed with a "Mobile First" mindset and it is continuously updated for optimal performance across mobile devices. This includes all of DLAN's GIS features, which allow stakeholders to view up-to-date geospatial information from any location. In addition to allowing users to securely access the software from any location, DLAN supports multi-agency use with features such as multi-tiered security settings. This allows stakeholders in different agencies from across the province to work together while keeping sensitive information secure.
CONTACT	Terry Strocel, POC Application Coordinator Terry.strocel@gov.ab.ca 14515-122 Avenue NW. Edmonton, Alberta T5L 2W4, Canada 780-427-8651

4.3.1.3 Vendor shall provide at least One (1) of the references above in 4.3.1.1 from United States public sector/government clients.

GOVERNMENT ORGANIZATION	VERMONT DIVISION OF EMERGENCY MANAGEMENT & HOMELAND SECURITY
SYSTEM	DLAN Enterprise with Chat, GIS, IAP, Situation Reports, Training Site, and Watch Command.
IMPLEMENTATION	When the State of Vermont Emergency Management (VEM) approached BCG about procuring an incident management system for statewide use, they expressed the desire to have the solution integrate with numerous existing data systems. BCG was selected as the vendor for their project based upon both willingness and ability to perform complex integrations and customizations. An Enterprise-level COTS version of DLAN was installed in Vermont. All desired modifications were managed using BCG's proven Project Management methodology. BCG worked with Vermont stakeholders to analyze business processes, existing systems and databases, and desired outputs prior to developing a design plan for system modifications. BCG project managers oversaw every aspect of the analysis, design, implementation, testing, and evaluation phase which came in on time and on budget. In the end, the State of Vermont was provided with a customized COTS IMS designed to their exact standards. Vermont's DLAN system is currently used on a 24/7/365 basis for regular statewide business in addition to large-scale emergencies such as Hurricane Irene and Tropical Storm Lee. DLAN is a central component of the state's ability to coordinate and respond to emergencies anywhere in the State of Vermont.

	BCG's VEM installation demonstrates a record of accomplishment implementing a Systems Development Life Cycle (SDLC) process – specifically in response to integrating a COTS IMS solution into existing emergency management operational structures. Additionally, by working side-by-side with Vermont Emergency Managers in the Joint Field Office (JFO) during the federally coordinated response to Hurricane Irene and Tropical Storm Lee, BCG can point to first-hand understanding of the complex interplay and operational requirements necessary when FEMA, State, and local partners must all work together to respond to large-scale crisis events. Their Gold Support status provides them with addition BCG staff for dedicated onsite hours to assist VT DEMHS with drills, exercises, and activations.
CONTACT	Brett Pierce Vermont Division of Emergency Management 103 South Main Street, Waterbury, VT 05671 (802) 241-5361 brett.pierce@vermont.gov

Mandatory Qualifications/Experience Requirements

4.3.2.1 Vendor shall provide a minimum of five (5) relevant references to demonstrate that it has proven experience in managing hosted/on premise Solutions at a statewide level. All referenced Solutions shall be currently operational in a production environment. This information shall be provided prior to contract award.

Please see the answer to 4.3.1.1 and 4.3.1.3 above.

DESIGNATED CONTACT, REVIEW CERTIFICATION & SIGNATURE FORM, AND SIGNED RFP REVIEW FORM

DESIGNATED CONTACT: Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.

Patrick Cerra, Proposal Manager
(Name, Title)

Patrick Cerra, Proposal Manager
(Printed Name and Title)

4185 Bayview Road, Blasdell, NY 14219
(Address)

716-822-8668 / 716-822-2730
(Phone Number) / (Fax Number)

pcerra@bcgeng.com
(email address)

CERTIFICATION AND SIGNATORE: By signing below, or submitting documentation through wvOASIS. I certify that I have reviewed this Solicitation in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that I am authorized by the vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

Buffalo Computer Graphics, Inc.
(Company)

Gary J. Masterson   Gary F. Masterson, Vice President

(Authorized Signature) (Representative Name, Title)

Gary F. Masterson, Vice President
(Printed Name and Title of Authorized Representative)

3/29/19
(date)

716-822-8668 / 716-822-2730
(Phone Number) (Fax Number)

By signing below, I certify that I have reviewed this Request for Proposal in its entirety; understand the requirements, terms and conditions, and other information contained herein; that I run submitting this proposal for review and consideration; that I run authorized by the bidder to execute this bid or any documents related thereto on bidder's behalf; that I run authorized to bind the bidder in a contractual relationship; and that, to the best of my knowledge, the bidder has properly registered with any State agency that may require registration.

Buffalo Computer Graphics, Inc.
(Company)

Gary F. Masterson, Vice President
(Representative Name, Title)

716-822-8668 / 716-822-2730
(Contact Phone/Fax Number)

3/29/19
(Date)

PURCHASING AFFIDAVIT FORM

PURCHASING AFFIDAVIT

CONSTRUCTION CONTRACTS: Under W. Va. Code § 5-22-1(i), the contracting public entity shall not award a construction contract to any bidder that is known to be in default on any monetary obligation owed to the state or a political subdivision of the state, including, but not limited to, obligations related to payroll taxes, property taxes, sales and use taxes, fire service fees, or other fines or fees.

ALL CONTRACTS: Under W. Va. Code §5A-3-10a, no contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

> **EXCEPTION:** The prohibition listed above does not apply where a vendor has contested any tax administered pursuant to chapter eleven of the W. Va. Code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

DEFINITIONS:

"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

"Employer default" means having an outstanding balance or liability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-2c-2, failure to maintain mandatory workers' compensation coverage, or failure to fully meet its obligations as a workers' compensation self-insured employer. An employer is not in employer default if it has entered into a repayment agreement with the Insurance Commissioner and remains in compliance with the obligations under the repayment agreement.

"Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceed five percent of the total contract amount.

AFFIRMATION: By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (*W. Va. Code* §61-5-3) that: (1) for construction contracts, the vendor is not in default on any monetary obligation owed to the state or a political subdivision of the state, and (2) for all other contracts, that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

WITNESS THE FOLLOWING SIGNATURE:

Vendor's Name: _BUFFALO COMPUTER GRAPHICS, Inc._

Authorized Signature: _Ken Williams_ Date: _4.23.2019_

State of _New York_

County of _Erie_, to-wit:

Taken, subscribed, and sworn to before me this _23_ day of _April_, 20_19_.

My Commission expires _April 27_, 20_22_.

AFFIX SEAL HERE   NOTARY PUBLIC _Ellen J. Civitta_

ELLEN P. TROTTA
Notary Public, State of New York
Qualified in Erie County
No. 01TR4995592
My Commission Expires April 27, 2022

Purchasing Affidavit (Revised 01/19/2018)

SIGNED ORIGINAL RFP ANNOUNCEMENT & ADDEDNDUMS 1 AND 2

Purchasing Divison
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

State of West Virginia
Request for Proposal
21 — Info Technology

Proc Folder: 462141

Doc Description: Web Based Emergency Management Information System

Proc Type: Central Master Agreement

Date Issued	Solicitation Closes	Solicitation No		Version
2019-03-15	2019-04-02 13:30:00	CRFP	0606 HSE1900000001	1

BID RECEIVING LOCATION

BID CLERK
DEPARTMENT OF ADMINISTRATION
PURCHASING DIVISION
2019 WASHINGTON ST E
CHARLESTON WV 25305
US

VENDOR

Vendor Name, Address and Telephone Number:

FOR INFORMATION CONTACT THE BUYER
Stephanie L Gale
(304) 558-8801
stephanie.l.gale@wv.gov

Signature X _Keri Williams_ FEIN # 161190997 DATE 4.23.2019

All offers subject to all terms and conditions contained in this solicitation

Request for Proposal

The West Virginia Department of Administration, Purchasing Division (hereinafter referred to as the "Purchasing Division") is issuing this solicitation as a request for proposal ("RFP"), as authorized by W. VA. Code §5A-3-10b for the West Virginia Department of Homeland Security and Emergency Management to provide an Emergency Management Information System (EMIS) solution.

