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Header @ 4 List View

- General Information
- Contact
- Default Values
- Discount
- Document Information
- Clarification Request

Procurement Folder: 970413

Procurement Type: Central Contract - Fixed Amt

Vendor ID: VS0000017241

Legal Name: Dynamis, Inc.

Alias/DBA:

Total Bid: \$225,000.00

Response Date: 12/21/2021

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Responded By User ID: Dynamis

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SO Doc ID: HSE2200000005

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Solicitation Description: Emergency Management Information System (EMIS)

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Total of All Attachments: 4

| Line | Comm Ln Desc | Qty | Unit Issue | Unit Price | Ln Total Or Contract Amount |
|------|---|---------|------------|--------------|-----------------------------|
| 1 | Annual Subscription for EMIS - Initial Year | 1.00000 | EA | 90000.000000 | 90000.00 |

| Comm Code | Manufacturer | Specification | Model # |
|-----------|--------------|---------------|---------|
| 43230000 | | | |

Commodity Line Comments:

Extended Description:

- 4.1.2 Contract Item 1: Annual Subscription for EMIS Solution
- 4.1.2.1 Vendor must provide an annual cloud-based subscription for EMIS Solution as defined in Section 4.1.1.
- 4.1.2.2 Vendor must provide access for an estimated quantity of 500 users simultaneously with the ability to add more users without delay as per

| Line | Comm Ln Desc | Qty | Unit Issue | Unit Price | Ln Total Or Contract Amount |
|------|---|---------|------------|--------------|-----------------------------|
| 2 | Annual Subscription for EMIS - Optional Year 2 | 1.00000 | EA | 45000.000000 | 45000.00 |

| Comm Code | Manufacturer | Specification | Model # |
|-----------|--------------|---------------|---------|
| 43230000 | | | |

Commodity Line Comments:

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| Line | Comm Ln Desc | Qty | Unit Issue | Unit Price | Ln Total Or Contract Amount |
|------|---|---------|------------|--------------|-----------------------------|
| 3 | Annual Subscription for EMIS - Optional Year 3 | 1.00000 | EA | 45000.000000 | 45000.00 |

| Comm Code | Manufacturer | Specification | Model # |
|-----------|--------------|---------------|---------|
| 43230000 | | | |

Commodity Line Comments:

Extended Description:

- 4.1.2 Contract Item 1: Annual Subscription for EMIS Solution
- 4.1.2.1 Vendor must provide an annual cloud-based subscription for EMIS Solution as defined in Section 4.1.1.
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| Line | Comm Ln Desc | Qty | Unit Issue | Unit Price | Ln Total Or Contract Amount |
|------|---|---------|------------|--------------|-----------------------------|
| 4 | Annual Subscription for EMIS - Optional Year 4 | 1.00000 | EA | 45000.000000 | 45000.00 |

| Comm Code | Manufacturer | Specification | Model # |
|-----------|--------------|---------------|---------|
| 43230000 | | | |

Commodity Line Comments:

Extended Description:

4.1.2 Contract Item 1: Annual Subscription for EMIS Solution

4.1.2.1 Vendor must provide an annual cloud-based subscription for EMIS Solution as defined in Section 4.1.1.

4.1.2.2 Vendor must provide access for an estimated quantity of 500 users simultaneously with the ability to add more users without delay as per



DYNAMIS

West Virginia Emergency Management Information System Proposal

Solicitation

CRFQ 0606 HSE2200000005

Submitted: December 21, 2021

Submitted By:

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1. Executive Overview

West Virginia is no stranger to both natural and man-made disasters ranging from floods and landslides to mining accidents and extreme weather. A rugged and varied geography including large swaths of forests, mountains, and valleys, coupled with a dispersed population presents unique challenges with coordinating emergency response at the state level. There is a compelling mission need for a Common Operating Picture that enables all organizations associated with an emergency to coordinate and collaborate efficiently and effectively. WV Emergency Management Division (WVEMD) is responsible for disaster preparedness, mitigation, response, and recovery efforts and seeks a system that provides an integrated solution for employees to use during emergency activation, including software, installation services, training, incremental upgrades and expansion, and other custom services needed to bring a cloud-based solution to full operation for all emergencies. Dynamis is well postured to support this contract - ***we are fully capable of serving as West Virginia's single vendor for emergency management software, installation, training, and other services as required.*** This response to WV Request for Quote describes how COBRA, a world-class emergency management software solution, will meet ***all the needs*** of West Virginia and is backed by a company the state can depend on at an affordable price.

2. History Fielding Emergency Management Solutions

With 22 years of continuous development and fielding, Dynamis' COBRA Emergency Management solution has been employed by emergency responders in state and local EOCs across the all-hazards spectrum. During Hurricane Harvey, the National Guard (NG) used COBRA as its Common Operating Picture (COP) solution for the Houston area. With COBRA, the NG effectively tracked resources, requests for assistance, and personnel across a wide area of responsibility. The NG's campus survey crew was also able to provide senior leaders situational awareness in a virtual environment, limiting the need for in person visits to the physical campus area. Using COBRA's integrated map, a site picture portrayed the ground hazards existing in the area, assisting responders supporting NG emergency operations.

In addition to this impressive use case, we can report that the COBRA solution we are proposing is currently being used in the state of West Virginia. Both Air National Guard Wings in West Virginia, located in Martinsburg and Charleston, are mature users of COBRA, putting its suite of tools to use for all hazards preparedness and response and for the Guard's domestic response operations across the state under the jurisdiction and control of the Governor.

COBRA also has had extensive use during the ongoing COVID-19 pandemic, functioning as the statewide platform for the State of New Mexico since March 2020. The Air National Guard Wing, National Guard Joint Operations Center, and State Emergency Management agency have relied on COBRA to provide a highly capable and effective COP, enabling situational awareness across multiple responding agencies. COBRA's tools have also been effective in tracking COVID testing facilities and staffing, points of distribution, vaccine facility locations and critical PPE shipments. Daily situational updates are continuously posted along with critical documents shared across the statewide response enterprise. Equally important, COBRA's integrated map has been populated with critical facilities, test locations, vaccine locations, and Liaison Team locations across the state, offering a unified picture that is invaluable to New Mexico state officials.

For the past five years, the country of Belgium has employed our technology and its tools as its national crisis response solution. Belgian authorities chose a COBRA-based software platform for their nationwide Incident and Crisis Management System (ICMS). The system began operations

on January 1, 2017, providing a service that delivers highly similar requirements as those sought by West Virginia. The system integrates disparate users in multiple agencies -- connecting their National Crisis Center with the Departments of Interior, Defense, Justice, and their Intelligence service. Moreover, it connects all Belgian cities, municipalities, provinces, and federal authorities, as well as ports, roads, high-risk companies, hospitals, and other organizations of national significance into one comprehensive COP supporting incident and crisis management. With a population of over 11 million and major critical infrastructure across a national enterprise, CORBA provides a capability to address all hazards for Belgium on a scope and scale that is highly applicable to the state of West Virginia and its citizens, cities, economy, and infrastructure.

Throughout each of these on-going deployments of a comprehensive emergency management software system, Dynamis provides its domestic and international customers with an integrated solution for all hazards, including cloud-based software, installation services, initial and recurring training, incremental upgrades and expansion, and other custom development services based on evolving customer needs, collaboration and information sharing requirements, and technology upgrades.

3. Customization Philosophy

The COBRA solution described in the response has the capabilities to meet all of the defined requirements. Still, it is Dynamis' experience that enterprise level organizations often need to enable unique integrations with other systems or custom modules previously crafted. Dynamis has a mature and highly capable in-house development shop that allows for custom design and integration of cost-effective solutions on the COBRA framework.

Custom solutions developed by Dynamis adhere to a development philosophy that minimizes client risk while maximizing value and the delivery of a high-quality product. Dynamis utilizes Agile Scrum processes, enabling us to work closely with our customers to rapidly produce new features that match our users' needs. We embed Subject Matter Experts in our development teams as Product Owners and Stakeholders to establish a close working relationship between domain experts and engineering teams. We release seamless updates every six weeks, ensuring users have the most reliable and current solution possible. By utilizing a User-Centered design coupled with a Dynamis design framework, we can produce new modules that have a comfortable experience that minimize customer training requirements and time to adoption.

Our process involves working in two-week Sprint iterations. Each Sprint iteration begins with a Sprint Planning meeting. During this meeting, the team estimates the highest priority items from the Product Backlog, a comprehensive list of requirements for the project. During Sprint planning, a subset of requirements prioritized by the Product Owner are moved from the Product Backlog into the Sprint Backlog. This Sprint Backlog contains the requirements that the team will work during the two-week cycle. During the Sprint, a daily Scrum meeting will be held to announce progress and address any issues discovered by the team. At the end of the Sprint, a Sprint Review meeting is held to demonstrate work completed during the Sprint. This continuous communication mechanism throughout the process ensures project success.

4. Additional COBRA Capabilities

COBRA boasts a robust, integrated mapping engine that exceeds WVEMD's mapping requirements found in the RFQ. Of note, COBRA provides an interactive drawing feature where NIMS symbols, shapes and free-hand drawing tools can be used to annotate the map with relevant

information. This feature is instantly synchronized across the network to all users and is also exportable as a graphic image and transmittable to personnel lacking access to the network via email, SMS, or other means.

In addition to map annotations, COBRA has the capability to define zones or regions that render on the integrated map. Zones can be various areas of an individual facility, various facilities, or geographic shapes, city regions/sectors, or custom-defined by WVEMD. Zone or region conditions can be tracked and displayed within the mapping tool and are 100% tailorable. These zone shapes will also automatically update color in real time based on that location's status.

COBRA also has an extensive emergency planning capability that provides a step-by-step form-based wizard to assist users in creating plans. The planning tool allows a general plan to be created for each location or facility that acts as the primary plan. Then secondary, more specific plans can be created for specific scenarios involving those locations or facilities.

The planning tool includes an integrated workflow diagramming tool as well as integrated mapping for plotting locations, ingress, and egress routes, positioning of resources, etc. The plans are then made available to users based on role-based security. Once the plans are created, they can be used as an incident template for a structured response. All resources, documents, map symbols, and other items designated in the plan will then be preloaded into the COBRA incident to help speed response.

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5. Program Management and Implementation

Dynamis adheres to project management industry standards and best practices, including the Project Management Institute's Project Management Body of Knowledge (PMBOK) to ensure disciplined, risk-managed approach to project delivery. Our team has extensive experience delivering EOC software of similar scope and scale to WVEMD requirements.

This proven project management experience ensures our team will meet all software, installation, and deliverables on time. Our Customer Advocate, Dan Zent, with over 20 years' experience in large-scale emergency response, will work closely with WVEMD and Dynamis' configuration engineering team to ensure the COBRA solution is configured properly and meets all of West Virginia's unique needs.

6. Maintenance and Support

Dynamis fully supports COBRA customers with software maintenance and technical support, including helpdesk service. Standard technical support, assistance, or technical advice, located in Fairfax, VA, is provided directly to the customer using email, telephone, and video teleconferencing systems during normal business hours (Monday through Friday, 8am-5pm EST, excluding holidays).

Emergency technical support is provided 24/7/365 using our Dynamis' Customer Care program. Dynamis provides a tracking system to monitor help tickets to ensure adequate response of support

requests and the follow-up of action items, as required. In the rare occasion a critical bug is discovered in the application, Dynamis patches and releases fixes usually within one-day. The average cycle time for non-critical bug reporting to fix is 33 days.

As mentioned in the Project Management and Implementation section, Dynamis will provide initial configuration engineering services to ensure WVEMD's COBRA instance is tailored to its unique requirements so that all system modules and features work appropriately in any incident. This configuration is included in the year one licensing price.

Dynamis Configuration Engineers will work closely with West Virginia EMD personnel to ensure optimal system settings. This includes activities such as setting up unique West Virginia EMD incident types and categories, adding personnel as system users, creating COBRA positions for users, setting up dashboards, briefing board templates, organization-specific checklists, and uploading custom map layers. Unlike other providers, our configuration engineering support doesn't end with our initial engagement with West Virginia EMD – these services remain available *throughout the life of the contract* to ensure COBRA is configured to meet the State's evolving Emergency Management needs.

7. Training and Education

COBRA is an existing, mature emergency management software solution that has been delivered to clients around the world. As such, we have extensive training experience and a proven training methodology for new users and system administrators to teach them to effectively use the system.

Dynamis' COBRA training package for West Virginia – which is included in our cost proposal -- consists of four different types of training. System Admins, GIS operators, and train-the-trainers will attend a three-day course. State Agency employees will attend a two-day advanced training course and it is recommended they attend either the Local Responders or NGO/Federals course as well. Dynamis will provide two separate two-day courses for local responders and there will be a one-day overview course available targeted at NGOs and Federal responders.

Training is structured through the use and distribution of training materials, segmented by software module, and with training objectives to be met for each module. Each module includes at least one (typically two) practical exercise(s) (answers included) to reinforce the module.

We have also worked with several enterprise customers to develop training programs that fit their needs and provide classroom, virtual, and train the trainer options. In addition, we have extensive experience in curriculum design, allowing us to create customized training based on client needs and expectations and using multiple mediums. These include electronic user guides and formal instructor-led training programs.

COBRA also provides an electronic, searchable User Guide, hosted in a collaboration based on-line forum. This COBRA Collaboration Community (through Zen Desk) hosts detailed On-Line help, User, Administration, and Quick Start Guides and examples. The training materials are hosted in COBRA (presentations) in the Document Library for the onsite training session to allow for future reference by system users.

8. References

Dynamis is proud to provide the following project references for West Virginia's review. We have selected the following customers as most representative of our past performance and capability to

meet the State's emergency management solution requirements. We look forward to West Virginia reaching out to the points-of-contact listed below for further information or questions.

In addition to the references provided below Dynamis would like to highlight that several countries, including the Kingdom of Belgium, trust COBRA for their *nationwide* emergency management solution. In operation since 2017, their implementation of COBRA is used by local governments, provincial authorities, and ministerial level operators. With over 4,000 daily users, the system handles dozens of incidents and events daily, providing Shared Situational Awareness and a collaborative response.

New Jersey Joint Operations

Project Description: Cloud-based EOC software system deployed to support New Jersey National Guard Joint Operations Center. Deployment leveraged capabilities to support COVID-19 operations within National Guard responsibilities.