INVOICE TO		SHIP TO	
ACCOUNTING TECHNICIAN 304-558-5380		ACCOUNTING TECHNICIAN 304-558-5380	
HOMELAND SECURITY & EMERGENCY MANAGEMENT		HOMELAND SECURITY & EMERGENCY MANAGEMENT	
BLDG 1 RM EB80		BLDG 1 RM EB80	
1900 KANAWHA BLVD E		1900 KANAWHA BLVD E	
CHARLESTON	WV 25305-0360	CHARLESTON	WV 25305-0360
US		US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
1	EMIS- network				

Comm Code	Manufacturer	Specification	Model #
43232900			

Extended Description :
Web based statewide EMIS enterprise solution to be utilized by all levels of government and private sector response partners as the States central Emergency Response platform

Page : 2

	Document Phase	Document Description	Page 3
HSE1900000001	Final	Web Based Emergency Management Information System	of 3

ADDITIONAL TERMS AND CONDITIONS

See attached document(s) for additional Terms and Conditions

State of West Virginia
Request for Proposal
21 — Info Technology

Proc Folder: 462141

Doc Description: Addendum #1 Web Based Emergency Management Information Syste

Proc Type: Central Master Agreement

Date Issued	Solicitation Closes	Solicitation No	Version
2019-03-29	2019-04-16 13:30:00	CRFP 0606 HSE1900000001	2

BID RECEIVING LOCATION

BID CLERK
DEPARTMENT OF ADMINISTRATION
PURCHASING DIVISION
2019 WASHINGTON ST E
CHARLESTON   WV   25305
US

VENDOR

Vendor Name, Address and Telephone Number:

FOR INFORMATION CONTACT THE BUYER
Stephanie L Gale
(304) 558-8801
stephanie.l.gale@wv.gov

Signature X _Ken Williams_   FEIN # 161190997   DATE 4.23.2019

All offers subject to all terms and conditions contained in this solicitation

ADDITIONAL INFORMATION:

Addendum #1 issued to:

1. Extend the bid opening date and time to Tuesday, April 16, 2019 @ 1:30pm. Subsequent Addendum to follow.

End of Addendum #1.

INVOICE TO	SHIP TO
ACCOUNTING TECHNICIAN 304-558-5380	ACCOUNTING TECHNICIAN 304-558-5380
HOMELAND SECURITY & EMERGENCY MANAGEMENT	HOMELAND SECURITY & EMERGENCY MANAGEMENT
BLDG 1 RM EB80	BLDG 1 RM EB80
1900 KANAWHA BLVD E	1900 KANAWHA BLVD E
CHARLESTON WV 25305-0360	CHARLESTON WV 25305-0360
US	US

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
1	EMIS- network				

Comm Code	Manufacturer	Specification	Model #	
43232900				

Extended Description :

web based statewide EMIS enterprise solution to be utilized by all levels of government and private sector response partners as the States central Emergency Response platform

SOLICITATION NUMBER: CRFP HSE1900000001
Addendum Number: 1

The purpose of this addendum is to modify the solicitation identified as ("Solicitation") to reflect the change(s) identified and described below.

Applicable Addendum Category:

- [✓] Modify bid opening date and time

- [ ] Modify specifications of product or service being sought

- [ ] Attachment of vendor questions and responses

- [ ] Attachment of pre-bid sign-in sheet

- [ ] Correction of error

- [ ] Other

Description of Modification to Solicitation:

Addendum #1 issued to:

1. Extend the bid opening date and time to Tuesday, April 16, 2019 @ 1:30pm. Subsequent Addendum to follow.

End of Addendum #1.

Additional Documentation: Documentation related to this Addendum (if any) has been included herewith as Attachment A and is specifically incorporated herein by reference.

Terms and Conditions:

1. All provisions of the Solicitation and other addenda not modified herein shall remain in full force and effect.

2. Vendor should acknowledge receipt of all addenda issued for this Solicitation by completing an Addendum Acknowledgment, a copy of which is included herewith. Failure to acknowledge addenda may result in bid disqualification. The addendum acknowledgement should be submitted with the bid to expedite document processing.

Revised 6/8/2012

Proc Folder: 462141				
Doc Description: Addendum #2 Web Based Emergency Management Information Syste				
Proc Type: Central Master Agreement				
Date Issued	Solicitation Closes	Solicitation No		Version
2019-04-08	2019-04-25 13:30:00	CRFP	0606 HSE1900000001	3

BID RECEIVING LOCATION

BID CLERK
DEPARTMENT OF ADMINISTRATION
PURCHASING DIVISION
2019 WASHINGTON ST E
CHARLESTON   WV   25305
US

VENDOR

Vendor Name, Address and Telephone Number:

FOR INFORMATION CONTACT THE BUYER
Stephanie L Gale
(304) 558-8801
stephanie.l.gale@wv.gov

Signature X _Ken Williams_   FEIN # 161190997   DATE 4.23.2019

All offers subject to all terms and conditions contained in this solicitation

ADDITIONAL INFORMATION:

Addendum #2 issued to:

1. Re-publish entire solicitation due to changes in the Terms and Conditions, Specifications, and Pricing Pages. Please read solicitation in its entirety.

End of Addendum #2.

INVOICE TO	SHIP TO
ACCOUNTING TECHNICIAN 304-558-5380	ACCOUNTING TECHNICIAN 304-558-5380
HOMELAND SECURITY & EMERGENCY MANAGEMENT	HOMELAND SECURITY & EMERGENCY MANAGEMENT
BLDG 1 RM EB80	BLDG 1 RM EB80
1900 KANAWHA BLVD E	1900 KANAWHA BLVD E
CHARLESTON WV25305-0360	CHARLESTON WV 25305-0360
US	US

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
1	EMIS- network				

Comm Code	Manufacturer	Specification	Model #
43232900			

Extended Description :

web based statewide EMIS enterprise solution to be utilized by all levels of government and private sector response partners as the States central Emergency Response platform

Page : 2

HSE1900000001	Document Phase	Document Description	Page 3
	Final	Addendum #2 Web Based Emergency	of 3
		Management Information Syste	

ADDITIONAL TERMS AND CONDITIONS

See attached document(s) for additional Terms and Conditions

SIGNED ADDENDUM ACKNOWLEDGEMENT

ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.: _____

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received:
(Check the box next to each addendum received)

[✗]	Addendum No. 1	[ ]	Addendum No. 6
[✗]	Addendum No. 2	[ ]	Addendum No. 7
[ ]	Addendum No. 3	[ ]	Addendum No. 8
[ ]	Addendum No. 4	[ ]	Addendum No. 9
[ ]	Addendum No. 5	[ ]	Addendum No. 10

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

BUFFALO COMPUTER Graphics, Inc
Company

Ken Williams
Authorized Signature

4.23.19
Date

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing.
Revised 6/8/2012

Purchasing Divison
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

State of West Virginia
Request for Proposal
21 — Info Technology

Proc Folder: 462141

Doc Description: Addendum #3 Web Based Emergency Management Information Syste

Proc Type: Central Master Agreement

Date Issued	Solicitation Closes	Solicitation No		Version
2019-04-24	2019-05-03 13:30:00	CRFP	0606 HSE1900000001	4

BID RECEIVING LOCATION

BID CLERK
DEPARTMENT OF ADMINISTRATION
PURCHASING DIVISION
2019 WASHINGTON ST E
CHARLESTON   WV   25305
US

VENDOR

Vendor Name, Address and Telephone Number:

FOR INFORMATION CONTACT THE BUYER
Stephanie L Gale
(304) 558-8801
stephanie.l.gale@wv.gov

Signature X _Gary J. Masterson_   FEIN # 161190997   DATE 5.7.19

All offers subject to all terms and conditions contained in this solicitation

Addendum #3 issued to:

1. Move bid opening date and time to Friday, May 3, 2019 @ 1:30pm. Subsequent Addendum to follow.

End of Addendum #3

INVOICE TO		SHIP TO	
ACCOUNTING TECHNICIAN 304-558-5380		ACCOUNTING TECHNICIAN 304-558-5380	
HOMELAND SECURITY & EMERGENCY MANAGEMENT		HOMELAND SECURITY & EMERGENCY MANAGEMENT	
BLDG 1 RM EB80		BLDG 1 RM EB80	
1900 KANAWHA BLVD E		1900 KANAWHA BLVD E	
CHARLESTON	WV 25305-0360	CHARLESTON	WV 25305-0360
US		US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
1	EMIS- network				

Comm Code	Manufacturer	Specification	Model #
43232900			

Extended Description :

web based statewide EMIS enterprise solution to be utilized by all levels of government and private sector response partners as the States central Emergency Response platform

SOLICITATION NUMBER: CRFP HSE1900000001
Addendum Number: 3

The purpose of this addendum is to modify the solicitation identified as ("Solicitation") to reflect the change(s) identified and described below.

Applicable Addendum Category:

[✓] Modify bid opening date and time

[ ] Modify specifications of product or service being sought

[ ] Attachment of vendor questions and responses

[ ] Attachment of pre-bid sign-in sheet

[ ] Correction of error

[ ] Other

Description of Modification to Solicitation:

Addendum #3 issued to:

1. Move bid opening date and time to Friday, May 3, 2019 @ 1:30pm. Subsequent Addendum to follow.

End of Addendum #3

Additional Documentation: Documentation related to this Addendum (if any) has been included herewith as Attachment A and is specifically incorporated herein by reference.

Terms and Conditions:

1. All provisions of the Solicitation and other addenda not modified herein shall remain in full force and effect.

2. Vendor should acknowledge receipt of all addenda issued for this Solicitation by completing an Addendum Acknowledgment, a copy of which is included herewith. Failure to acknowledge addenda may result in bid disqualification. The addendum acknowledgement should be submitted with the bid to expedite document processing.

ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.: _____

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received:
(Check the box next to each addendum received)

[✗] Addendum No. 1   [ ] Addendum No. 6

[✗] Addendum No. 2   [ ] Addendum No. 7

[✗] Addendum No. 3   [ ] Addendum No. 8

[ ] Addendum No. 4   [ ] Addendum No. 9

[ ] Addendum No. 5   [ ] Addendum No. 10

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

Buffalo Computer Graphics, Inc
Company

Gary J. Masterson
Authorized Signature

_5.7.19_
Date

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing.
Revised 6/8/2012

Purchasing Divison
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

State of West Virginia
Request for Proposal
21 — Info Technology

Proc Folder: 462141

Doc Description: Addendum #4 Web Based Emergency Management Information Syste

Proc Type: Central Master Agreement

Date Issued	Solicitation Closes	Solicitation No		Version
2019-05-02	2019-05-08 13:30:00	CRFP	0606 HSE1900000001	5

BID RECEIVING LOCATION

BID CLERK
DEPARTMENT OF ADMINISTRATION
PURCHASING DIVISION
2019 WASHINGTON ST E
CHARLESTON   WV   25305
US

VENDOR

Vendor Name, Address and Telephone Number:

FOR INFORMATION CONTACT THE BUYER
Stephanie L Gale
(304) 558-8801
stephanie.l.gale@wv.gov

Signature X _Gary J. Masterson_   FEIN # 161190997   DATE   5·7·19

All offers subject to all terms and conditions contained in this solicitation

ADDITIONAL INFORMATION:

Addendum #4 issued to:

1. Move bid opening date and time to Wednesday, May 8, 2019 @ 1:30pm.
2. Provide responses to vendor questions.

End of Addendum #4.

INVOICE TO	SHIP TO
ACCOUNTING TECHNICIAN 304-558-5380 HOMELAND SECURITY & EMERGENCY MANAGEMENT BLDG 1 RM EB80 1900 KANAWHA BLVD E CHARLESTON WV 25305-0360 US	ACCOUNTING TECHNICIAN 304-558-5380 HOMELAND SECURITY & EMERGENCY MANAGEMENT BLDG 1 RM EB80 1900 KANAWHA BLVD E CHARLESTON WV 25305-0360 US

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
1	EMIS- network				

Comm Code	Manufacturer	Specification	Model #
43232900			

Extended Description :

web based statewide EMIS enterprise solution to be utilized by all levels of government and private sector response partners as the States central Emergency Response platform

ADDITIONAL TERMS AND CONDITIONS

See attached document(s) for additional Terms and Conditions

Purchasing Divison
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

State of West Virginia
Request for Proposal
21 — Info Technology

Proc Folder: 462141

Doc Description: Addendum #4 Web Based Emergency Management Information Syste

Proc Type: Central Master Agreement

Date Issued	Solicitation Closes	Solicitation No		Version
2019-05-02	2019-05-06 13:30:00	CRFP	0606 HSE1900000001	5

BID RECEIVING LOCATION

BID CLERK
DEPARTMENT OF ADMINISTRATION
PURCHASING DIVISION
2019 WASHINGTON ST E
CHARLESTON   WV   25305
US

VENDOR

Vendor Name, Address and Telephone Number:

FOR INFORMATION CONTACT THE BUYER
Stephanie L Gale
(304) 558-8801
stephanie.l.gale@wv.gov

Signature X _Gary J. Masterson_   FEIN # 161190997   DATE 5.7.19

All offers subject to all terms and conditions contained in this solicitation

Addendum #4 issued to:

1. Move bid opening date and time to Wednesday, May 8, 2019 @ 1:30pm.
2. Provide responses to vendor questions.

End of Addendum #4.

INVOICE TO	SHIP TO
ACCOUNTING TECHNICIAN 304-558-5380 HOMELAND SECURITY & EMERGENCY MANAGEMENT BLDG 1 RM EB80 1900 KANAWHA BLVD E CHARLESTON WV 25305-0360 US	ACCOUNTING TECHNICIAN 304-558-5380 HOMELAND SECURITY & EMERGENCY MANAGEMENT BLDG 1 RM EB80 1900 KANAWHA BLVD E CHARLESTON WV 25305-0360 US

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
1	EMIS- network				

Comm Code	Manufacturer	Specification	Model #
43232900			

Extended Description :

web based statewide EMIS enterprise solution to be utilized by all levels of government and private sector response partners as the States central Emergency Response platform

SOLICITATION NUMBER: CRFP HSE1900000001
Addendum Number: 4

The purpose of this addendum is to modify the solicitation identified as ("Solicitation") to reflect the change(s) identified and described below.