Project start and end dates: March 2020 – October 2023

Reference name, telephone & email: Technical Sergeant Seth Schoenfeld, USAF, (908) 884-9574, seth.schoenfeld@us.af.mil

EMIS Modules Used: Incident Reports, Incident Notification, User Based Permissions, Reports Management, Geospatial Component, Logistics Support, Situational Awareness, Communication, Technical Requirements, Software Administration

Tennessee Air National Guard Wings

Project Description: Cloud-based EOC software system for the Tennessee ANG emergency management mission. Fully deployed at three organizations in Tennessee supporting National Guard response across the state area of responsibility. Includes installation, operations and maintenance, custom development, and system training.

Project start and end dates: October 2012 - October 2023

Reference name, telephone & email: Senior Master Sergeant Steven Breeden, USAF, (865) 336-3219, steven.breeden@us.af.mil

EMIS Modules Used: Incident Reports, Incident Notification, User Based Permissions, Reports Management, Geospatial Component, Training, Document Management, Logistics Support, Forms and Templates, Situational Awareness, Communication, Software Administration, Technical Requirements

New Mexico

Project Description: Cloud-based EOC software system utilized by cross functional state response team consisting of New Mexico ANG, National Guard Joint Operations Center, and New Mexico Emergency Management Agency personnel to support states support and response to COVID-19. Used to track all facets of statewide response to from initial testing activities to subsequent vaccine distribution.,

Project start and end dates: March 2020 – October 2023

Reference name, telephone & email: Technical Sergeant Sharon Westerhold, USAF, (505)853-1303, sharon.westerhold@us.af.mil

EMIS Modules Used: Incident Reports, Incident Notification, User Based Permissions, Reports Management, Geospatial Component, Training, Document Management, Logistics Support, Forms and Templates, Situational Awareness, Community Lifeline, Communication, Software Administration, Technical Requirements

Air National Guard

Project Description: Cloud-based EOC software system for the ANG emergency management enterprise. Deployed at 90 organizations across all 50 states, averaging 300 users per month. Includes installation, operations and maintenance, custom development, and system training.

Project start and end dates: October 2012 - October 2023

Reference name, telephone & email: Chief Master Sergeant Noah Flick, USAF, 240-612-8171, noah.flick@us.af.mil

EMIS Modules Used: Incident Reports, Incident Notification, Contact lists and Directory, User Based Permissions, Interoperability, Reports Management, Geospatial Component, Training, Document Management, Logistics Support, Financial and Administrative Support, Forms and Templates, Situational Awareness, Community Lifeline, Communication, Software Administration, Technical Requirements

Buckley Space Force Garrison

Cloud-based EOC software system deployed to approximately 100 users/emergency management personnel at the Buckley Space Force Base installation. Includes installation, operations and maintenance, custom development, and system training.

Project start and end dates: March 2020 – March 2023

Reference name, telephone & email: Eric A. Mueller, Department of the Air Force Civilian, 720-847-6718, Eric.mueller.4@spaceforce.mil

EMIS Modules Used: Incident Reports, Incident Notification, User Based Permissions, Reports Management, Geospatial Component, Training, Document Management, Logistics Support, Forms and Templates, Situational Awareness, Communication, Software Administration, Technical Requirements

9. Description of Cost Proposal

Included in this response for RFQ is Software as a Service (SaaS) pricing for a complete turnkey COBRA emergency management solution for West Virginia. This pricing includes the total licensing costs for 500 users hosted in an Azure GovCloud environment complete with training, project management, configuration engineering support, and 24/7 help support. The year one costs cover the extensive training needs identified by the state as well as the expected configuration engineering support experience has shown will be required when standing up a large customer such as the West Virginia EMD. The yearly licensing costs in the follow-on years drop to reflect the decreased training needs, but still include at least one training refresher course per year.

10. COBRA Solution: Ready to Provide West Virginia's Emergency Management Information System

Effective coordination and integration require efficient and reliable communications and ability to share situational awareness. Through the release of the RFQ and the extensive requirements it outlines, it is clear that West Virginia recognizes the common challenge to attain sufficient representation from all stakeholders, such as cities, towns and supporting agencies in the EOC

during a crisis. Dynamis' COBRA system can facilitate operations both inside the local EOC and across the state response centers, while enhancing and maximizing coordination with stakeholders that cannot be present. COBRA will support WVEMD's mission to protect communities by facilitating synchronization and coordination of activities required to build, sustain, mitigate, and prepare before a disaster happens. During an emergency activation, COBRA will fully enable WVEMD to execute highly effective coordination and integration of activities to protect their citizens.

COBRA is time-tested; it has been used in the field by emergency responders and operators for 22 years. That experience comes with an intimate understanding of the challenges operators, decision makers, and leadership face in an emergency. We employ that knowledge in the tools we build, designing solutions that assist users through all five phases of preparedness spectrum. Dynamis has analyzed West Virginia's requirements for the EMIS system and will meet those requirements on day one.

11. Key COBRA Features Aligned to WV EMIS' Requirements

The COBRA Ecosystem features over eighty modules across fifteen functional areas designed to enhance responders' and operators' ability to function in all five phases of emergency response at the tactical, operational, and strategic levels. COBRA is deployed with the customer in mind, tailoring the system via configuration to meet the organization's needs without requiring extensive coding changes or the purchase of costly additional modules.

Dynamis will deploy its COBRA solution to West Virginia within the first week of the contract signing, enabling the state to quickly begin training, configuring, and adopting the software. During the next four months, Dynamis will work closely with WVEMD to ensure the solution is properly configured to meet your needs by the go-live date. The section of the proposal is divided into seventeen high-level areas as defined in section 4.2.1 of the Request for Quotation. Each area has the explicit requirements identified and a concrete, ready to use COBRA solution to meet those requirements. Dynamis is confident that COBRA will fulfill the identified and future needs that West Virginia demands of its EMIS.

11.1 Incident Reports

COBRA provides a robust platform to create develop a comprehensive emergency management common operational picture available across all levels of response. The system is available on any device from any location providing nearly instant access to critical information for decision makers. Incident data is fully tailorable, customizable, and exportable. COBRA's database creates entries of all data ensuring the development comprehensive reports.

| WV EMIS Requirement | COBRA Capability | Complies |
|--|--|----------|
| The EMIS shall enable authorized users to create, update, and view incidents from browsers, and mobile applications. | COBRA allows a WV Administrator to create users who can then create, update, view, and edit existing incident information from browsers and mobile applications. | ✓ |
| The EMIS shall geolocate the incident based on the incident location data and update the Common Operating Picture (COP). | An Incident in COBRA can be geolocated on the Integrated Map by entering location data. Options include entering Street/State/Zip code information or Latitude/Longitude formats. Users can also use a simple point-and-click mini-map interface to geotag the incident location, which will be visible on the system's Integrated Map. | ✓ |
| The EMIS shall receive, record, and log incident situation reports submitted by authorized users. These reports may contain but not limited to the following personal identifiable information (PII): <ul style="list-style-type: none"> • First Name • Last Name • Phone Number • Address | A user interacting with COBRA's Multi Logbook tool allows users to capture and share incident information for situation reports. The tool provides a hierarchical format that allows logbook entries to be related to each other. This is particularly useful for questions and answers. The tool also allows admins to create logbook entry types, that provide categorization and quick visual cues for entries. Examples of frequently used types are questions, answers, and facts. Logbook entries record the user's name and their organization for traceability and no medical records or an individual's health information is tracked. | ✓ |

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| <p>The EMIS solution will not store medical records or other data related to a person’s health conditions.</p> | | |
| <p>The EMIS shall provide a component to create, collect, and notify data related to different type of incidents that are reported through the Watch Center. These are the reports include but not limited to: Arson Investigations, Tip Rewards, Mine Incidents, Workplace Safety Tips, Safe Schools, Industrial Incidents, State Interoperable Radio Network (SIRN) operators’ reports, and Infrastructure Protection Incident Notification (IPIN). The system shall allow the user to attach videos, photos, documents, and call recordings.</p> | <p>COBRA provides administrators with the capability to configure the system with custom incident types, such as Actual, Exercise, and Pre-planned. For WV, the EMIS could be configured to include organizationally defined incident types as described in the RFQ, like Arson Investigations, Mine Incidents, Industrial Incidents, etc.</p> <p>COBRA has a document library that allows for storage of files, data, and documents. The Attachment tool that allows for photos, video, audio recordings, blueprints, organizational charts, MSDS docs and more to be attached to each incident.</p> |  |
| <p>The EMIS shall enable the system users to change the status report and the system sends the report automatically as an email notification.</p> | <p>COBRA includes a system-wide notification tool allowing admins to post system messages to the COBRA system. The Alert notifies recipients via a visual and audible notification in the COBRA system, followed up with an email, SMS text, and voice phone call notifying them of the Alert. The Alert message can be tailored to include critical status report information in the body of email message.</p> |  |
| <p>The EMIS shall select from a dataset the right contacts who receive the email notification.</p> | <p>COBRA provides a robust capability for managing contact information and makes them readily available during an incident response. A COBRA Organization Administrator can ensure regular users of their organization receive email notifications on incident creation.</p> <p>COBRA also has the capability to share Incidents with users, which includes the ability to send notifications to share organizations.</p> |  |
| <p>The EMIS shall offer a mobile application and system interface to update the contacts notification dataset.</p> | <p>With the Contacts interface, an Organization Administrator can update contact information on a mobile device to ensure notifications are sent to the latest contacts dataset.</p> |  |

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| Depending on the type of incident, the EMIS shall pull data to auto-populate reports. | COBRA has the ability to auto-populate data in an Organization's ICS forms or custom forms with pre-existing data native to the system. This eases a COBRA user's data entry burden. | ✓ |
| The EMIS shall offer a mobile application and system interface to update those datasets required to auto populate a report. | The COBRA Mobile App includes the data pre-population functionality utilized in the Forms and IAP Builder tools. This functionality auto-populates data in reports with data that already exists in the system, all through a responsive mobile interface. | ✓ |
| EMIS shall offer a system interface to update select lists, such as the agencies list and resources list. The system shall control names' duplication. | A COBRA System Administrator can view add, edit, and delete organizations in the system. Agencies can be recognized as Organizations in COBRA to allow a System Administrator to update the list of Agencies and subordinate entities, called Sub-Organizations. The Organizations tool in COBRA includes data validation to check for duplicative names. The COBRA Logistics tool lets Organization Administrators create a list of major resources available to the organization for incident response. | ✓ |
| The EMIS shall offer the option to send those reports as part of an email's content (email body). | COBRA includes a system-wide notification tool allowing admins to post system messages to the COBRA system. The Alert notifies recipients via a visual and audible notification in the COBRA system, followed up with an email, SMS text, and voice phone call notifying them of the Alert. The Alert message can be tailored to include report information in the body of email message. | ✓ |
| The EMIS shall offer the option to call the phone numbers included in an incident report. It shall be possible from a mobile application and a system desktop/laptop/tablet interface. It is understood that the mobile device (phone or tablet) has a data plan. | COBRA includes a system-wide notification tool allowing admins to post system messages to the COBRA system. The Alert notifies recipients via a visual and audible notification in the COBRA system, followed up with an email, SMS text, and voice phone call notifying them of the Alert. | ✓ |
| The EMIS shall offer the option to print incident reports. The printed reports shall include images, and the attachments' list. | Users can print ICS or custom forms, IAPs, documents and images uploaded via the Attachments tool. Detail incident timeline reports are readily available for printing. | ✓ |
| The EMIS shall geocode and present as a layer incidents per type of incident, and to include those layers in the COP. Those layers must be | As almost all COBRA data is reported to the system with location information, virtually any facility, report, resource, image, or video can be displayed on the integrated map. Using custom data layers, its automatic geo-location analysis features can identify organizations with shared response | ✓ |

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| <p>updated based on a data/time. It is understood the system is not replacing the whole dataset. It is updating based on new reports.</p> | <p>coverage and optimize resource and asset allocation for any given circumstance while simultaneously updating the map data for all users across the entire network.</p> | |
| <p>The EMIS shall offer a dashboard per report type to monitor the notification status, access contact information per report type, and link to the datasets that are required to auto populate a specific type of report.</p> | <p>COBRA dashboard is tailorable based upon each user’s role or position and users can change that view as operational periods or situation status changes in real time. The system allows administrators to customize toolsets that are available to users, positions, or organization.</p> <p>The tools in COBRA can be centrally located on one page to bring specific needed information into one location. This concept puts only the tools needed by functional area or agency at the forefront of the crisis management system.</p> |  |
| <p>The EMIS shall offer the option to export data as a .csv or .xlsx format.</p> | <p>COBRA users can download files, as well as data from specific tools using CSV, Excel, or PDF capabilities allowing for specific reporting on different tools.</p> |  |

11.2. Incident Notification

COBRA’s Incident Notifications features provide system wide notification of creation of new incidents. Incident can be quickly shared outside the organization to mission partners.

| WV EMIS Requirement | COBRA Capability | Complies |
|---|---|----------|
| The EMIS shall support automatic notification and support organizational as well as external email addresses | When an incident is created the operator has the option of notifying COBRA users within the organization of the creation of the incident. For external users, a COBRA incident can be shared, providing access to only the incident and nothing else. When the incident is shared, those external email addresses are notified. | ✓ |
| The EMIS must enable authorized users to assign or remove members of the contact lists to associated message groups to facilitate rapid dissemination of messages to specific sets of recipients. | As part of the new messaging module currently under development, authorized users are provided the ability to manage groups and dissemination lists, enabling the rapid notification of information to targeted sets of recipients. | ✓ |

11.3. Contact Lists and Directory

COBRA’s robust database provides a centralized location for users to ensure appropriate contact information is readily available across the platform for any user.

| WV EMIS Requirement | COBRA Capability | Complies |
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| The EMIS shall enable users to create contact lists for emergency management staff and external contacts. | Users can employ Command Boards to manage contact lists for emergency management staff and external contacts. The messaging module will enable the creation of multiple lists incorporating internal users and external contacts for notification. | ✓ |
| The EMIS shall use these contact lists to send reports, email, and notifications. | The new messaging module enables operators to use contact lists to send emails, notifications, and attachments (including reports). | ✓ |
| The EMIS shall eliminate the duplication of effort by enabling users to update contact data one time and update the instances where that contact is used. | COBRA provides a phone book module which is a centralized contact repository enabling administrators to keep one instance of contact data that can be used throughout the system. | ✓ |

11.4. User-based Permissions

COBRA user levels are fully administrated at the organizational level. COBRA provides customizable structure to support Incident Command System, Emergency Support Function, or locally defined processes. All incident data is logged into the system and associated to a specific user, position, and date/time modified.

| WV EMIS Requirement | COBRA Capability | Complies |
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| <p>This system shall be capable of assigning user-based permissions to data. These permissions will be based on security levels determined by system administrator(s). The system will be capable of determining access to data based on user permission level.</p> | <p>The COBRA System Administrator role provides capability to provide specific users full access to all features of COBRA while limiting access for others. Users must have the necessary permission and rights granted by the COBRA System Administrator to access all data in the system.</p> |  |
| <p>Functional structure. The EMIS shall enable approved users to designate groups of users, by name or by functional position.</p> | <p>COBRA’s structure allows full flexibility to function as an On-Scene and Operations Center support tool. Both Incident Command Structure (ICS) and Emergency Support Function (ESF) protocols and criteria are natively supported and are supported during an incident simultaneously.</p> <p>Each position within the incident has dedicated event and incident logs associated with their assigned position and are associated with the user across the entire system. Each entry in COBRA is tied to positional and associated user data.</p> |  |
| <p>Incident management. The EMIS shall enable users to manage daily activities and to monitor and track all aspects of an incident or event.</p> | <p>The COBRA Multi-Logbook tool allows users to capture and share notes and information during an incident. The tool provides a hierarchical format that allows logbook entries to be related to each other. This is particularly useful for questions and answers. The tool also allows admins to create logbook entry types, that provide categorization and quick visual cues for entries. Examples of frequently used types are questions, answers, and facts.</p> <p>All information entered in the COBRA system is time/date stamped, tracking the user that entered the data. Any time data is subsequently edited or modified will cause the previous entry to be archived ensuring a full, historical log of all information in COBRA is preserved. Data entered in COBRA is not deleted, only archived.</p> <p>COBRA provides a full and complete audit trail of users who have accessed the system and archival of their actions. COBRA Incident Timeline tool consolidates a continuous</p> |  |

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| | <p>report of all time/date/user stamped actions within the application. Log entries can have any type of attachment associated with them and the attachments can be optionally geolocated.</p> | |
| <p>Duty and Call Logs. The EMIS shall enable users to access Duty Logs and Call logs.</p> | <p>The COBRA Multi-Logbook tool allows users to capture and share notes and information during an incident. The tool provides a hierarchical format that allows logbook entries to be related to each other. This is particularly useful for questions and answers.</p> <p>The tool also allows admins to create logbook entry types, that provide categorization and quick visual cues for entries. Examples of frequently used types are questions, answers, and facts.</p> |  |
| <p>User management. The EMIS shall enable the system administrator(s) to define roles, assign privileges to users, create, maintain and/or delete users.</p> | <p>COBRA Organization Administrators can use the User List page for all aspects of user management, including creating new users, editing user data, removing users, defining roles, and assigning privileges/access rights.</p> |  |

11.5. Interoperability

COBRA is designed from the ground up with interoperability in mind. Dynamis recognizes the importance of sharing information across systems in an emergency response capacity. The application is built with a RESTful architecture and open APIs which facilitates interoperability and minimizes custom development time.

The COBRA ecosystem is modular by design, allowing new functionality to be quickly added without time-consuming system overhauls. Dynamis has a rich history of developing integrations with COBRA and has successfully created interoperability with over sixty different systems including sensor suites, plume models, mass alerting systems, and other emergency management solutions.

| WV EMIS Requirement | COBRA Capability | Complies |
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| Vendor shall provide a solution that could interface with common EMIS web-based solutions. | <p>Dynamis has years of experience connecting to databases outside of the COBRA environment. COBRA has a robust Application Programming Interface (API) solution managed by Swagger that allows information posting and sharing between different systems. In addition, the COBRA team has experienced system administrators who can understand the intricacies and nuances built into legacy systems and can build custom data extraction programs that pull that information out of a legacy system and into COBRA.</p> <p>COBRA supports Emergency Management Data Exchange Standards (EDXL), Common Alerting Protocol (CAP), National Information Exchange Management (NIEM), and Xchange core industry standards and is able to connect to other systems that support these standards. COBRA has interfaced with several external EMIS web-based solutions and continues to adopt and contribute to standards that facilitate the exchange of data across the Emergency Management spectrum</p> |  |
| The EMIS must be fully interoperable with Emergency Management Assistance Compact (EMAC) Operations System (EOS) for all functions. | IGA amendment spreadsheets and EMAC REQ-A forms can be pre-loaded in COBRA and initiated during an incident response. Those documents can be populated and tracked in the associated incident and then emailed to EOS. Mission ready packages can be defined in the Mission Manager module and the information copied to the EMAC forms for reimbursement. As a future enhancement not included in this proposal would be the automation of the submission of the forms, mission packages, and spreadsheets directly to the EOS. |  |

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| <p>The EMIS can be integrated and interoperable with the resources management software implemented at the local level, the WVEMD resources management, and EMAC platform, and the Geospatial platform implemented at WVEMD. Currently, the WVEMD uses AssetCloud for managing assets and Inventory Cloud for WVEMD's warehouse items. The Geospatial platform implemented at WVEMD is based on ArcGIS platform.</p> | <p>Web Map Service (WMS) and Web Feature Service (WFS) allows for live web map feeds to display directly in the COBRA map. WMS and WFS layers display information such as resource locations and other geospatial information. For non-geospatial information, COBRA operators can use the Briefing Board external content widget to interact with external systems. For a more integrated experience Dynamis recommends the enhancement of the resource and mission tracking modules which would interface with the AssetCloud and Inventory Cloud systems and provide direct and tightly coupled interoperability. The enhancement to this module is not included in the submitted licensing price.</p> |  |
| <p>The EMIS must have the capability to interoperate with the State's financial administration system to report material transactions including order and receipt of ordered material. Currently, the WVEMD uses OASIS.</p> | <p>The Briefing Board external content widget enables users to consume and display information from other systems and provides complete interaction. For a more integrated experience Dynamis recommends the development of a financial administration module which would interface with the OASIS system and provide direct interoperability. This financial module is not included in the submitted licensing price.</p> |  |

11.6. Reports Management

COBRA robust platform allows Incident data to be fully tailorable, customizable, and exportable. All data can be fully tailored to create user specific dashboards. Customized workspace and dashboard tools assist in senior leadership information briefings. External data can be imported to ensure shared situational awareness at all levels. Complete export of incident data packages all data entries, incident attachment and geolocated map data provide ability to create highly detailed reporting.

| WV EMIS Requirement | COBRA Capability | Complies |
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| <p>This system shall supply situational 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, critical infrastructure; damage assessment; Community Lifelines; and a section for documents, images, user directory, organization charts, etc. the situational reports shall be saved as digital format, and printable from the EMIS interface.</p> | <p>Incident Timeline reporting for after action reporting and to expedite recovery reimbursement, facilitates after action analysis, consolidates a continuous report of all time/date/user stamped actions within the application. COBRA Export feature provides ability to create complete incident report from three exportable files to include all incident data, attachments, and Map annotations.</p> |  |
| <p>The EMIS shall enable users to access situation reports and visual situation displays, and provide the means for visually presenting situational information in a dashboard and COP.</p> | <p>COBRA’s Dashboard tool allows users to build custom dashboards that pull incident data based on user-defined preferences, displaying only the most relevant data, and reducing the “noise” of information overload.</p> |  |
| <p>The EMIS must enable users to access Road Closure Notifications and reports from the West Virginia Division of Highways and display the information in the EMIS solution and the COP.</p> | <p>Fully integrated mapping platform based on Open-Source technologies with robust geospatial interface that includes annotations, sketching, measuring, NIMS symbols, evacuation zone and perimeter drawing capabilities. Supports Google, Open Street Maps, ESRI or your organization’s base map. Consumes WMS, WFS, and ESRI Features Service map layers. Can incorporate and display external GIS data layers (KML, GeoJSON, and ESRI Shapefiles). Automatic consumption of KML data on map.</p> |  |

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| <p>The EMIS must provide ad hoc user-defined reporting in which dynamic, real-time data reports are created by the user on an as-needed basis.</p> | <p>Incident Timeline allow for ad-hoc reporting real time data of all time/date/user stamped actions within the application. COBRA Export feature provides ability to create complete incident report from three exportable files to include all incident data, attachments, and Map annotations for report generation.</p> |  |
| <p>The EMIS must provide data views that users can select based on parameter such as date, even type, counties. The data views should sort those views and enable the user to sort by parameter too.</p> | <p>Incident Timeline provides ability to generate custom views based on user defined criteria using tailorable search/filter criteria. Data provided can be manipulated by time/date within the application. COBRA Export feature provides ability to create complete incident report from three exportable files to include all incident data, attachments, and Map annotations for report generation.</p> |  |
| <p>The EMIS must provide detailed user access and activity reports.</p> | <p>Incident Timeline allow for detailed reporting of all time/date/user stamped actions within the application.</p> |  |

11.7. Geospatial Component

COBRA provides a fully integrated map without the need for additional modules or licenses. Robust map annotation tools are available for all users, reducing the workload for GIS personnel. External data is easily imported in various formats added to the incident map. All mapping layers are available immediately and updated in real time. Critical response and incident information is quickly geolocated creating a detailed site picture.

| WV EMIS Requirement | COBRA Capability | Complies |
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| <p>The EMIS shall be capable of generating dynamic maps and reports that represent a COP. The system shall be designed and equipped to upload of the GIS information for spatial display in the form of shapefiles, layer files, web map services (WMS), and .kml or .kmz formats.</p> | <p>COBRA supports upload of multiple GIS data and map sources (WFS/WMS/REST, organizational custom base map; external GIS data layers such as KML/KMZ, GeoJSON, ESRI Shapefiles, ArcGIS Online) .</p> |  |
| <p>The EMIS's geographic component shall be capable of displaying a dynamic map identifying incidents, events, effects related to those events: and, the responding agencies involved, including agency contact information.</p> | <p>The integrated mapping module provides a real-time display of the geospatial information relevant to that user, with sophisticated filtering tools to ensure the display is not saturated with information the user does not need. As almost all data is reported to the system with location information, virtually any facility, report, resource, image, or video can be displayed on the integrated map. Using custom data layers, its automatic geo-location analysis features can identify organizations with shared response coverage and optimize resource and asset allocation for any given circumstance while simultaneously updating the map data for all users across the entire network.</p> |  |
| <p>The EMIS's geographic applications shall allow users to add new layers to the dynamic map.</p> | <p>COBRA supports multiple GIS data and base map sources such as Web Map Services (WMS), and Web Feature Service (WFS), and ESRI Feature Services, or your organization's custom base map. It can incorporate and display external GIS data layers such as KML, GeoJSON, and ESRI Shapefiles allowing responders to see local GIS data in the incident.</p> |  |
| <p>The EMIS's geographic application shall permit users to use the geographic analysis functions.</p> | <p>Background Map Layer Support tools allow administrators to import ESRI SHP files, KML, and GeoJSON map files, create custom symbology (coloring, thickness, opacity, icons), map categorizing, and tagging data.</p> <p>Allows users to quickly load background map layers from the COBRA library. Includes a wizard for searching data as well as filtering by tags, categories, and type.</p> <p>Allows users to geo-process a map layer upon import to select a sub-set of the data for import within a certain</p> |  |

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| | <p>distance of the incident or a custom location set by the user.</p> <p>Allows users to import facilities in their COBRA critical infrastructure database.</p> <p>Allows users to preview the new map layer before adding it to the map. Support for custom base maps from 3rd party systems.</p> | |
| The EMIS shall enable the user to edit and update layers, query multiple datasets, and export the query in GIS formats, tabular or delimited formats. | All mapping data is available as KML files for sharing with other GIS based systems and all image files including TIFF and PNG are available for download from the Attachments tool. | ✓ |
| The EMIS's geographic component must have a geographic application capable of supporting the resource request management. | COBRA Request Manager module generates four request types that are sent to appropriate assigned agency, indicate overall priority, track status (approval/denial, transit/delivery), and are geolocated on the incident map. | ✓ |
| This geographic application shall contain dynamic maps for displaying information such as the status of resource request and 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 add, remove, and edit layers. | Using custom data layers, its automatic geo-location analysis features can identify organizations with shared response coverage and optimize resource and asset allocation for any given circumstance while simultaneously updating the map data for all users across the entire network. All map data can be manipulated for addition, removal and editing at the user level. | ✓ |
| The EMIS shall permit dynamic search by address, toponyms, coordinates, and resource type. The application shall work on computer, tablet, and mobile devices. | Currently, COBRA resource requests can be geolocated on the incident map with user input. By the go-live date, COBRA have the ability to dynamically search all resource requests within the incident - this search will be incorporated into both browser and mobile application versions of the system. | ✓ |
| The EMIS's geographic component must include and integrate mobile applications to collect, present and disseminate data and information. | COBRA is developed with a Mobile-First UX design philosophy meaning that the application works on any screen size. Most COBRA modules work equally well on a mobile device or desktop. Dynamis also offers mobile native applications for iOS, Android, and Windows featuring offline support and a subset of the full COBRA tool suite, including the Integrated Map feature. | ✓ |

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| <p>The EMIS must enable users to track incident locations and information and develop trend data over time during and incident.</p> | <p>COBRA allows users to edit and update incident location information. All information entered in the COBRA system is time/date stamped, tracking the user that entered the data. Any time data is subsequently edited or modified will cause the previous entry to be archived ensuring a full, historical log of all information in COBRA is preserved. Data entered in COBRA is not deleted, only archived.</p> <p>COBRA provides a full and complete audit trail of users who have accessed the system and archival of their actions. COBRA Incident Timeline tool consolidates a continuous report of all time/date/user stamped actions within the application. Log entries can have any type of attachment associated with them and the attachments can be optionally geolocated.</p> |  |
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11.8. Training

COBRA is an intuitive emergency management software solution used around the world for over 20 years. Our experience and extensive curriculum design allows us to create customized training based on WV EMA needs and expectations. Training is available in multiple platforms to include typical classroom-based instruction and virtual conferencing platforms. All documentation and training product are available via a collaboration community.