Applicable Addendum Category:

[✓] Modify bid opening date and time

[ ] Modify specifications of product or service being sought

[✓] Attachment of vendor questions and responses

[ ] Attachment of pre-bid sign-in sheet

[ ] Correction of error

[ ] Other

Description of Modification to Solicitation:

Addendum #4 issued to:

1. Move bid opening date and time to Wednesday, May 8, 2019 @ 1:30pm.
2. Provide responses to vendor questions.

End of Addendum #4.

Additional Documentation: Documentation related to this Addendum (if any) has been included herewith as Attachment A and is specifically incorporated herein by reference.

Terms and Conditions:

1. All provisions of the Solicitation and other addenda not modified herein shall remain in full force and effect.

2. Vendor should acknowledge receipt of all addenda issued for this Solicitation by completing an Addendum Acknowledgment, a copy of which is included herewith. Failure to acknowledge addenda may result in bid disqualification. The addendum acknowledgement should be submitted with the bid to expedite document processing.

1. 4.2.4.34 and 4.2.4.35 – Please describe how the State's GIS platform and the EMIS GIS Platform are expected to interact and coexist in day-to-day scenarios as well as when there is an outage.

ANSWER: Respondent is unsure what is meant by outage. Day-to-day usage is anticipated to use the EMIS GIS platform to produce custom GIS products for State and Local partners.

2. 4.2.4.35- As the State's GIS data (ESRI) is the primary data source for all GIS data (4.2.4.34), is the State's GIS system the primary GIS platform to be used by WV Homeland Security?

ANSWER: There is no single GIS system for the State, nor is there a statewide clearing house of data at this time.

3. 4.2.4.34 – Will the EMIS GIS platform serve as the alternate data source for use across the State? Will the EMIS GIS platform server as the alternate GIS platform for use across the State?

ANSWER: EMIS GIS platform will be able to manipulate GIS data to produce GIS products for incident command. Second Question is unclear to respondent.

4. 4.2.3.21 – Please describe the concept of user-selected data views.

ANSWER: User is able to select specific layers of data to be displayed at any given time.

5. 4.2.3.21 - What type of data views are required?

ANSWER: None are required, but the ability for the agency to construct data layers to create views internally.

6. 4.2.3.21 – Please define 'old-active' information

ANSWER: Information that is required to be maintained for a period of time after an event.

7. 4.2.3.21 – What sorting, filtering and editing functionality is required for user-selected data views

ANSWER: Functionality will be determined by GIS manager based on the incident and determined in house.

8. 4.2.1.11 and 4.2.1.30 –
   - How many total contacts is anticipated to be loaded into the EMIS System?

ANSWER: The number of contacts loaded ito the EMIS system would be limited to those users with valid accounts.
   - What Solution/Vendor is currently providing messaging services?

ANSWER: Our current messaging service is through Everbridge.
   - What is the historical volume of usage? Ex: how many unique messages are sent out on an annual average basis? On average, how many modalities are included with each unique outbound message?

ANSWER: Historical volume of usage is quite low, and we are working to expand that use. The current service can provide messaging to emails, landline phones, cell phones by voice and call phones by text messages.

9. 4.2.1.24- Please explain what is meant by 'automatically disseminating incident information'. Please provide an example.

ANSWER: Selected/designated report types would have distribution groups set up within the EMIS and for retransmission to and through Everbridge, based upon administrator settings for such groups. Such groups could be selected by a report writer/editor during the life cycle of each report. Some report types would be built to have specific and editable distribution groups established and those distribution groups would be set for inclusion on specific report types for dissemination without the report writer/editor being forced to add those distribution groups. Upon the submission of the report into the EMIS, all distribution groups assigned by any of the methods above would be sent the appropriate messaging, as established within the administration for that distribution group.

10. 4.2.1.24 – Does 'disseminate incident information automatically' mean that a human is not involved to trigger the dissemination of information?

ANSWER: See response for Question 9 above.

ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.: _____

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received:
(Check the box next to each addendum received)

[X] Addendum No. 1   [ ] Addendum No. 6

[X] Addendum No. 2   [ ] Addendum No. 7

[X] Addendum No. 3   [ ] Addendum No. 8

[X] Addendum No. 4   [ ] Addendum No. 9

[X] Addendum No. 5   [ ] Addendum No. 10

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

Buffalo Computer Graphics, Inc
Company

Gary F. Masterson
Authorized Signature

_5·7·19_
Date

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing.
Revised 6/8/2012

VENDOR PREFERENCE CERTIFICATE

WV-10
Approved / Revised
06/08/18

State of West Virginia
VENDOR PREFERENCE CERTIFICATE

Certification and application is hereby made for Preference in accordance with *West Virginia Code*, §5A-3-37. (Does not apply to construction contracts). *West Virginia Code*, §5A-3-37, provides an opportunity for qualifying vendors to request (at the time of bid) preference for their residency status. Such preference is an evaluation method only and will be applied only to the cost bid in accordance with the *West Virginia Code*. This certificate for application is to be used to request such preference. The Purchasing Division will make the determination of the Vendor Preference, if applicable.

1. **Application is made for 2.5% vendor preference for the reason checked:**
    ☐ Bidder is an individual resident vendor and has resided continuously in West Virginia, or bidder is a partnership, association or corporation resident vendor and has maintained its headquarters or principal place of business continuously in West Virginia, for four (4) years immediately preceding the date of this certification; **or,**

    ☐ Bidder is a resident vendor partnership, association, or corporation with at least eighty percent of ownership interest of bidder held by another entity that meets the applicable four year residency requirement; **or,**

    ☐ Bidder is a nonresident vendor which has an affiliate or subsidiary which employs a minimum of one hundred state residents and which has maintained its headquarters or principal place of business within West Virginia continuously for the four (4) years immediately preceding the date of this certification; **or,**

2. **Application is made for 2.5% vendor preference for the reason checked:**
    ☐ Bidder is a resident vendor who certifies that, during the life of the contract, on average at least 75% of the employees working on the project being bid are residents of West Virginia who have resided in the state continuously for the two years immediately preceding submission of this bid; **or,**

3. **Application is made for 2.5% vendor preference for the reason checked:**
    ☐ Bidder is a nonresident vendor that employs a minimum of one hundred state residents, or a nonresident vendor which has an affiliate or subsidiary which maintains its headquarters or principal place of business within West Virginia and employs a minimum of one hundred state residents, and for purposes of producing or distributing the commodities or completing the project which is the subject of the bidder's bid and continuously over the entire term of the project, on average at least seventy-five percent of the bidder's employees or the bidder's affiliate's or subsidiary's employees are residents of West Virginia who have resided in the state continuously for the two immediately preceding years and the vendor's bid; **or,**

4. **Application is made for 5% vendor preference for the reason checked:**
    ☐ Bidder meets either the requirement of both subdivisions (1) and (2) or subdivision (1) and (3) as stated above; **or,**

5. **Application is made for 3.5% vendor preference who is a veteran for the reason checked:**
    ☐ Bidder is an individual resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard and has resided in West Virginia continuously for the four years immediately preceding the date on which the bid is submitted; **or,**

6. **Application is made for 3.5% vendor preference who is a veteran for the reason checked:**
    ☐ Bidder is a resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard, if, for purposes of producing or distributing the commodities or completing the project which is the subject of the vendor's bid and continuously over the entire term of the project, on average at least seventy-five percent of the vendor's employees are residents of West Virginia who have resided in the state continuously for the two immediately preceding years.

7. **Application is made for preference as a non-resident small, women- and minority-owned business, in accordance with *West Virginia Code* §5A-3-59 and *West Virginia Code of State Rules*.**
    ☒ Bidder has been or expects to be approved prior to contract award by the Purchasing Division as a certified small, women- and minority-owned business.

8. **Application is made for reciprocal preference.**
    ☐ Bidder is a West Virginia resident and is requesting reciprocal preference to the extent that it applies.

Bidder understands if the Secretary of Revenue determines that a Bidder receiving preference has failed to continue to meet the requirements for such preference, the Secretary may order the Director of Purchasing to: (a) rescind the contract or purchase order; or (b) assess a penalty against such Bidder in an amount not to exceed 5% of the bid amount and that such penalty will be paid to the contracting agency or deducted from any unpaid balance on the contract or purchase order.

By submission of this certificate, Bidder agrees to disclose any reasonably requested information to the Purchasing Division and authorizes the Department of Revenue to disclose to the Director of Purchasing appropriate information verifying that Bidder has paid the required business taxes, provided that such information does not contain the amounts of taxes paid nor any other information deemed by the Tax Commissioner to be confidential.

Bidder hereby certifies that this certificate is true and accurate in all respects; and that if a contract is issued to Bidder and if anything contained within this certificate changes during the term of the contract, Bidder will notify the Purchasing Division in writing immediately.

Bidder: _Buffalo Computer Graphics, Inc._   Signed: _Kei Williams_

Date: _4/23/19_   Title: _Vice President_

Check any combination of preference consideration(s) indicated above, which you are entitled to receive.

DESIGNATED CONTACT: Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.

Patrick Cerra, Proposal Manager
(Name, Title)

Patrick Cerra, Proposal Manager
(Printed Name and Title)

4185 Bayview Road, Blasdell, NY 14219
(Address)

716-822-8668 / 716-822-2730
(Phone Number) / (Fax Number)

pcerra@bcgeng.com
(email address)

CERTIFICATION AND SIGNATORE: By signing below, or submitting documentation through wvOASIS. I certify that I have reviewed this Solicitation in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that I am authorized by the vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

Buffalo Computer Graphics, Inc.
(Company)

Gary J. Masterson   Gary F. Masterson, Vice President
(Authorized Signature) (Representative Name, Title)

Gary F. Masterson, Vice President
(Printed Name and Title of Authorized Representative)

3/29/19
(date)

716-822-8668 / 716-822-2730
(Phone Number) (Fax Number)

By signing below, I certify that I have reviewed this Request for Proposal in its entirety; understand the requirements, terms and conditions, and other information contained herein; that I run submitting this proposal for review and consideration; that I run authorized by the bidder to execute this bid or any documents related thereto on bidder's behalf; that I run authorized to bind the bidder in a contractual relationship; and that, to the best of my knowledge, the bidder has properly registered with any State agency that may require registration.

Buffalo Computer Graphics, Inc.
(Company)

Gary F. Masterson   Gary F. Masterson, Vice President
(Representative Name, Title)

716-822-8668 / 716-822-2730
(Contact Phone/Fax Number)

3/29/19
(Date)

STATE OF WEST VIRGINIA
Purchasing Division

PURCHASING AFFIDAVIT

CONSTRUCTION CONTRACTS: Under W. Va. Code § 5-22-1(i), the contracting public entity shall not award a construction contract to any bidder that is known to be in default on any monetary obligation owed to the state or a political subdivision of the state, including, but not limited to, obligations related to payroll taxes, property taxes, sales and use taxes, fire service fees, or other fines or fees.

ALL CONTRACTS: Under W. Va. Code §5A-3-10a, no contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

EXCEPTION: The prohibition listed above does not apply where a vendor has contested any tax administered pursuant to chapter eleven of the W. Va. Code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

DEFINITIONS:

"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

"Employer default" means having an outstanding balance or liability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-2c-2, failure to maintain mandatory workers' compensation coverage, or failure to fully meet its obligations as a workers' compensation self-insured employer. An employer is not in employer default if it has entered into a repayment agreement with the Insurance Commissioner and remains in compliance with the obligations under the repayment agreement.

"Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceed five percent of the total contract amount.

AFFIRMATION: By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (*W. Va. Code* §61-5-3) that: (1) for construction contracts, the vendor is not in default on any monetary obligation owed to the state or a political subdivision of the state, and (2) for all other contracts, that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

WITNESS THE FOLLOWING SIGNATURE:

Vendor's Name: _BUFFALO Computer Graphics, Inc._

Authorized Signature: _Ken Williams_   Date: _4.23.2019_

State of _New York_

County of _Erie_ , to-wit:

Taken, subscribed, and sworn to before me this _23_ day of _April_ , 20_19_.

My Commission expires _April 27_ , 20_22_.

AFFIX SEAL HERE

NOTARY PUBLIC _Ellen J Trotta_

ELLEN F. TROTTA
Notary Public, State of New York
Qualified in Erie County
No. 01TR4995592
My Commission Expires April 27, _2022_

Purchasing Affidavit (Revised 01/19/2018)

Purchasing Divison
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

State of West Virginia
Request for Proposal
21 — Info Technology

Proc Folder: 462141

Doc Description: Addendum #1 Web Based Emergency Management Information Syste

Proc Type: Central Master Agreement

Date Issued	Solicitation Closes	Solicitation No		Version
2019-03-29	2019-04-16 13:30:00	CRFP	0606 HSE1900000001	2

BID RECEIVING LOCATION

BID CLERK
DEPARTMENT OF ADMINISTRATION
PURCHASING DIVISION
2019 WASHINGTON ST E
CHARLESTON   WV   25305
US

VENDOR

Vendor Name, Address and Telephone Number:

FOR INFORMATION CONTACT THE BUYER
Stephanie L Gale
(304) 558-8801
stephanie.l.gale@wv.gov

Signature X _Kei Williams_   FEIN # 161190997   DATE 4·23·2019

All offers subject to all terms and conditions contained in this solicitation

ADDITIONAL INFORMATION:

Addendum #1 issued to:

1. Extend the bid opening date and time to Tuesday, April 16, 2019 @ 1:30pm. Subsequent Addendum to follow.

End of Addendum #1.

INVOICE TO		SHIP TO	
ACCOUNTING TECHNICIAN 304-558-5380		ACCOUNTING TECHNICIAN 304-558-5380	
HOMELAND SECURITY & EMERGENCY MANAGEMENT		HOMELAND SECURITY & EMERGENCY MANAGEMENT	
BLDG 1 RM EB80		BLDG 1 RM EB80	
1900 KANAWHA BLVD E		1900 KANAWHA BLVD E	
CHARLESTON	WV 25305-0360	CHARLESTON	WV 25305-0360
US		US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
1	EMIS- network				

Comm Code	Manufacturer	Specification	Model #
43232900			

Extended Description :

web based statewide EMIS enterprise solution to be utilized by all levels of government and private sector response partners as the States central Emergency Response platform

SOLICITATION NUMBER: CRFP HSE1900000001
Addendum Number: 1

The purpose of this addendum is to modify the solicitation identified as ("Solicitation") to reflect the change(s) identified and described below.