| WV EMIS Requirement | COBRA Capability | Complies |
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| <p>The vendor shall provide all training opportunities leverage against the State's development and training platform of the EMIS Solution. Vendor shall provide training for:</p> <ol style="list-style-type: none"> 1. Users. 2. Trainers. 3. System Administrators. 4. Technical Staff, to include Information Technology, Programming, and GIS staff. | <p>Dynamis deploys multiple training capabilities for each of its COBRA users to include classroom-based training and web-based training using multiple web conferencing platforms including Microsoft Teams, Zoom™, GoToMeeting™ and Adobe Connect®.</p> <p>Dynamis’ COBRA training package for WV EMA consists of a three-day Train-the-Trainer and Administrator training module. Dynamis then provides an annual training course upon initial implementation of the system, which includes full system training for users and administrators. Also included in the package is an annual refresher training course for the next five years.</p> |  |
| <p>The Vendor shall make training available on-site for all user levels. The vendor shall identify the following:</p> <ol style="list-style-type: none"> 1. Course names (Serialized and in Sequential organization order) 2. Delivery Methods 3. Length of each course 4. Schedule for standard yearly training course. 5. Type of course material that will be provided (course handouts, presentations, and other training materials) | <p>COBRA is an existing, mature emergency management software solution that has been delivered to clients around the world. As such, we have extensive training experience and a proven training methodology for new users and system administrators to teach them to effectively use the system.</p> <p>Dynamis uses a “train the trainer” approach, where key stakeholders from WV EMA will be identified in the pre-deployment phase to receive the initial round of training, who can then facilitate training of additional personnel in their organizations. Training is structured through the use and distribution of training materials, segmented by software module, and with training objectives to be met for each module. Each module includes at least one (typically two) practical exercise(s) (answers included) to reinforce the module.</p> |  |

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| <p>6. Methods of ongoing, continuing, and on demand training.</p> | | |
| <p>The Vendor shall provide initial training on-site for the following users. This training must be accompanied by user manuals.</p> <ol style="list-style-type: none"> 1. System Administrators to include user access management, a minimum of ten (10) users 2. State Agency representatives, a minimum of fifty (50) users. 3. Local Jurisdiction representatives, a minimum of two hundred (200) users 4. Non-governmental Organization Representatives, a minimum of one hundred (100) users. 5. Federal Agency Representatives, a minimum of twenty-five (25) users. | <p>We have worked with several enterprise customers to develop training programs that fit their needs and provide classroom, virtual, and train the trainer options. We also have extensive experience in curriculum design, allowing us to create customized training based on client needs and expectations and using multiple mediums. These include electronic user guides and formal instructor-led training programs.</p> <p>COBRA also provides an electronic, searchable User Guide, hosted in a collaboration based on-line forum. This COBRA Collaboration Community (through ZenDesk) hosts detailed On-Line help, User, Administration, and Quick Start Guides and examples. The training materials are hosted in COBRA (presentations) in the Document Library for the onsite training session to allow for future reference by system users.</p> |  |

11.9. Document Management

COBRA offers several tools to meet WV EMIS Document Management needs. The Document Library allows for upload and download of multiple media types (documents, images, videos) in a customizable folder structure within the application. Users can also use the Attachments module to upload important files that can be geo-tagged and displayed on the Integrated Map. COBRA’s EM Plans feature allows users to create and maintain customizable organizational emergency response plans within the system itself for easy reference. Finally, the Spreadsheet module assists users with a flexible mechanism to track numeric data related to the incident response, such as material consumption trends.

| WV EMIS Requirement | COBRA Capability | Complies |
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| The EMIS shall offer a document management component to support the emergency management workflow. | Document Library feature for storing and viewing multiple media types (documents, images, videos) in customizable folder structure. Attachments tool allows upload /retrieval of important documents. Provides complete audit trail of system use with date/time stamps. | ✓ |
| The EMIS shall enable users to access procedures, check lists and organization charts, and other documents. | Organizations can add custom checklists via excel template upload and are visible to all users and dynamically update in system as tasks are completed. | ✓ |
| The EMIS must allow users to import and export information including resource data. | All data within COBRA is fully exportable for use. COBRA and the system provide numerous bulk import capabilities. Data downloadable through XML via API to support reporting, or export to MS Office tools like Excel. | ✓ |
| The EMIS shall enable users to prepare and disseminate situation assessment information and recommendations. | COBRA tools can be turned into customizable widgets, allowing a user to display key data from multiple tools on a Briefing Board page for a strategic look at every facet of crisis response. | ✓ |
| The EMIS shall provide access to electronic West Virginia Emergency Operations Plan, State Emergency Operations Center (SEOC) Standard Operating Guidelines (SOG), Incident Command System (ICS) forms, documents, and templates for approved user to edit, update and subsequently store within the application in the user interface. | Document Library feature for storing and viewing multiple media types (documents, images, videos) in customizable folder structure. Attachments tool allows upload /retrieval of important documents. Provides complete audit trail of system use with date/time stamps. COBRA has an IAP Builder with pre-populated, integrated NIMS ICS Forms and Emergency Management Plan tools to meet this requirement. IAPs are built via drag-and-drop interface – IAPs can be saved, locked, printed, copied, and exported. | ✓ |

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| <p>The system must also provide for customization of displays or reports, based on the users' needs.</p> | <p>The COBRA dashboard is tailorable based upon each user's role or position and users can change that view as operational periods or situation status changes in real time. The system allows administrators to customize toolsets that are available to users, positions, or organization. The tools in COBRA can be centrally located on one page to bring specific needed information into one location. This concept puts only the tools needed by functional area or agency at the forefront of the crisis management system.</p> |  |
| <p>The EMIS must 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.</p> | <p>Spreadsheet tools can be used to generate, edit, and share organization's resource utilization forecast. Logistics Tool allows users to enter and track major equipment inventory deployed for an incident.</p> |  |
| <p>The EMIS must be able to receive, record and log incident intelligence and security reports from identified and verified external agencies.</p> | <p>Attachments tool allows upload /retrieval of important documents. Provides complete audit trail of system use with date/time stamps.</p> |  |
| <p>The EMIS shall be capable of storing and managing documentation to be retained as record.</p> | <p>Attachments tool allows upload /retrieval of important documents. Provides complete audit trail of system use with date/time stamps. Document Library feature for storing and viewing multiple media types (documents, images, videos) in customizable folder structure.</p> |  |
| <p>All data shall remain the property of the state and will not be available for dissemination by the vendor.</p> | <p>Currently COBRA inherits all the security protocols derived from being hosted on Microsoft Azure Government Cloud. COBRA has been deployed in secure, FedRAMP approved government cloud solutions, including Azure and AWS. COBRA is designed to also be deployed in on-premises environments, giving administrators complete control over database and server access. For more than a decade, the COBRA system has handled law enforcement sensitive information and other Controlled Unclassified Information (CUI) data without incident. In addition, the system meets Federal/Department of Defense (DoD) requirements for information assurance.</p> |  |

11.10. Logistics Support

COBRA employs a combination of tools to meet WV EMIS requirements for Logistics Support. The Request Manager tool can create Resource Requests that can be tracked by priority, status, and be geolocated on the Integrated Map. For major equipment being deployed for response, Organization Administrators can use the Logistics tool to enter individual equipment inventory (e.g., Snow Cat) or equipment packages (e.g., “Strike Team”). These equipment or packages can be added to an incident, geo-located and displayed on the Integrated Map. Finally, COBRA’s flexible Spreadsheet Module can be used track resource utilization for consumable equipment and associated costs.

| WV EMIS Requirement | COBRA Capability | Complies |
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| Resource management. The EMIS shall enable users to direct, task, receive, and monitor resource requests. | Robust Request Management Module generates four request types. Request types sent to appropriate assigned agency, indicate overall priority, and track status (approval/denial, transit/delivery), and ability to geolocate on incident map. Resource Requests – COBRA contains a Request Manager tool for resource request tracking. Mission Assignments (MA) directing the completion of a specific request for assistance in response to, an emergency or a major disaster. Requests For Information (RFI) – COBRA’s Request Manager tool also tracks requests for information. | ✓ |
| The EMIS shall enable users to plan and manage the acquisition and distribution of personnel, equipment, and material required to sustain an incident operation. | Logistics Tool allows users to enter and track major equipment inventory deployed for an incident | ✓ |
| The EMIS shall enable users to register, update, and delete resources from the resource management component. | Logistics Tool allows users to enter and track major equipment inventory deployed for an incident | ✓ |
| The EMIS shall offer a resource request option with the capacity to document partially fulfilled requests. | COBRA's included Resource Request tool allows users to create and assign Tasks which can be at local, regional, national, or global level, giving those organizations the ability to view and access to those Tasks and organizations to monitor the progress of Task completion | ✓ |
| The EMIS shall enable users to track the prepositioning of resources and managing supplies in facilities. | Request types sent to appropriate assigned agency, indicate overall priority, and track status (approval/denial, transit/delivery), and ability to geolocate on incident map | ✓ |
| The EMIS shall enable users to task transportation | Logistics Tool allows users to enter and track major equipment inventory deployed for an incident | ✓ |

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| resources to transport and deliver supplies. | | |
| The EMIS shall enable users to monitor and forecast the consumption of supplies. | Spreadsheet tools can be used to generate, edit, and share organization's resource utilization forecast | ✓ |
| The EMIS must allow users to plan, manage, track, and observe costs incurred. | The imbedded Spreadsheet function allows users to develop a comprehensive matrix to execute planning, and manage costs associated with the organization's response in a collaborative environment. The tool provides the ability to import existing products or create incident specific tracking. | ✓ |
| The EMIS shall provide users electronic and printable forms for logging and reporting the ordering, receiving, and issuance of material. | COBRA has the ability to auto-populate data in an Organization's ICS forms or custom forms with pre-existing data native to the system. This eases a COBRA user's data entry burden. | ✓ |
| The EMIS shall receive, log and report to users the status of personnel, equipment, and logistics resources throughout an event. | Incident Timeline reporting for after action reporting and to expedite recovery reimbursement, facilitates after action analysis, consolidates a continuous report of all time/date/user stamped actions within the application. | ✓ |
| The EMIS must enable logistics support users to plan and monitor the routing and movement of supplies from staging areas, distribution points, and other supply facilities. | Request types sent to appropriate assigned agency, indicate overall priority, and track status (approval/denial, transit/delivery), and ability to geolocate on incident map | ✓ |
| The EMIS must enable logistics support users to monitor and manage stocking levels of supplies held in staging areas, distribution points, and other supply facilities. | Mission manager concept provides functionality to establish commodity inventory levels. These supplies can be geo-located to indicate present location. As commodities are tasked for deployment the assets location can be updated and total remaining available inventory accurately reflected | ✓ |
| The EMIS must be capable of allowing accessibility on mobile devices in an application format. Mobile applications shall be able to perform all functions of basic inventory management without the need for data | By the go-live date, the existing Mobile Application will be updated to include COBRA's Logistics tool, which will allow basic inventory management in austere/communications-deprived environments. | ✓ |

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| <p>connectivity due to potential lack of communications in remote sites. Mobile applications shall be able to perform automatic inventory updates when a user enters into an area that has data connectivity available.</p> | | |
| <p>The EMIS shall be capable of supporting hardware such as barcode/QR Code scanners and barcode/QR Code printers. Mobile applications shall be capable of utilizing the mobile device camera as a barcode/QR Code Scanner.</p> | <p>COBRA can use a barcode scanner as input to text fields throughout the system. The mobile application can use the device camera to take photos of barcodes/QR codes and submit them to the incident.</p> |  |

11.11. Finance and Administrative Support

COBRA is designed to facilitate all areas of an emergency response and tracking the financial impact of a disaster is included. The recently completed Mission Manager module allows operators to develop response packages and track the costs associated with them. The embedded spreadsheet tool enables the building of complex worksheets including cost analysis, while the Forms tool provides organizations the ability to upload and interact with HTML based forms. All the information recorded in these three modules is associated with the incident.

| WV EMIS Requirement | COBRA Capability | Complies |
|---|--|----------|
| Financial and administrative support for procurement of material and services. | A combination of using custom forms for procurement in COBRA's Forms module coupled with use of the Mission Manager to request and record material and personnel used in a response will provide EMIS users with financial and administrative support in a response. | ✓ |
| Monitoring and reporting of costs related to an incident. | COBRA provides a spreadsheet tool which allows operators to record, monitor, and update the costs associated with an incident. The mission manager provides additional financial tracking capabilities tied to personnel; equipment deployed in a response capacity. | ✓ |
| Providing cost analysis services. | The spreadsheet tool within COBRA provides a robust collection of accounting formulas and capabilities which would allow an operator to perform cost analysis. It contains many of the functions found in Excel. | ✓ |
| Documenting individual transaction receipts. | Receipts can be attached to an incident and additional metadata can be included with the receipt, enabling an organization to associate all related documentation to the incident and storing it in one location | ✓ |
| <p>The EMIS must enable users to provide administrative support for procurement of materials and services including the ability to:</p> <ol style="list-style-type: none"> 1. Identify local sources for equipment rentals. 2. Identify local sources for material supplies. 3. Record orders and receipts for equipment and supplies. 4. Provide capability for the upload/import of database of existing or acquired inventories. | <p>The Mission Manager module allows for the definition of assets (including initial quantities) and enables operators to deploy assets and track the consumption of those assets. Asset packages can be imported via excel or inputted manually. Inventories and receipts can be uploaded as attachments in the attachments tool. Orders can be recorded using the Multi-log book or the Spreadsheet tool. Administrative support for procurement and identification of local sources of equipment rentals and material supplies can be accomplished by recording the findings in a Briefing Board or Spreadsheet Tool.</p> | ✓ |

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| <p>The EMIS must enable users to provide cost analysis services including the ability to:</p> <ol style="list-style-type: none"> 1. Identify material and personnel that require payment. 2. Enter and record all cost data. 3. Maintain accurate records of incident costs. 4. Support planning activities through preparation of estimates for resource usage. | <p>The embedded Spreadsheet Tool provides managers a centralized location tied to the rest of the incident information where they can record cost data of material and personnel. Using the Mission Manager and Request Manager tools, one can track planning activities and preparation of resource usage, as well as identifying material and personnel utilized including payment information.</p> |  |
| <p>Financial and administrative support for procurement of material and services.</p> | <p>A combination of using custom forms for procurement in COBRA's Forms module coupled with use of the Mission Manager to request and record material and personnel used in a response will provide EMIS users with financial and administrative support in a response.</p> |  |

11.12. Forms and Templates

COBRA's Forms and IAP Builder modules meet all WV EMIS requirements for electronic fillable and printable forms. COBRA comes out-of-the box with customizable forms, including NIMS ICS forms and templates for easy inclusion in the IAP Builder. COBRA has the ability to auto-populate data into custom forms by pulling existing incident data previously entered into the system.

| WV EMIS Requirement | COBRA Capability | Complies |
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| <p>The EMIS shall provide the electronic fillable and printable forms for users to prepare, share, present, electronically sign, and print required documents.</p> | <p>Customizable fillable forms and displays – COBRA comes out-of-the box with a full suite of customizable forms, including all NIMS ICS forms and templates that are easily integrated into an Incident Action Place (IAP) Builder.</p> |  |
| <p>The EMIS shall enable electronic and customizable forms.</p> | <p>By the go-live date, COBRA will be able to auto-populate data into custom fillable PDF Forms. These forms have the ability to pull existing data in COBRA to ease data entry burden.</p> |  |
| <p>The EMIS shall allow users to update, create or import user generated forms. System upgrades must allow for continued use of previously generated forms.</p> | <p>As system updates are developed all existing COBRA data will allow for backwards compatibility protecting existing system data.</p> |  |

11.13. Situational Awareness

COBRA’s Integrated Map and Dashboard modules offer robust situational awareness capabilities for all of WV’s EMIS requirements. The Integrated Map supports multiple GIS data and base map services including WMS, WFS, select ArcGIS Feature Services, or WV’s base map. It can also incorporate and display external GIS data layers such as KML, GeoJSON and ESRI Shape Files. All layers are easily selectable and displayed simultaneously within COBRA’s Integrated Map.