Applicable Addendum Category:

[✓] Modify bid opening date and time

[ ] Modify specifications of product or service being sought

[ ] Attachment of vendor questions and responses

[ ] Attachment of pre-bid sign-in sheet

[ ] Correction of error

[ ] Other

Description of Modification to Solicitation:

Addendum #1 issued to:

1. Extend the bid opening date and time to Tuesday, April 16, 2019 @ 1:30pm. Subsequent Addendum to follow.

End of Addendum #1.

Additional Documentation: Documentation related to this Addendum (if any) has been included herewith as Attachment A and is specifically incorporated herein by reference.

Terms and Conditions:

1. All provisions of the Solicitation and other addenda not modified herein shall remain in full force and effect.

2. Vendor should acknowledge receipt of all addenda issued for this Solicitation by completing an Addendum Acknowledgment, a copy of which is included herewith. Failure to acknowledge addenda may result in bid disqualification. The addendum acknowledgement should be submitted with the bid to expedite document processing.

	Purchasing Divison 2019 Washington Street East Post Office Box 50130 Charleston, WV 25305-0130	**State of West Virginia** **Request for Proposal** **21 — Info Technology**

Proc Folder: 462141

Doc Description: Web Based Emergency Management Information System

Proc Type: Central Master Agreement

Date Issued	Solicitation Closes	Solicitation No	Version
2019-03-15	2019-04-02 13:30:00	CRFP 0606 HSE1900000001	1

BID RECEIVING LOCATION

BID CLERK
DEPARTMENT OF ADMINISTRATION
PURCHASING DIVISION
2019 WASHINGTON ST E
CHARLESTON   WV   25305
US

VENDOR

Vendor Name, Address and Telephone Number:

FOR INFORMATION CONTACT THE BUYER
Stephanie L Gale
(304) 558-8801
stephanie.l.gale@wv.gov

Signature X _Keri Williams_   FEIN # 161190997   DATE 4.23.2019

All offers subject to all terms and conditions contained in this solicitation

FORM ID : WV-PRC-CRFP-001

Request for Proposal

The West Virginia Department of Administration, Purchasing Division (hereinafter referred to as the "Purchasing Division") is issuing this solicitation as a request for proposal ("RFP"), as authorized by W. VA. Code §5A-3-10b for the West Virginia Department of Homeland Security and Emergency Management to provide an Emergency Management Information System (EMIS) solution.

INVOICE TO		SHIP TO	
ACCOUNTING TECHNICIAN 304-558-5380		ACCOUNTING TECHNICIAN 304-558-5380	
HOMELAND SECURITY & EMERGENCY MANAGEMENT		HOMELAND SECURITY & EMERGENCY MANAGEMENT	
BLDG 1 RM EB80		BLDG 1 RM EB80	
1900 KANAWHA BLVD E		1900 KANAWHA BLVD E	
CHARLESTON	WV 25305-0360	CHARLESTON	WV 25305-0360
US		US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
1	EMIS- network				

Comm Code	Manufacturer	Specification	Model #
43232900			

Extended Description :

web based statewide EMIS enterprise solution to be utilized by all levels of government and private sector response partners as the States central Emergency Response platform

ADDITIONAL TERMS AND CONDITIONS

See attached document(s) for additional Terms and Conditions

Purchasing Divison
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

State of West Virginia
Request for Proposal
21 — Info Technology

Proc Folder: 462141

Doc Description: Addendum #2 Web Based Emergency Management Information Syste

Proc Type: Central Master Agreement

Date Issued	Solicitation Closes	Solicitation No		Version
2019-04-08	2019-04-25 13:30:00	CRFP	0606 HSE1900000001	3

BID RECEIVING LOCATION

BID CLERK
DEPARTMENT OF ADMINISTRATION
PURCHASING DIVISION
2019 WASHINGTON ST E
CHARLESTON   WV   25305
US

VENDOR

Vendor Name, Address and Telephone Number:

FOR INFORMATION CONTACT THE BUYER

Stephanie L Gale
(304) 558-8801
stephanie.l.gale@wv.gov

Signature X _Keri Williams_   FEIN # 161190997   DATE 4.23.2019

All offers subject to all terms and conditions contained in this solicitation

Addendum #2 issued to:

1. Re-publish entire solicitation due to changes in the Terms and Conditions, Specifications, and Pricing Pages. Please read solicitation in its entirety.

End of Addendum #2.

INVOICE TO	SHIP TO
ACCOUNTING TECHNICIAN 304-558-5380 HOMELAND SECURITY & EMERGENCY MANAGEMENT BLDG 1 RM EB80 1900 KANAWHA BLVD E CHARLESTON WV 25305-0360 US	ACCOUNTING TECHNICIAN 304-558-5380 HOMELAND SECURITY & EMERGENCY MANAGEMENT BLDG 1 RM EB80 1900 KANAWHA BLVD E CHARLESTON WV 25305-0360 US

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
1	EMIS- network				

Comm Code	Manufacturer	Specification	Model #
43232900			

Extended Description :

web based statewide EMIS enterprise solution to be utilized by all levels of government and private sector response partners as the States central Emergency Response platform

ADDITIONAL TERMS AND CONDITIONS

See attached document(s) for additional Terms and Conditions

ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.: _____

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Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

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Addendum Numbers Received:
(Check the box next to each addendum received)

[x] Addendum No. 1   [   ] Addendum No. 6

[x] Addendum No. 2   [   ] Addendum No. 7

[   ] Addendum No. 3   [   ] Addendum No. 8

[   ] Addendum No. 4   [   ] Addendum No. 9

[   ] Addendum No. 5   [   ] Addendum No. 10

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

Buffalo Computer Graphics, Inc
_____
Company

Ken Williams
_____
Authorized Signature

_4.23.19_
_____
Date

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing.
Revised 6/8/2012

State of West Virginia
VENDOR PREFERENCE CERTIFICATE

Certification and application is hereby made for Preference in accordance with *West Virginia Code*, §5A-3-37. (Does not apply to construction contracts). *West Virginia Code*, §5A-3-37, provides an opportunity for qualifying vendors to request (at the time of bid) preference for their residency status. Such preference is an evaluation method only and will be applied only to the cost bid in accordance with the *West Virginia Code*. This certificate for application is to be used to request such preference. The Purchasing Division will make the determination of the Vendor Preference, if applicable.