The Dashboard module is a tailorable function users can employ to stream data from various COBRA toolsets to a centralized point for ongoing situational awareness across incident response efforts. The Dashboard can display status updates of requests, significant events, personnel status, zone/region status, damage assessments, chats, and others.

| WV EMIS Requirement | COBRA Capability | Complies |
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| The EMIS’s situation display shall be able to display geographical views with georeferenced features on map overlays. | As almost all COBRA data is reported to the system with location information, virtually any facility, report, resource, image, or video can be displayed on the integrated map. Using custom data layers, its automatic geo-location analysis features can identify organizations with shared response coverage and optimize resource and asset allocation for any given circumstance while simultaneously updating the map data for all users across the entire network. | ✓ |
| The EMIS’s situation display shall be capable of displaying one or more selectable map overlays. | COBRA supports multiple GIS data and base map sources such as Web Map Services (WMS), and Web Feature Service (WFS), and ESRI Feature Services, or your organization’s custom base map. It can incorporate and display external GIS data layers such as KML, GeoJSON, and ESRI Shapefiles allowing responders to see local GIS data in the incident. COBRA can also import weather data or modeling products (i.e., plume dispersion models) and display it on the map. | ✓ |
| The EMIS’s situation display shall be capable of displaying a situation report, operational information, status report, or map image received from users. | The COBRA dashboard is tailorable based upon each user’s role or position and users can change that view as operational periods or situation status changes in real time. The system allows administrators to customize toolsets that are available to users, positions, or organization. The tools in COBRA can be centrally located on one page to bring specific needed information into one location. This concept puts only the tools needed by functional area or agency at the forefront of the crisis management system. | ✓ |
| The EMIS's situation display shall include the ability to display selectable levels of detail to enable users to see summaries such as a dashboard display to indicate | The COBRA dashboard is tailorable based upon each user’s role or position and users can change that view as operational periods or situation status changes in real time. The system allows administrators to customize toolsets that are available to users, positions, or organization. The tools in COBRA can be centrally located on one page to bring | ✓ |

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| elements that may require attention. | specific needed information into one location. This concept puts only the tools needed by functional area or agency at the forefront of the crisis management system. As new information is entered into the system, tools on the Dashboard provide a visual cue that new data is available for review. This cueing occurs without interaction by the user across all active Dashboards. | |
| 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. | COBRA's media player can consume and display external IP-based video and image feeds. | ✓ |
| The EMIS shall be capable of capturing and disseminating the image showing on the situation display to selected user(s). | COBRA users can take a screenshot of the incident integrated map and save as an attachment to be shared with other interested parties. | ✓ |
| The EMIS shall provide for managing and reporting of injuries and deaths. | COBRA's Personnel Statistics Tool allows an organization to enter, manage, and report data on personnel information such as injuries and deaths. | ✓ |

11.14. Community Lifeline

COBRA's Lifeline tool allows users to generate a dashboard to display customizable categories of interest to decision makers. Examples of Lifeline categories can include Safety and Security, Health and Medical, Energy, Communications, Transportation, among others. These categories can be easily updated with stop-light colors -- Red, Yellow, Green -- to indicate status. The Community Lifeline tool can be embedded as a widget on a user's Dashboard to give an immediate snapshot of Lifeline status throughout the incident.

| WV EMIS Requirement | COBRA Capability | Complies |
|---|--|----------|
| The EMIS shall automatically generate a dashboard, and status based on the Community Lifelines. The EMIS shall allow users to generate and store time-stamped Community Lifelines reports based on jurisdiction and vent. | COBRA Lifeline tools provides ability to display Community Lifeline reports based up customizable jurisdiction display or organization defined parameters. | ✓ |

11.15. Communication

COBRA offers a configurable chat capability which enables secure, data recorded, real-time communication capability for information sharing. Our system’s integrated Chat feature is currently undergoing a modernization and enhancement effort which will include virtual meeting space/conference capability, along with storing related documents and recordings.

| WV EMIS Requirement | COBRA Capability | Complies |
|---|---|---|
| <p>The EMIS shall offer chat rooms and virtual conference rooms configurable by users. The EMIS shall enable the users to capture and manage content. The EMIS shall enable the users to save and store documents, recordings, and aids used in a chat room or virtual meeting.</p> | <p>The integrated chat capability provides a secure, data recorded, real-time communication capability for information sharing and includes a system-wide chat function that will broadcast important messages into all chat rooms at once. Chat room names and access are controlled by administrators to prevent them from becoming unwieldy.</p> |  |
| <p>The EMIS must provide the means to communicate easily with one or more remote users (by name or by function) using real time text messaging that is logged and recorded.</p> | <p>COBRA includes a system-wide notification tool allowing admins to post system messages to the COBRA system. The Alert notifies recipients via a visual and audible notification in the COBRA system, followed up with an email, SMS text, and voice phone call notifying them of the Alert. Notifications are based on the user’s notification preferences. Users can track the status of the alert and who has acknowledged it.</p> <p>The integrated chat capability provides a secure, data recorded, real-time communication capability for information sharing and includes a system-wide chat function that will broadcast important messages into all chat rooms at once. Chat room names and access are controlled by administrators to prevent them from becoming unwieldy.</p> |  |
| <p>The EMIS must have the ability to send automated text messages, voice chat messages, or video messages to mobile devices.</p> | <p>COBRA includes a system-wide notification tool allowing admins to post system messages to the COBRA system. The Alert notifies recipients via a visual and audible notification in the COBRA system, followed up with an email, SMS text, and voice phone call notifying them of the Alert. Notifications are based on the user’s notification preferences. Users can track the status of the alert and who has acknowledged it.</p> |  |
| <p>The EMIS shall be capable of logging chat history in order to be retrieved by users at a later time.</p> | <p>The integrated chat capability provides a secure, data recorded, real-time communication capability for information sharing and includes a system-wide chat function that will broadcast important messages into all chat rooms at once. Chat room names and access are</p> |  |

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| | controlled by administrators to prevent them from becoming unwieldy. | |
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11.16. Software Administration

Dynamis can assign WV EMIS personnel as System Administrators to their Organization in COBRA, which allows them to configure the application’s toolsets in a way that is best suited for their users’ incident response needs. All WV EMIS templates, data, forms, roles, and tools can be customized by System Administrators without additional Dynamis technical support. For WV EMIS organizational structure requirements, COBRA provides several avenues for organizing groups in the system. Users can be grouped into organizations, sub-organizations, jurisdictions, and positions, which can mirror WV’s real-world incident response structure while retaining organizational flexibility throughout the response.

| WV EMIS Requirement | COBRA Capability | Complies |
|---|---|----------|
| The EMIS’s administrative and management functions shall be available to the system administrators. | COBRA has many user configurable settings available to the customer. These allow customization to occur at the local level and includes organization positions, incident types, Excel spreadsheet checklists, custom HTML forms, facility categories, and other features. All organization templates, data, forms, roles, dashboards, briefing board, checklists, documents, workflows are customizable at an administration level without any support from the vendor. COBRA supports five different user roles, ranging from read-only, through system administrators. Roles are easily assigned and updated in bulk or per-user. | ✓ |
| The EMIS must provide user access through desktops, laptops, and mobile devices, such as, tablets or smart phones. The EMIS must let a user remain logged in at the same time on different devices. | COBRA allows for multiple concurrent user sign-ons. An administrator at any time can remotely remove a user that is logged in. Access is available via smart phone, tablet, laptop, or desktop. | ✓ |
| The EMIS must enable a user to sign on 'once' for access to all embedded applications. | COBRA requires users to only sign in once to access all tools in the system. | ✓ |
| The EMIS shall be able to define a structured top-level organization with fully functional sub-organizations that operate in a hierarchy of authority. | COBRA provides multiple mechanisms for grouping: organizations, sub-organizations, jurisdictions, and positions. These organizations mirror real-world organizational structures and can contain any number of users within the system. Sub-organizations can be created to match divisions within an organization. Users can belong to one or more sub-organizations. Jurisdictions are groups of organizations. Jurisdictions are primarily used to share information and responsibilities during incident responses. This structure allows multi-jurisdiction and multi-agency shared response. There are no limits to the | ✓ |

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| | number of organizations, sub-organizations, jurisdictions, positions, or users within the COBRA system. | |
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11.17. Technical Requirements

COBRA meets all West Virginia EMIS technical requirements for a scalable, secure, and redundant system architecture. COBRA uses secure and compliant Platform-as-a-Service (PaaS) options supplied by the Azure environment for U.S. Government organizations at Federal, State, and Local levels. This ensures a secure and reliable platform that emphasizes redundancy and data integrity.

The COBRA team also provides training and support capabilities that fulfil WV EMIS needs to develop, train, and use the system in separate environments. COBRA development uses three environments: Development, Staging, and Production. COBRA’s Staging environment will mirror the Production environment to allow WV personnel to test and train system functionality before using in the deployed Production environment. For WV’s 24/7/365 technical support requirement, Dynamis uses our Dynamis Customer Care program, where we track and monitor help tickets to ensure adequate response of support requests and the follow-up of action items, as required.

| WV EMIS Requirement | COBRA Capability | Complies |
|---|---|----------|
| The EMIS shall be compatible with multiple factor identification and its use for system access. | COBRA supports Multi-Factor Authentication (MFA) for an additional layer of security during the authentication process. | ✓ |
| The EMIS shall provide for single sign on and for PIV/PIVI/CAC integration for system access based on Federal Information Processing Standard (FIPS 201-2) requirements. https://csrc.nist.gov/publications/detail/fips/201/2/final | COBRA provides complete control of sensitive data through secure and encrypted password protection and federated authentication capabilities. Security is provided for both data in transit and at rest with all connections secured through an SHA-2 2048-bit encryption SSL certificate and data at rest is encrypted using AES256. All encryption methodologies used by COBRA are compliant with the FIPS requirement registry setting and login encryption uses PBKDF2. COBRA supports Multi-Factor Authentication (MFA) for an additional layer of security during the authentication process. COBRA meets Federal/Department of Defense (DoD) requirements for information assurance, maintaining required levels of integrity and availability and is protected by measures that are considered industry best practices. For more than a decade, the COBRA system has handled law enforcement sensitive but unclassified information (SBU) and other Controlled Unclassified Information (CUI) data without incident. | ✓ |
| 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 | COBRA notifies users on failed login attempts, and by the go-live date, will have capability to lock out a user account after an Administrator-specified number of attempts. COBRA currently has the capability to provide unattended password reset. | ✓ |

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| <p>number of attempts. The solution shall have the capability of providing unattended password reset capability.</p> | | |
| <p>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.</p> | <p>COBRA allows System Administrators to view all log-in information by username, with the corresponding IP Address, date and time stamped.</p> |  |
| <p>The EMIS shall include the means of recovering from a system failure using data previously backed-up.</p> | <p>COBRA uses the secure and compliant Platform-as-a-Service (PaaS) options supplied by the Azure environment for US government organizations (federal, state, and local). Azure has several certificates including ISO 27001 and FedRAMP. It provides secure and reliable platform with redundancy and data integrity. Incremental daily and full-weekly backups provide point-in-time restoration and prevent data loss.</p> |  |
| <p>The EMIS shall limit access to those users who have valid login permissions and credentials.</p> | <p>Users cannot log in to COBRA without an established account and valid credentials.</p> |  |
| <p>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.</p> | <p>COBRA users are required to read and accept an Electronic End User License Agreement on first sign on, which can include WV's confidentiality agreement.</p> |  |
| <p>The EMIS shall enforce strong alphanumeric passwords and periodic password changes. It means, minimum eight characters, combination of numbers, letters, special characters, and monthly password changes.</p> | <p>COBRA provides complete control of sensitive data through secure and encrypted password protection and federated authentication capabilities. Security is provided for both data in transit and at rest with all connections secured through an SHA-2 2048-bit encryption SSL certificate and data at rest is encrypted using AES256. All encryption methodologies used by COBRA are compliant with the FIPS requirement registry setting and login encryption uses PBKDF2.</p> <p>COBRA supports Multi-Factor Authentication (MFA) for an additional layer of security during the authentication process. COBRA meets Federal/Department of Defense (DoD) requirements for information assurance, maintaining required levels of integrity and availability and</p> |  |