1.   **Application is made for 2.5% vendor preference for the reason checked:**
☐   Bidder is an individual resident vendor and has resided continuously in West Virginia, or bidder is a partnership, association or corporation resident vendor and has maintained its headquarters or principal place of business continuously in West Virginia, for four (4) years immediately preceding the date of this certification; **or,**

☐   Bidder is a resident vendor partnership, association, or corporation with at least eighty percent of ownership interest of bidder held by another entity that meets the applicable four year residency requirement; **or,**

☐   Bidder is a nonresident vendor which has an affiliate or subsidiary which employs a minimum of one hundred state residents and which has maintained its headquarters or principal place of business within West Virginia continuously for the four (4) years immediately preceding the date of this certification; **or,**

2.   **Application is made for 2.5% vendor preference for the reason checked:**
☐   Bidder is a resident vendor who certifies that, during the life of the contract, on average at least 75% of the employees working on the project being bid are residents of West Virginia who have resided in the state continuously for the two years immediately preceding submission of this bid; **or,**

3.   **Application is made for 2.5% vendor preference for the reason checked:**
☐   Bidder is a nonresident vendor that employs a minimum of one hundred state residents, or a nonresident vendor which has an affiliate or subsidiary which maintains its headquarters or principal place of business within West Virginia and employs a minimum of one hundred state residents, and for purposes of producing or distributing the commodities or completing the project which is the subject of the bidder's bid and continuously over the entire term of the project, on average at least seventy-five percent of the bidder's employees or the bidder's affiliate's or subsidiary's employees are residents of West Virginia who have resided in the state continuously for the two immediately preceding years and the vendor's bid; **or,**

4.   **Application is made for 5% vendor preference for the reason checked:**
☐   Bidder meets either the requirement of both subdivisions (1) and (2) or subdivision (1) and (3) as stated above; **or,**

5.   **Application is made for 3.5% vendor preference who is a veteran for the reason checked:**
☐   Bidder is an individual resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard and has resided in West Virginia continuously for the four years immediately preceding the date on which the bid is submitted; **or,**

6.   **Application is made for 3.5% vendor preference who is a veteran for the reason checked:**
☐   Bidder is a resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard, if, for purposes of producing or distributing the commodities or completing the project which is the subject of the vendor's bid and continuously over the entire term of the project, on average at least seventy-five percent of the vendor's employees are residents of West Virginia who have resided in the state continuously for the two immediately preceding years.

7.   **Application is made for preference as a non-resident small, women- and minority-owned business, in accordance with *West Virginia Code* §5A-3-59 and *West Virginia Code of State Rules*.**
☒   Bidder has been or expects to be approved prior to contract award by the Purchasing Division as a certified small, women- and minority-owned business.

8.   **Application is made for reciprocal preference.**
☐   Bidder is a West Virginia resident and is requesting reciprocal preference to the extent that it applies.

Bidder understands if the Secretary of Revenue determines that a Bidder receiving preference has failed to continue to meet the requirements for such preference, the Secretary may order the Director of Purchasing to: (a) rescind the contract or purchase order; or (b) assess a penalty against such Bidder in an amount not to exceed 5% of the bid amount and that such penalty will be paid to the contracting agency or deducted from any unpaid balance on the contract or purchase order.

By submission of this certificate, Bidder agrees to disclose any reasonably requested information to the Purchasing Division and authorizes the Department of Revenue to disclose to the Director of Purchasing appropriate information verifying that Bidder has paid the required business taxes, provided that such information does not contain the amounts of taxes paid nor any other information deemed by the Tax Commissioner to be confidential.

Bidder hereby certifies that this certificate is true and accurate in all respects; and that if a contract is issued to Bidder and if anything contained within this certificate changes during the term of the contract, Bidder will notify the Purchasing Division in writing immediately.

Bidder: Buffalo Computer Graphics, Inc.   **Signed:** *Kei Williams*

Date: 4/23/19   **Title:** Vice President

Check any combination of preference consideration(s) indicated above, which you are entitled to receive.

Purchasing Divison
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

State of West Virginia
Request for Proposal
21 — Info Technology

Proc Folder: 462141

Doc Description: Addendum #3 Web Based Emergency Management Information Syste

Proc Type: Central Master Agreement

Date Issued	Solicitation Closes	Solicitation No	Version
2019-04-24	2019-05-03 13:30:00	CRFP 0606 HSE1900000001	4

BID RECEIVING LOCATION

BID CLERK
DEPARTMENT OF ADMINISTRATION
PURCHASING DIVISION
2019 WASHINGTON ST E
CHARLESTON   WV   25305
US

VENDOR

Vendor Name, Address and Telephone Number:

FOR INFORMATION CONTACT THE BUYER

Stephanie L Gale
(304) 558-8801
stephanie.l.gale@wv.gov

Signature X _Gary J. Masterson_   FEIN # 161190997   DATE 5.7.19

All offers subject to all terms and conditions contained in this solicitation

ADDITIONAL INFORMATION:

Addendum #3 issued to:

1. Move bid opening date and time to Friday, May 3, 2019 @ 1:30pm. Subsequent Addendum to follow.

End of Addendum #3

INVOICE TO		SHIP TO	
ACCOUNTING TECHNICIAN 304-558-5380		ACCOUNTING TECHNICIAN 304-558-5380	
HOMELAND SECURITY & EMERGENCY MANAGEMENT		HOMELAND SECURITY & EMERGENCY MANAGEMENT	
BLDG 1 RM EB80		BLDG 1 RM EB80	
1900 KANAWHA BLVD E		1900 KANAWHA BLVD E	
CHARLESTON	WV 25305-0360	CHARLESTON	WV 25305-0360
US		US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
1	EMIS- network				

Comm Code	Manufacturer	Specification	Model #
43232900			

Extended Description :

web based statewide EMIS enterprise solution to be utilized by all levels of government and private sector response partners as the States central Emergency Response platform

SOLICITATION NUMBER: CRFP HSE1900000001
Addendum Number: 3

The purpose of this addendum is to modify the solicitation identified as ("Solicitation") to reflect the change(s) identified and described below.

Applicable Addendum Category:

[✓] Modify bid opening date and time

[ ] Modify specifications of product or service being sought

[ ] Attachment of vendor questions and responses

[ ] Attachment of pre-bid sign-in sheet

[ ] Correction of error

[ ] Other

Description of Modification to Solicitation:

Addendum #3 issued to:

1. Move bid opening date and time to Friday, May 3, 2019 @ 1:30pm. Subsequent Addendum to follow.

End of Addendum #3

Additional Documentation: Documentation related to this Addendum (if any) has been included herewith as Attachment A and is specifically incorporated herein by reference.

Terms and Conditions:

1. All provisions of the Solicitation and other addenda not modified herein shall remain in full force and effect.

2. Vendor should acknowledge receipt of all addenda issued for this Solicitation by completing an Addendum Acknowledgment, a copy of which is included herewith. Failure to acknowledge addenda may result in bid disqualification. The addendum acknowledgement should be submitted with the bid to expedite document processing.

ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.: _____

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received:
(Check the box next to each addendum received)

[✗] Addendum No. 1   [   ] Addendum No. 6

[✗] Addendum No. 2   [   ] Addendum No. 7

[✗] Addendum No. 3   [   ] Addendum No. 8

[   ] Addendum No. 4   [   ] Addendum No. 9

[   ] Addendum No. 5   [   ] Addendum No. 10

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

Buffalo Computer Graphics, Inc
Company

Gary J. Masterson
Authorized Signature

_5.7.19_
Date

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing.
Revised 6/8/2012

Purchasing Divison
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

State of West Virginia
Request for Proposal
21 — Info Technology

Proc Folder: 462141

Doc Description: Addendum #4 Web Based Emergency Management Information Syste

Proc Type: Central Master Agreement

Date Issued	Solicitation Closes	Solicitation No		Version
2019-05-02	2019-05-08 13:30:00	CRFP	0606 HSE1900000001	5

BID RECEIVING LOCATION

BID CLERK
DEPARTMENT OF ADMINISTRATION
PURCHASING DIVISION
2019 WASHINGTON ST E
CHARLESTON   WV   25305
US

VENDOR

Vendor Name, Address and Telephone Number:

FOR INFORMATION CONTACT THE BUYER

Stephanie L Gale
(304) 558-8801
stephanie.l.gale@wv.gov

Signature X *Gary J. Masterson*   **FEIN #** 161190997   **DATE** 5·7·19

All offers subject to all terms and conditions contained in this solicitation

ADDITIONAL INFORMATION:

Addendum #4 issued to:

1. Move bid opening date and time to Wednesday, May 8, 2019 @ 1:30pm.
2. Provide responses to vendor questions.

End of Addendum #4.

INVOICE TO	SHIP TO
ACCOUNTING TECHNICIAN 304-558-5380 HOMELAND SECURITY & EMERGENCY MANAGEMENT BLDG 1 RM EB80 1900 KANAWHA BLVD E CHARLESTON WV 25305-0360 US	ACCOUNTING TECHNICIAN 304-558-5380 HOMELAND SECURITY & EMERGENCY MANAGEMENT BLDG 1 RM EB80 1900 KANAWHA BLVD E CHARLESTON WV 25305-0360 US

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
1	EMIS- network				

Comm Code	Manufacturer	Specification	Model #
43232900			

Extended Description :

web based statewide EMIS enterprise solution to be utilized by all levels of government and private sector response partners as the States central Emergency Response platform

ADDITIONAL TERMS AND CONDITIONS

See attached document(s) for additional Terms and Conditions

Purchasing Divison
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

State of West Virginia
Request for Proposal
21 — Info Technology

Proc Folder: 462141

Doc Description: Addendum #4 Web Based Emergency Management Information Syste

Proc Type: Central Master Agreement

Date Issued	Solicitation Closes	Solicitation No	Version
2019-05-02	2019-05-08 13:30:00	CRFP 0606 HSE1900000001	5

BID RECEIVING LOCATION

BID CLERK
DEPARTMENT OF ADMINISTRATION
PURCHASING DIVISION
2019 WASHINGTON ST E
CHARLESTON   WV   25305
US

VENDOR

Vendor Name, Address and Telephone Number:

FOR INFORMATION CONTACT THE BUYER
Stephanie L Gale
(304) 558-8801
stephanie.l.gale@wv.gov

Signature X *Gary J. Masterson*   FEIN # 161190997   DATE 5.7.19

All offers subject to all terms and conditions contained in this solicitation

Addendum #4 issued to:

1. Move bid opening date and time to Wednesday, May 8, 2019 @ 1:30pm.
2. Provide responses to vendor questions.

End of Addendum #4.

INVOICE TO	SHIP TO
ACCOUNTING TECHNICIAN 304-558-5380	ACCOUNTING TECHNICIAN 304-558-5380
HOMELAND SECURITY & EMERGENCY MANAGEMENT	HOMELAND SECURITY & EMERGENCY MANAGEMENT
BLDG 1 RM EB80	BLDG 1 RM EB80
1900 KANAWHA BLVD E	1900 KANAWHA BLVD E
CHARLESTON WV 25305-0360	CHARLESTON WV 25305-0360
US	US

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
1	EMIS- network				

Comm Code	Manufacturer	Specification	Model #
43232900			

Extended Description :

web based statewide EMIS enterprise solution to be utilized by all levels of government and private sector response partners as the States central Emergency Response platform

SOLICITATION NUMBER: CRFP HSE1900000001
Addendum Number: 4

The purpose of this addendum is to modify the solicitation identified as ("Solicitation") to reflect the change(s) identified and described below.

Applicable Addendum Category:

[✓] Modify bid opening date and time

[   ] Modify specifications of product or service being sought

[✓] Attachment of vendor questions and responses

[   ] Attachment of pre-bid sign-in sheet

[   ] Correction of error

[   ] Other

Description of Modification to Solicitation:

Addendum #4 issued to:

1. Move bid opening date and time to Wednesday, May 8, 2019 @ 1:30pm.
2. Provide responses to vendor questions.

End of Addendum #4.

Additional Documentation: Documentation related to this Addendum (if any) has been included herewith as Attachment A and is specifically incorporated herein by reference.

Terms and Conditions:

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1. 4.2.4.34 and 4.2.4.35 – Please describe how the State's GIS platform and the EMIS GIS Platform are expected to interact and coexist in day-to-day scenarios as well as when there is an outage.

ANSWER: Respondent is unsure what is meant by outage. Day-to-day usage is anticipated to use the EMIS GIS platform to produce custom GIS products for State and Local partners.

2. 4.2.4.35- As the State's GIS data (ESRI) is the primary data source for all GIS data (4.2.4.34), is the State's GIS system the primary GIS platform to be used by WV Homeland Security?

ANSWER: There is no single GIS system for the State, nor is there a statewide clearing house of data at this time.

3. 4.2.4.34 – Will the EMIS GIS platform serve as the alternate data source for use across the State? Will the EMIS GIS platform server as the alternate GIS platform for use across the State?

ANSWER: EMIS GIS platform will be able to manipulate GIS data to produce GIS products for incident command. Second Question is unclear to respondent.

4. 4.2.3.21 – Please describe the concept of user-selected data views.

ANSWER: User is able to select specific layers of data to be displayed at any given time.

5. 4.2.3.21 - What type of data views are required?

ANSWER: None are required, but the ability for the agency to construct data layers to create views internally.

6. 4.2.3.21 – Please define 'old-active' information

ANSWER: Information that is required to be maintained for a period of time after an event.

7. 4.2.3.21 – What sorting, filtering and editing functionality is required for user-selected data views

ANSWER: Functionality will be determined by GIS manager based on the incident and determined in house.

8. 4.2.1.11 and 4.2.1.30 –
   - How many total contacts is anticipated to be loaded into the EMIS System?

ANSWER: The number of contacts loaded ito the EMIS system would be limited to those users with valid accounts.

   - What Solution/Vendor is currently providing messaging services?

ANSWER: Our current messaging service is through Everbridge.

   - What is the historical volume of usage? Ex: how many unique messages are sent out on an annual average basis? On average, how many modalities are included with each unique outbound message?

ANSWER: Historical volume of usage is quite low, and we are working to expand that use. The current service can provide messaging to emails, landline phones, cell phones by voice and call phones by text messages.

9. 4.2.1.24- Please explain what is meant by 'automatically disseminating incident information'. Please provide an example.

ANSWER: Selected/designated report types would have distribution groups set up within the EMIS and for retransmission to and through Everbridge, based upon administrator settings for such groups. Such groups could be selected by a report writer/editor during the life cycle of each report. Some report types would be built to have specific and editable distribution groups established and those distribution groups would be set for inclusion on specific report types for dissemination without the report writer/editor being forced to add those distribution groups. Upon the submission of the report into the EMIS, all distribution groups assigned by any of the methods above would be sent the appropriate messaging, as established within the administration for that distribution group.

10. 4.2.1.24 – Does 'disseminate incident information automatically' mean that a human is not involved to trigger the dissemination of information?

ANSWER: See response for Question 9 above.

ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.: _____

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[X] Addendum No. 4   [ ] Addendum No. 9

[X] Addendum No. 5   [ ] Addendum No. 10

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Buffalo Computer Graphics, Inc
Company

Gary J. Masterson
Authorized Signature

_5·7·19_
Date

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Revised 6/8/2012