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| | is protected by measures that are considered industry best practices. For more than a decade, the COBRA system has handled law enforcement sensitive but unclassified information (SBU) and other Controlled Unclassified Information (CUI) data without incident. | |
| The EMIS shall provide capability of a user to obtain password reset by administrator and by verification and via approved email and/or text. | A COBRA user can request a password reset, or that password may be reset by the Administrator. Users are notified by email on password reset. | ✓ |
| The EMIS shall be scalable to automatically accept any number of users to a maximum of 500 users logged in simultaneously with capability to add additional users with no delay. | The COBRA platform has a modern, flexible architecture that allows deployment in various data centers and cloud hosted environments. Azure Government is our preferred and primary hosting environment. COBRA uses the secure and compliant Platform-as-a-Service (PaaS) options supplied by the Azure environment for US government organizations (federal, state, and local). | ✓ |
| The EMIS shall adhere to industry standard scalable relational database architectures that are able to provide input or output to other Enterprise systems. | The COBRA platform has a modern, flexible architecture that allows deployment in various data centers and cloud hosted environments. Azure Government is our preferred and primary hosting environment. COBRA uses the secure and compliant Platform-as-a-Service (PaaS) options supplied by the Azure environment for US government organizations (federal, state, and local). | ✓ |
| The EMIS's Graphical User Interface (GUI) shall be a windows-based interface, and mobile app User Interfaces (UI). | COBRA GUI uses a windows-based interface, and a responsible mobile app user interface. | ✓ |
| The EMIS shall have the following environments: production, training, and development environments. The training and development platform shall have the same functionality and capabilities of the production platform. The development platform will be used for change management. The training platform will be used for training, exercises, and scenario modeling. | COBRA's DevOps team utilizes three environments: development, staging (training) and production. The staging environment is used to conduct regression testing and ensure quality before new features or bug fixes are pushed to the production environment. This can also be used as a training environment to pilot new tools and improvements before they are expanded to a wider pool of users. | ✓ |
| The EMIS shall have complete redundancy across all components and a sole | COBRA uses the secure and compliant Platform-as-a-Service (PaaS) options supplied by the Azure environment for US government organizations (federal, state, and | ✓ |

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| <p>Disaster Recovery solution, in the event of data corruption, hardware malfunction, or cyberattacks.</p> | <p>local). Azure has several certificates including ISO 27001 and FedRAMP. It provides secure and reliable platform with redundancy and data integrity. Incremental daily and full-weekly backups provide point-in-time restoration and prevent data loss.</p> | |
| <p>The EMIS shall have multi-server fault-tolerant architecture with full redundancy and automatic recovery.</p> | <p>COBRA uses the secure and compliant Platform-as-a-Service (PaaS) options supplied by the Azure environment for US government organizations (federal, state, and local). Azure has several certificates including ISO 27001 and FedRAMP. It provides secure and reliable platform with redundancy and data integrity. Incremental daily and full-weekly backups provide point-in-time restoration and prevent data loss.</p> |  |
| <p>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. The sites must meet the following minimums. Primary replication site at least 50 miles from our facility.</p> <ol style="list-style-type: none"> 1. Secondary replication site at least 100 miles from our facility and at least 100 miles from the primary replication. 2. Tertiary replication site at least 200 miles from our facility. and at least 200 miles from the secondary replication. <p>The vendor shall provide a copy of their disaster recovery plan upon Agency request.</p> | <p>The COBRA platform has a modern, flexible architecture that allows deployment in various data centers and cloud hosted environments. Azure Government is our preferred and primary hosting environment. COBRA uses the secure and compliant Platform-as-a-Service (PaaS) options supplied by the Azure environment for US government organizations (federal, state, and local). Azure has several certificates including ISO 27001 and FedRAMP. It provides secure and reliable platform with redundancy and data integrity. Incremental daily and full-weekly backups provide point-in-time restoration and prevent data loss. We utilize Azure availability zones with automatic replication to multiple datacenters in different regions and our SQL data stores are configured to have Always on Asynchronous Native Replication to the target region used for disaster recovery. Dynamis develops a disaster recovery plan for all of our COBRA deployments and intends to provide one to WV upon request.</p> |  |
| <p>The EMIS shall provide data backup to include error checking and correcting during backup to ensure backed-up data is valid.</p> | <p>The COBRA platform has a modern, flexible architecture that allows deployment in various data centers and cloud hosted environments. Azure Government is our preferred and primary hosting environment. COBRA uses the secure and compliant Platform-as-a-Service (PaaS) options supplied by the Azure environment for US government organizations (federal, state, and local). Azure has several certificates including ISO 27001 and FedRAMP. It provides secure and reliable platform with redundancy and data</p> |  |

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| | integrity. Incremental daily and full-weekly backups provide point-in-time restoration and prevent data loss. | |
| The EMIS shall provide for records maintenance and retain information until permanently deleted. | COBRA "never forgets." Data can only be archived; it is never fully deleted. | ✓ |
| The EMIS shall provide flexible emergency management support functions for day-to-day operations and large-scale multi-agency response. | With its incident management engine, COBRA can support multiple training exercises and simultaneous live events. User can seamlessly transfer between each with while sustaining continuity of operations and real-world applications. | ✓ |
| The EMIS emergency management support functions shall enable users to share, analyze, and prioritize information across multiple jurisdictions in text, images, and georeferenced map formats. | COBRA provides multiple mechanisms for grouping: organizations, sub-organizations, jurisdictions, and positions. These organizations mirror real-world organizational structures and can contain any number of users within the system. Sub-organizations can be created to match divisions within an organization. Users can belong to one or more sub-organizations. Jurisdictions are groups of organizations. Jurisdictions are primarily used to share information and responsibilities during incident responses. This structure allows multi-jurisdiction and multi-agency shared response. There are no limits to the number of organizations, sub-organizations, jurisdictions, positions, or users within the COBRA system. | ✓ |
| The EMIS shall operate as a web application in which users interact with the EMIS through any web browser, and mobile applications. | COBRA is offered as a SAS web-based application. It is browser agnostic and available as a mobile responsive application. | ✓ |
| The EMIS shall be browser independent, and device awareness industry requirements. | COBRA is browser agnostic. All functionality is usable with the same user experience across browsers. | ✓ |
| The EMIS shall be built on a highly secure platform. The Vendor shall describe their platform and security measures such as end-to-end encryption. | COBRA provides complete control of sensitive data through secure and encrypted password protection and federated authentication capabilities. Security is provided for both data in transit and at rest with all connections secured through an SHA-2 2048-bit encryption SSL certificate and data at rest is encrypted using AES256. All encryption methodologies used by COBRA are compliant with the FIPS requirement registry setting and login encryption uses PBKDF2. COBRA supports Multi-Factor Authentication (MFA) for an additional layer of security during the authentication process. COBRA meets Federal/Department of Defense (DoD) requirements for information assurance, | ✓ |

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| | maintaining required levels of integrity and availability and is protected by measures that are considered industry best practices. For more than a decade, the COBRA system has handled law enforcement sensitive but unclassified information (SBU) and other Controlled Unclassified Information (CUI) data without incident. | |
| The EMIS shall provide secure usage capabilities such as security reporting, user data access, and email/message. | COBRA utilizes Microsoft Application Insights and Azure Reporting to monitor usage and security reporting. SSL is used throughout the system to ensure secure data transmission and user data access and sending emails is through secure application channels. | ✓ |
| The EMIS shall enforce secure networking protocols and ports for all activities. | COBRA currently enforces secure networking protocols and ports for all activities. | ✓ |
| The EMIS shall maintain an event log of all entries, which makes a time-stamped record of receipt and transmission of messages. | COBRA allows System Administrators to view all log-in information by username, with the corresponding IP Address, date and time stamped. | ✓ |
| The EMIS shall create and maintain a security audit trail to log system usage | COBRA allows System Administrators to view all log-in information by username, with the corresponding IP Address, date and time stamped. | ✓ |
| The EMIS shall have an automated and scheduled back up of information, including back up of image libraries, recording libraries, and document libraries. | The COBRA platform has a modern, flexible architecture that allows deployment in various data centers and cloud hosted environments. Azure Government is our preferred and primary hosting environment. COBRA uses the secure and compliant Platform-as-a-Service (PaaS) options supplied by the Azure environment for US government organizations (federal, state, and local). Azure has several certificates including ISO 27001 and FedRAMP. It provides secure and reliable platform with redundancy and data integrity. Incremental daily and full-weekly backups provide point-in-time restoration and prevent data loss. | ✓ |
| The EMIS shall support interaction with remote users using a workstation, laptop, tablet, and mobile devices. | COBRA is compatible with multiple device types, including workstations, laptops, tablets, and mobile devices. | ✓ |
| The EMIS shall be able to access, integrate, interoperate, and remain compatible with the Agency GIS platform (ESRI -ArcGIS). | COBRA can access and display a subset of ArcGIS REST Feature Services on the Integrated Map, such as USA Wildfires, NWS Watches & Warnings, among others. | ✓ |
| The EMIS shall have an alternate GIS platform that can be used if the Agency GIS platform source is unavailable. | COBRA supports multiple GIS data and base map sources such as Web Map Services (WMS), and Web Feature Service (WFS), and ESRI Feature Services, or your organization's custom base map. It can incorporate and display external GIS data layers such as KML, GeoJSON, | ✓ |

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| | and ESRI Shapefiles allowing responders to see local GIS data in the incident. | |
| 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 system. | <p>Dynamis fully supports COBRA customers with software maintenance and technical support, including helpdesk service. Standard technical support, assistance, or technical advice, located in Fairfax, VA, is provided directly to the customer using email, telephone, and video teleconferencing systems during normal business hours (Monday through Friday, 8am-5pm EST, excluding holidays).</p> <p>Emergency technical support is provided 24/7/365 using our Dynamis' Customer Care program. Dynamis provides a tracking system to monitor help tickets to ensure adequate response of support requests and the follow-up of action items, as required. In the rare occasion a critical bug is discovered in the application, Dynamis patches and releases fixes usually within one-day. The average cycle time for non-critical bug reporting to fix is 33 days.</p> | ✓ |
| The Vendor shall provide a proposed EMIS support model. The proposed support model must identify how the vendor will address the ongoing support functions. | A Dynamis Configuration Engineer will work closely with WV personnel to ensure optimal system settings. This includes activities such as setting up WV incident types and categories, adding WV personnel as system users, creating COBRA positions for users, setting up dashboards, briefing board templates, organization-specific checklists, and uploading custom map layers. Unlike some providers, configuration engineering support doesn't end with our initial engagement with WV – these services remain available throughout the life of the contract to ensure COBRA is configured to meet the State's evolving Emergency Management needs. | ✓ |
| The Vendor shall provide a proposed EMIS maintenance schedule and services schedule with costs and any additional service packages. | COBRA is built using the Microsoft Azure cloud platform featuring the Azure Platform as a Service (PaaS) features. PaaS features are fully managed by Microsoft to provide built-in high availability, redundancy. New releases are deployed every 6 weeks and are scheduled after-hours with customers notified 1 week in advance. During this time the system is offline for roughly 15 minutes. All modules are included in the cost of the SaaS license. There are no additional costs associated with COBRA operations. | ✓ |
| The EMIS shall provide a cyber-secure environment and a continuity plan in case of a system failure | COBRA is deployed to the Azure GovCloud which ensures a cyber-secure environment. It has been audited by Deloitte for security vulnerabilities and is currently undergoing Fed Ramp and Airforce ATO certifications. We utilize distributed availability zone regions and azure front door to ensure fail-over reliability and high-availability. | ✓ |

| | | |
|---|---|---|
| <p>The Vendor shall provide 24/7 technical support to sustain continuous operation. Vendor must provide support by telephone, online, and email 24 hours a day, 7 days a week, 365 days a year for troubleshooting technical issues. The Vendor will provide the following response times to request for technical support:</p> <ol style="list-style-type: none"> 1. No more than one (1) business day for non-critical issues. 2. No more than two (2) hours for critical issues. | <p>Dynamis fully supports COBRA customers with software maintenance and technical support, including helpdesk service. Standard technical support, assistance, or technical advice, located in Fairfax, VA, is provided directly to the customer using email, telephone, and video teleconferencing systems during normal business hours (Monday through Friday, 8am-5pm EST, excluding holidays).</p> <p>Emergency technical support is provided 24/7/365 using our Dynamis' Customer Care program. Dynamis provides a tracking system to monitor help tickets to ensure adequate response of support requests and the follow-up of action items, as required. In the rare occasion a critical bug is discovered in the application, Dynamis patches and releases fixes usually within one-day. The average cycle time for non-critical bug reporting to fix is 33 days.</p> |  |
| <p>The EMIS will be hosted on a minimum of a Tier 3 Data Center and have cloud-based hosting. Upon Agency request, the vendor shall provide a minimum of a Tier 3 data center certification verifying that it meets the following standards:</p> <ol style="list-style-type: none"> 1. ISO 27001 2. NIST SP800-53. | <p>Currently COBRA inherits all of the security protocols derived from being hosted on Microsoft Azure Government Cloud. COBRA implements two factor authorization as the standard. Dynamis is certified ISO 27001 as is the Azure Government Cloud.</p> |  |
| <p>The EMIS must be capable of being hosted on a minimum of a Tier 3 Data Center with a combination of local servers at the agency and have cloud-based hosting.</p> | <p>Dynamis recommends COBRA be deployed to the Azure GovCloud, but the system is platform agnostic, with successful fieldings to on-premise, private cloud, and data center environments. Utilizing a tiered architecture, COBRA can be deployed to a combination local server and cloud hosted approach.</p> |  |



Department of Administration
 Purchasing Division
 2019 Washington Street East
 Post Office Box 50130
 Charleston, WV 25305-0130

State of West Virginia
 Centralized Request for Quote

| | | | |
|--|----------------------------|---|----------------|
| Proc Folder: 970413 | | Reason for Modification: | |
| Doc Description: Emergency Management Information System (EMIS) | | Addendum No. 2 To move bid opening date to 12/21/21 To revise Specifications To respond to vendor technical questions. | |
| Proc Type: Central Contract - Fixed Amt | | | |
| Date Issued | Solicitation Closes | Solicitation No | Version |
| 2021-12-10 | 2021-12-21 13:30 | CRFQ 0606 HSE2200000005 | 3 |

BID RECEIVING LOCATION

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

VENDOR

Vendor Customer Code: VS0000017241
Vendor Name : Dynamis, Inc.
Address :
Street : 8260 Willow Oaks Corporate Drive, Suite 800
City : Fairfax
State : VA **Country :** USA **Zip :** 22031
Principal Contact : Sarah J. Smith, Vice President, Business Operations
Vendor Contact Phone: 703-338-9695 **Extension:**

FOR INFORMATION CONTACT THE BUYER

David H Pauline
 304-558-0067
 david.h.pauline@wv.gov

Vendor
 Signature X

FEIN# 26-1943446

DATE 12/21/21

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

ADDITIONAL INFORMATION

Addendum No. 2

To respond to Vendor Technical Questions, see attached.

To revise Specifications see attached.

To move Bid opening to December 21, 2021 at 1:30 pm EST

No other changes

INVOICE TO**SHIP TO**

DIVISION OF EMERGENCY
MANAGEMENT
BLDG 1 RM EB80
1900 KANAWHA BLVD E
CHARLESTON WV
US

DIVISION OF EMERGENCY
MANAGEMENT
2403 FAIRLAWN AVENUE
DUNBAR WV
US

| Line | Comm Ln Desc | Qty | Unit Issue | Unit Price | Total Price |
|------|---|---------|------------|-------------|-------------|
| 1 | Annual Subscription for EMIS - Initial Year | 1.00000 | EA | \$90,000.00 | \$90,000.00 |

| Comm Code | Manufacturer | Specification | Model # |
|-----------|--------------|---------------|---------|
| 43230000 | | | |

Extended Description:

4.1.2 Contract Item 1: Annual Subscription for EMIS Solution

4.1.2.1 Vendor must provide an annual cloud-based subscription for EMIS Solution as defined in Section 4.1.1.

4.1.2.2 Vendor must provide access for an estimated quantity of 500 users simultaneously with the ability to add more users without delay as per Section 4.1.1.3.10.

See attached specifications for full details.

| INVOICE TO | | | SHIP TO | | |
|--|--|--|---|--|--|
| DIVISION OF EMERGENCY MANAGEMENT BLDG 1 RM EB80 1900 KANAWHA BLVD E CHARLESTON WV US | | | DIVISION OF EMERGENCY MANAGEMENT 2403 FAIRLAWN AVENUE DUNBAR WV US | | |

| Line | Comm Ln Desc | Qty | Unit Issue | Unit Price | Total Price |
|------|--|---------|------------|-------------|-------------|
| 2 | Annual Subscription for EMIS - Optional Year 2 | 1.00000 | EA | \$45,000.00 | \$45,000.00 |

| Comm Code | Manufacturer | Specification | Model # |
|-----------|--------------|---------------|---------|
| 43230000 | | | |

Extended Description:

4.1.2 Contract Item 1: Annual Subscription for EMIS Solution

4.1.2.1 Vendor must provide an annual cloud-based subscription for EMIS Solution as defined in Section 4.1.1.

4.1.2.2 Vendor must provide access for an estimated quantity of 500 users simultaneously with the ability to add more users without delay as per Section 4.1.1.3.10.

See attached specifications for full details.

| INVOICE TO | | | SHIP TO | | |
|--|--|--|---|--|--|
| DIVISION OF EMERGENCY MANAGEMENT BLDG 1 RM EB80 1900 KANAWHA BLVD E CHARLESTON WV US | | | DIVISION OF EMERGENCY MANAGEMENT 2403 FAIRLAWN AVENUE DUNBAR WV US | | |

| Line | Comm Ln Desc | Qty | Unit Issue | Unit Price | Total Price |
|------|--|---------|------------|-------------|-------------|
| 3 | Annual Subscription for EMIS - Optional Year 3 | 1.00000 | EA | \$45,000.00 | \$45,000.00 |

| Comm Code | Manufacturer | Specification | Model # |
|-----------|--------------|---------------|---------|
| 43230000 | | | |

Extended Description:

4.1.2 Contract Item 1: Annual Subscription for EMIS Solution

4.1.2.1 Vendor must provide an annual cloud-based subscription for EMIS Solution as defined in Section 4.1.1.

4.1.2.2 Vendor must provide access for an estimated quantity of 500 users simultaneously with the ability to add more users without delay as per Section 4.1.1.3.10.

See attached specifications for full details.

| INVOICE TO | | SHIP TO | |
|--|--|---|--|
| DIVISION OF EMERGENCY MANAGEMENT BLDG 1 RM EB80 1900 KANAWHA BLVD E CHARLESTON WV US | | DIVISION OF EMERGENCY MANAGEMENT 2403 FAIRLAWN AVENUE DUNBAR WV US | |

| Line | Comm Ln Desc | Qty | Unit Issue | Unit Price | Total Price |
|------|--|---------|------------|-------------|-------------|
| 4 | Annual Subscription for EMIS - Optional Year 4 | 1.00000 | EA | \$45,000.00 | \$45,000.00 |

| Comm Code | Manufacturer | Specification | Model # |
|-----------|--------------|---------------|---------|
| 43230000 | | | |

Extended Description:

4.1.2 Contract Item 1: Annual Subscription for EMIS Solution

4.1.2.1 Vendor must provide an annual cloud-based subscription for EMIS Solution as defined in Section 4.1.1.

4.1.2.2 Vendor must provide access for an estimated quantity of 500 users simultaneously with the ability to add more users without delay as per Section 4.1.1.3.10.

See attached specifications for full details.

SCHEDULE OF EVENTS

| <u>Line</u> | <u>Event</u> | <u>Event Date</u> |
|-------------|-----------------------------------|-------------------|
| 1 | Technical Question Due By 2:00 pm | 2021-12-03 |

SOLICITATION NUMBER: CRFQ HSE2200000005
Addendum Number: 2

The purpose of this addendum is to modify the solicitation identified as CRFQ HSE2200000005 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
- To respond to technical questions
- Attachment of pre-bid sign-in sheet
- Correction of error
- Other

Additional Documentation:

1. **To modify specification of product or service being sought, see attached revision.**
2. **To respond to vendor technical questions, see attached.**
3. **To move bid opening date and time December 21, 2021, at 1:30 pm**
4. **No other changes.**

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.

Vendor Question 01:

Please confirm that Vendors must only provide the identified documentation (containing state, organization name, point of contact, start, and end date of implementation) for examples provided in response to requirements described in RFQ Section 3.4 Past Performance, not all Past Performance.

Agency Answer 01:

Correct, the documentation must contain the State's organizations name, a point of contact, start date and end date of the implementation.

The Agency is revising the specification section 3.4 that the vendor must include in the documentation a description of the EMIS modules that are implemented.

Vendor Question 02:

Please confirm that Vendors may use the same reference to fulfill two (or more) qualification requirements.

Agency Answer 02:

Yes. The references requested in section 3.4 could be part of the references requested in section 3.1.

Vendor Question 03:

Are examples of past performance that occur in countries other than the United States permitted to be used as qualifications/past performance examples?

Agency Answer 03:

No. The section 3.1 stated "3.1 Vendor shall provide a minimum of five (5) relevant reference to demonstrate that it has proven experience in managing hosted/on-premises Solutions at a statewide level." It refers to the statewide in the state of The United State of America (USA).

Vendor Question 04:

Will any integration engineering efforts be expected to be included in the licensing costs or will there be a separate invoice line number available?

Agency Answer 04:

Vendor must include all associated cost in the unit price for licensing.

Vendor Question 05:

Should the Vendor include pricing for additional users that exceed the 500 users defined in Section 4.1.1.3.10?

Agency Answer 05:

No. It is estimated that in an emergency we need as a maximum 500 licenses.

Vendor Question 06:

The revision date noted for Section 4 is 2014, would the State of West Virginia confirm that section is current?

Agency Answer 06:

The “Revised 10/27/2014” in the footer on every page of the specification document. This is the date WV Purchasing Division published the revised template for agencies to use when drafting mandatory specification. It has no impact on this contract.

Vendor Question 07:

What system does the WV Division of Highways use as noted in section 4.2.1.1.6?

Agency Answer 07:

The system used by Department of Transportation is based on Microsoft Access.

Vendor Question 08:

Are live images and video feeds for external sources IP based?

Agency Answer 08:

No. Images and videos that are part of a report could come from devices that does not have a data plan or does not have an IP address associated to the device.

Vendor Question 09:

As described in Section 4.2.1.1.6, is there an existing report format that must be used?

Agency Answer 09:

There are several reports that are related to the Section 4.2.1.1.6.
Those reports will be provided to the vendor in the implementation phase.

Vendor Question 10:

Is a native mobile application required or can a mobile-responsive web application be considered?

Agency Answer 10:

The EMIS solution must include mobile-responsive web applications.

Vendor Question 11:

Does the State of West Virginia anticipate training requirements in the Option Years?

Agency Answer 11:

There are not option years in this requirement. There are renewal periods.
No, there are not training requirements requested for the renewal periods.

Vendor Question and Response

CRFQ 0606 HSE2200000005 – Emergency Management Information System (EMIS)

12/09/2021

Vendor Question 12:

Section 4.2.1.3.16 implies that the solution will be hosted on-premises though cloud options are discussed in later sections. Will cloud solutions with replication strategies in place be considered?

Agency Answer 12:

The EMIS is a cloud based. See section “4.2.1.3.37 The EMIS will be hosted on a minimum of a Tier 3 Data Center and have cloud-based hosting. Upon Agency request, the vendor shall provide a minimum of a Tier 3 data center certification...”

Vendor Question 13:

Q: Due to the response timeframe for this CRFQ extending over the Thanksgiving/Indigenous Day Holiday we would respectfully like to request a one-week extension of the bid opening date to December 21st, 2021. We believe this extension will assist vendors in providing the best possible response to the State.

Agency Answer 13:

Yes, the opening will be extended.

Vendor Question 14:

Q: Regarding 4.2.1.1.1.5, could you please describe in further detail what you mean by the “status report” and provide an example of how you envision this working for a user?

Agency Answer 14:

Status report is a classification related to notification status. It could be Draft, Updated, Sent, updated, and resent. The agency will provide the awarded vendor samples of reports to use as a reference.

Vendor Question 15:

Q: Regarding Section 3 Qualifications - Items 3.1 and 3.4 both indicate that “This information shall be provided prior to contract award.” Does this mean that vendors are not required to list these references as part of their response, but only afterwards if they are the selected vendor?

Agency Answer 15:

Correct, the information will be requested from the vendor prior to the award of the contract.

Vendor Question 16:

Q: Please confirm that vendors should include their technical proposal as an attachment in Step 4 “Add Attachments” in the wvOASIS platform?

Agency Answer 16:

Yes, the vendor may upload all documentation related to their bid response.

Vendor Question and Response

CRFQ 0606 HSE2200000005 – Emergency Management Information System (EMIS)

12/09/2021

Vendor Question 17:

Q: Please indicate whether vendors should include contact information for Section 11.1 Contract Manger as part of their response.

Agency Answer 17:

Yes, the vendor must provide the requested information in section 11.1. This will be required prior to the award of the contract.

Vendor Question 18:

Q: Please indicate whether vendors should sign and include the Software as a Service Addendum as part of their response. If yes, do all pages of the agreement need to be included with the response, or only the signature page?

Agency Answer 18:

Vendors may submit the signed Software as a Service Addendum with the bid response. However, the signed Software as a Service Addendum will be required prior to award of the contract.

Vendor Question 19:

Q: Please indicate whether vendors should sign and include Appendix A as part of their response. If yes, are vendors only supposed to complete item # 6 (Vendor/Service Provider's required information)? Items 1-5 seem like they were to be completed by WVEMD, could you please confirm this?

Agency Answer 19:

Appendix A item #6 will need to be completed by the Vendor. This document may be submitted with the bid response but will be required prior to award of the contract.

Vendor Question 20:

Q: Should Vendors include a completed copy of EXHIBIT A – Pricing Page with their technical response proposal only complete it electronically within the wvOASIS as part of Step 2 “Respond to Lines”

Agency Answer 20:

Vendors must include the completed EXHIBIT A – Pricing Page with their bid response as well as entering it electronically on wvOASIS.

Vendor Question 21:

Q: Neither EXHIBIT A – Pricing Page, nor Step 2 “Respond to Lines” in wvOASIS include any separate line items for project implementation cost, training cost, optional value-ads, alternatives, or other components that may be relevant to this project. Please indicate how such items should be incorporated into the pricing of the solicitation response.

Agency Answer 21:

See answer to Vendor Question 04.

Vendor Question and Response

CRFQ 0606 HSE2200000005 – Emergency Management Information System (EMIS)

12/09/2021

Vendor Question 22:

Q: Should Vendors include a completed copy of the Purchasing Affidavit Page with their technical response proposal even though this is not a construction contract?

Agency Answer 22:

Vendor may submit the completed Purchasing Affidavit with their bid response. However, it will be required prior to award of the contract.

Vendor Question 23:

Q: When does WVEMD expect to make an award for this project?

Agency Answer 23:

The contract award process will begin after the evaluation process is complete.

Vendor Question 24:

Q: When is WVEMD's expected "Go Live" date for this system (all deliverables completed and project sign-off complete)?

Agency Answer 24:

Four (4) months from the contract award date.

Vendor Question 25:

Q: Regarding 4.2.1.1.5.3 - This requirement states that the EMIS must integrate with the OASIS system, would WVEMD please explain further the desired scope and functionality of this integration?

Agency Answer 25:

Per section 4.2.11.5 sub section number 3; "The EMIS must have the *capability* to interoperate with the State's financial administration system to report material transactions including order and receipt of ordered material."

If WVEMD deems it necessary, the integration of the EMIS system into the State's wvOASIS system will be a future contract.

Vendor Question 26:

Q: Regarding 4.2.1.1.13.6 – This requirement seems to be a duplicate of 4.2.1.1.13.5.

Agency Answer 26:

Correct, section 4.2.1.1.13, sub section 6 is a duplicated of section 4.2.1.1.13 subsection 5.

See the revised mandatory specifications section in this addendum.

Vendor Question 27:

Q: Regarding 4.2.1.3.13 – Will WVEMD consider having the training and development environments be shared instead of two separate ones?

Agency Answer 27:

Yes, as long as the development environment is protected, and the training environment does not compromise functionalities and performance of the development environment. There cannot be any interferences between the two environments.

See the revised mandatory specifications section in this addendum.

Vendor Question 28:

Q: Regarding 4.2.1.3.16 – The specifications call for Primary, Secondary, and Tertiary replication at geographically separate sites. This hosting architecture adds significant cost to the proposal. Would WVEMD consider an alternate architecture if it still provides high availability and load balancing? For example, an active/active environment for the primary and secondary sites with the third location being a passive disaster recovery site?

Agency Answer 28:

No, the Agency is not considering an alternate architecture.

Vendor Question 29:

Q: Regarding 4.2.1.3.16 – Would WVEMD please clarify what is the required RTP and RPO times for this solution, and if it is required to be an active/active solution, how are those times applicable, if at all?

Agency Answer 29:

The Agency is not requesting a specific maximum length of time permitted that data can be restored.

Vendor Question 30:

Q: Regarding 4.2.1.3.17 – Would WVEMD please provide more detail on the error checking and corrections expected during backups?

Agency Answer 30:

Per section 4.2.1.3.17 the purpose is “...to ensure backed-up data is valid.”

Vendor Question 31:

Q: Regarding 4.2.1.3.17 - For how long will vendors need to retain backups in the cloud environment?

Agency Answer 31:

It will depend on the vendor back-up strategies and disaster recovery plan that is included in section 4.2.1.3.16

Vendor Question 32:

Q: Regarding 4.2.1.2.2 – Would WVEMD please clarify what it means by “embedded applications?” Does this requirement simply refer to Single-Sign-On capability?

Agency Answer 32:

Yes, it refers to Single-Sign-On.

Vendor Question 33:

Q: Regarding 4.2.1.3.34 - This requirement asks the vendor to identify maintenance and services costs and additional service packages; however, the wvOASIS platform and EXHIBIT A – Pricing Page do not seem to include a location to identify what part of the system cost is maintenance or provide a space for optional service packages. How should vendors include this information?

Agency Answer 33:

See answer to Vendor Question 04.

Vendor Question 34:

Q: Regarding 4.2.1.3.37 & 4.2.1.3.38 - The first requirement states that this is expected to be a cloud-hosted system. However, latter requirement states that it must be combination of local servers at the agency and cloud-based hosting.

- Can WVEMD please clarify if they want a solely cloud hosted solution that meets the redundancy requirements set forth in requirement 4.1.2.3.16, OR if they want a Hybrid hosting approach that includes both cloud-based hosting and local servers?
- Typically, a hybrid approach adds significant cost as it requires more servers and adds complexity to the replication services. Which hosting requirement should vendors base their pricing on, solely cloud-based or hybrid?

Agency Answer 34:

The Agency is requesting an EMIS system that is a cloud base solution. Per section 4.2.1.3.38, this solution must have the **capability** to setup an on-premises system. This RFQ is not asking for the implementation on a combination of local servers at the agency.

Vendor Question 35:

Q: Should vendors be asked to participate in an onsite demonstration of their capabilities, would WVEMD please provide the following information:

- Is there a specific scenario (flood, fire, public health event, etc.) that WVEMD would like vendors to use when demonstrating their product capabilities?
- Is wired internet access available at the demonstration site? If so, what is the speed of that connection? Does connecting require a WVEMD supplied network login or computer, or can vendors bring their own laptops/devices from which to demonstrate?
- Is there wireless internet access available at the demonstration site? If so, what is the speed of that connection? Will WVEMD supply a projector or large screen TV with an HDMI connection upon which vendors can demonstrate their product? If so, what is the resolution of the projector or screen?

Agency Answer 35:

A demonstration of products before the closing period is not required for this RFQ.

Vendor Question 36:

We would like to know if there is an incumbent to the project listed below. If so, could you please provide the name of the previous awarded incumbent and the awarded amount?

Agency Answer 36

No, there is not an incumbent to the project. The current software solution that the Agency is using does not represent the solution that is requested in this RFQ.

Vendor Question 37:

Section 3.1 requests five statewide references and Section 3.4 requests three statewide references. Would you like the proposing vendor to provide five statewide references or three statewide references?

Agency Answer 37:

Five references are requested. See answer to question 2

Vendor Question 38:

Section 4.2.1.1.17 references the need to provide automated text messages, voice chat messages, or video messages to mobile devices. Can you provide any estimates of the number of each message type required?

Agency Answer 38:

No, there is not an estimation of the number of messages.

Revised Mandatory Specifications:

1. The Agency has revised the following specification in section 3.4:

Vendor shall provide a minimum of three (3) relevant references to demonstrate that it has proven experience in managing hosted/on-premises EMIS 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. The document provided as a reference shall include the state, organization name, point of contact, start, and end date of implementation, **and EMIS modules implemented.**

2. The Agency hereby removes 4.2.1.1.13 sub section 6 from the mandatory specifications.

4.2.1.1.13 Financial and administrative support. The EMIS shall provide support for the following processes:

1. Financial and administrative support for procurement of material and services.
2. Monitoring and reporting of costs related to an incident.
3. Providing cost analysis services.
4. Documenting individual transaction receipts.
5. The EMIS must enable users to provide administrative support for procurement of materials and services including the ability to:
 1. Identify local sources for equipment rentals.
 2. Identify local sources for material supplies.
 3. Record orders and receipts for equipment and supplies.
 4. Provide capability for the upload/import of database of existing or acquired inventories.

~~6. The EMIS must enable users to provide administrative support for procurement of materials and services including the ability to:~~

- ~~1. Identify local sources for equipment rentals.~~
- ~~2. Identify local sources for material supplies.~~
- ~~3. Record orders and receipts for equipment and supplies.~~
- ~~4. Provide capability for the upload/import of database of existing or acquired inventories.~~

Vendor Question and Response

CRFQ 0606 HSE2200000005 – Emergency Management Information System (EMIS)

12/09/2021

7. The EMIS must enable users to provide cost analysis services including the ability to:

1. Identify material and personnel that require payment.
2. Enter and record all cost data.
3. Maintain accurate records of incident costs.
4. Support planning activities through preparation of estimates for resource usage.

3. The Agency has revised the specification section 4.2.1.4.13.

4.2.1.4.13 The EMIS shall have ~~three~~ **the following** environments: production, training, and development environments. The training and development platform shall have the same functionality and capabilities of the production platform. The development platform will be used for change management. The training platform will be used for training, exercises, and scenario modeling.

Additional Mandatory Requirement for CRFQ 0606 HSE2200000005.

1. Vendor must be able to implement the software within four (4) months of award of the contract.

ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.: CRFQ HSE2200000005

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)

- | | | | |
|-------------------------------------|----------------|--------------------------|-----------------|
| <input checked="" type="checkbox"/> | Addendum No. 1 | <input type="checkbox"/> | Addendum No. 6 |
| <input checked="" type="checkbox"/> | Addendum No. 2 | <input type="checkbox"/> | Addendum No. 7 |
| <input type="checkbox"/> | Addendum No. 3 | <input type="checkbox"/> | Addendum No. 8 |
| <input type="checkbox"/> | Addendum No. 4 | <input type="checkbox"/> | Addendum No. 9 |
| <input type="checkbox"/> | Addendum No. 5 | <input type="checkbox"/> | 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 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.

Dynamis, Inc.



Company
Sarah J. Smith,
Vice President, Business Operations

Authorized Signature

12/21/21

Date

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing.

**EXHIBIT A – Pricing Page
Emergency Management Information System
CRFQ 0606 HSE220000005**

| Section | Description | Unit of Measure | Estimated Quantity | Unit Cost | Extended Cost |
|---------------------------|---|-----------------|--------------------|----------------------|---------------|
| 4.1.2 | Contract Item #1: Annual Subscription for EMIS Solution - Initial Year | Annual | 1 | 90,000.00 | \$ 90,000.00 |
| 4.1.2 | Contract Item #1: Annual Subscription for EMIS Solution - Optional Year 2 | Annual | 1 | 45,000.00 | \$ 45,000.00 |
| 4.1.2 | Contract Item #1: Annual Subscription for EMIS Solution - Optional Year 3 | Annual | 1 | 45,000.00 | \$ 45,000.00 |
| 4.1.2 | Contract Item #1: Annual Subscription for EMIS Solution - Optional Year 4 | Annual | 1 | 45,000.00 | \$ 45,000.00 |
| Overall Total Cost | | | | \$ 225,000.00 | - |

Please note: This information is being captured for auditing purposes.
Any product or service not on the Agency provided Cost Sheet will not be allowable. The state cannot accept alternate pricing pages, failure to use Exhibit A Cost Sheet could lead to disqualification of vendors bid.
Quantities listed herein are for bid evaluation purposes; no guarantee of any actual order quantities should be implied.
Vendor should type or electronically enter the information into the Pricing Page to prevent errors in the evaluation.

BIDDER /VENDOR INFORMATION:

| | |
|-----------------------|---|
| Vendor Name: | Dynamis, Inc. |
| Address: | 8260 Willow Oaks Corporate Drive, Suite 800 |
| City, St. Zip: | Fairfax, VA 22031 |
| Phone No.: | 703-338-9695 |
| Email Address: | ssmith@dynamis.com |



Vendor Signature:
 Sarah J. Smith, Vice President, Business Operationsf

12/21/21

Date:



Department of Administration
 Purchasing Division
 2019 Washington Street East
 Post Office Box 50130
 Charleston, WV 25305-0130

State of West Virginia
 Centralized Request for Quote

| | | | |
|--|----------------------------|---|----------------|
| Proc Folder: 970413 | | Reason for Modification: | |
| Doc Description: Emergency Management Information System (EMIS) | | Addendum No. 2 To move bid opening date to 12/21/21 To revise Specifications To respond to vendor technical questions. | |
| Proc Type: Central Contract - Fixed Amt | | | |
| Date Issued | Solicitation Closes | Solicitation No | Version |
| 2021-12-10 | 2021-12-21 13:30 | CRFQ 0606 HSE2200000005 | 3 |

BID RECEIVING LOCATION

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

VENDOR

Vendor Customer Code: VS0000017241
Vendor Name : Dynamis, Inc.
Address :
Street : 8260 Willow Oaks Corporate Drive, Suite 800
City : Fairfax
State : VA **Country :** USA **Zip :** 22031
Principal Contact : Sarah J. Smith, Vice President, Business Operations
Vendor Contact Phone: 703-338-9695 **Extension:**

FOR INFORMATION CONTACT THE BUYER

David H Pauline
 304-558-0067
 david.h.pauline@wv.gov

Vendor
 Signature X

FEIN# 26-1943446

DATE 12/21/21

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

ADDITIONAL INFORMATION

Addendum No. 2

To respond to Vendor Technical Questions, see attached.

To revise Specifications see attached.

To move Bid opening to December 21, 2021 at 1:30 pm EST

No other changes

INVOICE TO**SHIP TO**

DIVISION OF EMERGENCY
MANAGEMENT
BLDG 1 RM EB80
1900 KANAWHA BLVD E
CHARLESTON WV
US

DIVISION OF EMERGENCY
MANAGEMENT
2403 FAIRLAWN AVENUE
DUNBAR WV
US

| Line | Comm Ln Desc | Qty | Unit Issue | Unit Price | Total Price |
|------|---|---------|------------|-------------|-------------|
| 1 | Annual Subscription for EMIS - Initial Year | 1.00000 | EA | \$90,000.00 | \$90,000.00 |

| Comm Code | Manufacturer | Specification | Model # |
|-----------|--------------|---------------|---------|
| 43230000 | | | |

Extended Description:

4.1.2 Contract Item 1: Annual Subscription for EMIS Solution

4.1.2.1 Vendor must provide an annual cloud-based subscription for EMIS Solution as defined in Section 4.1.1.

4.1.2.2 Vendor must provide access for an estimated quantity of 500 users simultaneously with the ability to add more users without delay as per Section 4.1.1.3.10.

See attached specifications for full details.

| INVOICE TO | | | SHIP TO | | |
|--|--|--|---|--|--|
| DIVISION OF EMERGENCY MANAGEMENT BLDG 1 RM EB80 1900 KANAWHA BLVD E CHARLESTON WV US | | | DIVISION OF EMERGENCY MANAGEMENT 2403 FAIRLAWN AVENUE DUNBAR WV US | | |

| Line | Comm Ln Desc | Qty | Unit Issue | Unit Price | Total Price |
|------|--|---------|------------|-------------|-------------|
| 2 | Annual Subscription for EMIS - Optional Year 2 | 1.00000 | EA | \$45,000.00 | \$45,000.00 |

| Comm Code | Manufacturer | Specification | Model # |
|-----------|--------------|---------------|---------|
| 43230000 | | | |

Extended Description:

4.1.2 Contract Item 1: Annual Subscription for EMIS Solution

4.1.2.1 Vendor must provide an annual cloud-based subscription for EMIS Solution as defined in Section 4.1.1.

4.1.2.2 Vendor must provide access for an estimated quantity of 500 users simultaneously with the ability to add more users without delay as per Section 4.1.1.3.10.

See attached specifications for full details.

| INVOICE TO | | | SHIP TO | | |
|--|--|--|---|--|--|
| DIVISION OF EMERGENCY MANAGEMENT BLDG 1 RM EB80 1900 KANAWHA BLVD E CHARLESTON WV US | | | DIVISION OF EMERGENCY MANAGEMENT 2403 FAIRLAWN AVENUE DUNBAR WV US | | |

| Line | Comm Ln Desc | Qty | Unit Issue | Unit Price | Total Price |
|------|--|---------|------------|-------------|-------------|
| 3 | Annual Subscription for EMIS - Optional Year 3 | 1.00000 | EA | \$45,000.00 | \$45,000.00 |

| Comm Code | Manufacturer | Specification | Model # |
|-----------|--------------|---------------|---------|
| 43230000 | | | |

Extended Description:

4.1.2 Contract Item 1: Annual Subscription for EMIS Solution

4.1.2.1 Vendor must provide an annual cloud-based subscription for EMIS Solution as defined in Section 4.1.1.

4.1.2.2 Vendor must provide access for an estimated quantity of 500 users simultaneously with the ability to add more users without delay as per Section 4.1.1.3.10.

See attached specifications for full details.

| INVOICE TO | | SHIP TO | |
|--|--|---|--|
| DIVISION OF EMERGENCY MANAGEMENT BLDG 1 RM EB80 1900 KANAWHA BLVD E CHARLESTON WV US | | DIVISION OF EMERGENCY MANAGEMENT 2403 FAIRLAWN AVENUE DUNBAR WV US | |

| Line | Comm Ln Desc | Qty | Unit Issue | Unit Price | Total Price |
|------|--|---------|------------|-------------|-------------|
| 4 | Annual Subscription for EMIS - Optional Year 4 | 1.00000 | EA | \$45,000.00 | \$45,000.00 |

| Comm Code | Manufacturer | Specification | Model # |
|-----------|--------------|---------------|---------|
| 43230000 | | | |

Extended Description:

4.1.2 Contract Item 1: Annual Subscription for EMIS Solution

4.1.2.1 Vendor must provide an annual cloud-based subscription for EMIS Solution as defined in Section 4.1.1.

4.1.2.2 Vendor must provide access for an estimated quantity of 500 users simultaneously with the ability to add more users without delay as per Section 4.1.1.3.10.

See attached specifications for full details.

SCHEDULE OF EVENTS

| <u>Line</u> | <u>Event</u> | <u>Event Date</u> |
|-------------|-----------------------------------|-------------------|
| 1 | Technical Question Due By 2:00 pm | 2021-12-03 |

| | Document Phase | Document Description | Page |
|---------------|----------------|--|------|
| HSE2200000005 | Final | Emergency Management Information System (EMIS) | 5 |

ADDITIONAL TERMS AND CONDITIONS

See attached document(s) for additional Terms and Conditions