<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>SCHEDULE OF SUPPLIES/SERVICES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DUNS Number: 006928857 THIS IS TO IS FOR THE REQUIREMENT DESCRIBED IN THE SOW. BAH’S PROPOSAL SUBMITTALS ARE INCLUDED BY REFERENCE. GOVERNMENT COR INFORMATION IS LISTED IN THE AWARD DOCUMENT. PERIOD OF PERFORMANCE IS BASE + 4 YEARS. DO/DPAS Rating: NONE Period of Performance: 09/15/2017 to 09/14/2018 Continued ... (Use Reverse and/or Attach Additional Sheets as Necessary)</td>
</tr>
</tbody>
</table>

25. ACCOUNTING AND APPROPRIATION DATA
See schedule

25a. SOLICITATION INCORPORATES BY REFERENCE FAR 52.212-1, 52.212-4, FAR 52.212-3 and 52.212-5 ARE ATTACHED. ADDENDA
25b. CONTRACT/PURCHASE ORDER INCORPORATES BY REFERENCE FAR 52.212-4, FAR 52.212-3 IS ATTACHED. ADDENDA

26. CONTRACTOR IS REQUIRED TO SIGN THIS DOCUMENT AND RETURN COPIES TO ISSUING OFFICE. CONTRACTOR AGREES TO FURNISH AND DELIVER ALL ITEMS SET FORTH OR OTHERWISE IDENTIFIED ABOVE AND ON ANY ADDITIONAL SHEETS SUBJECT TO THE TERMS AND CONDITIONS SPECIFIED.

29. AWARD OF CONTRACT: OFFER
DATED YOUR OFFER ON SOLICITATION (BLOCK 5). INCLUDING ANY ADDITIONS OR CHANGES WHICH ARE SET FORTH HERIN, IS ACCEPTED AS TO ITEMS:

MATTHEW A RAIBLE

Authorized for Local Reproduction
Previous Edition is Not Usable

STANDARD FORM 1449 (REV. 2/2012)
Prescribed by GSA - FAR (48 CFR) 53.212
FEMA DISASTER EMERGENCY COMMUNICATIONS ASSESSMENT REVIEW AND PLANNING

STATEMENT OF WORK

PROJECT TITLE: Disaster Emergency Communications Assessment, Review and Planning Support for the Federal Emergency Management Agency (FEMA)

1. BACKGROUND: The Federal Emergency Management Agency (FEMA) has a requirement to attain and maintain the ability to assist all levels of emergency management and response with tactical and fixed disaster emergency communications (DEC) capabilities for command and control and situational awareness at all levels of government during emergencies and incidents. This will require FEMA to have personnel, expertise, and systems to provide a set of capabilities across the Federal, state, tribal, and local levels to effectively support information sharing, situational awareness, collaborative decision-making and coordinated operations between governments and public/private entities to continuously protect and care for the public and to achieve national objectives prior to, during and after an incident. One of those capabilities is in the area of DEC including engineering and architecture design development, and maintenance, DEC assessments, reviews, plan development and interagency coordination of DEC issues.

2. APPLICABLE DOCUMENTS: The Federal Emergency Management Agency (FEMA) under the authority of section 408 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. §5174, and Title 44 of the Code Federal Regulations (CFR) prepares for and responds to both natural and manmade disasters. Often, in those response efforts, commercial and public safety communications systems are damaged and providing emergency communications to Federal responders, as well as local and state responders, is a critical mission for FEMA.

3. SCOPE AND GENERAL REQUIREMENTS: The scope of this requirement is to provide system engineering and technical assistance (SETA) support to assist the government staff in performing assessments and DEC plan review and development efforts, interagency planning and coordination and engineering and architecture support.

The type of support provided will include DEC subject matter expertise; operational and tactical communications plan development at the Federal, regional, state, tribal, territory and local levels; and assessments of command and control communications between FEMA's command center and state, tribal and local emergency operations centers in each state. Additionally, technical analytical support is to be provided to access emerging technologies and trends that may affect how federal, state, tribal, and local response organizations employ communications capabilities to support disaster response. Examples include, but are not limited to LTE, Broadband, and Next Generation 911. The support will be provided in the Washington, DC area and in all 50 United States (U.S.) and 6 U.S. Territories. This statement of work (SOW) describes the specific tasks and deliverables, required from the contractor, necessary to support FEMA efforts to achieve these goals.

FEMA requires emergency communications plans/annexes that are up to date, implementable and comprehensive enough to support all-hazards disaster operations including preparedness, prevention, protection, response, hazard mitigation, short-term recovery and the transition to long-term recovery. Additionally, the Disaster Emergency Communications Division (DECD) requires support, nationally and in each Region, to facilitate the establishment and management of the legislatively mandated Regional Emergency Communications Coordinating Committees (RECCWG).

Regional onsite support will be episodic and does not require contractors permanently assigned to a region. The work effort includes providing assistance to the States and territories in all ten regions with developing state-specific plans and maintaining existing plans. DECD also requires support with developing national guidance for the continued management of the RECCWG process and support to the 10 Regions in the administration of the RECCWG. In addition, the effort is to provide assistance to national contingency plan (CONPLAN) and contingency operations (CONOPS) development, regional DECD planning, the development and update of regional emergency communications plans (RECP) and Federal Emergency Communications Annex to the State.
FEMA DISASTER EMERGENCY COMMUNICATIONS ASSESSMENT REVIEW AND PLANNING

Emergency Operation Plan (State Annexes) and the review and update of Emergency Support Function (ESF) communications plans.

The national, regional, state and ESF plans to be developed will be determined by the government at the time of award and the start of each option period. The government reserves the right to change ESF, state, tribal, territory, region and national planning projects during the base period and during option periods to meet changing priorities. Examples of existing national, region, state, tribal, territory and ESF plans that reflect the comprehensiveness and quality expected will be available for review prospective bidders.

FEMA will work with the contractor teams in this effort with government personnel and will be responsible for initial direct interfacing with all region, state, tribal, territory and local officials and leads. The contractor's role in this effort will be to provide Systems Engineering support, Technical Support, Analytical support to FEMA personnel and assist with developing and updating plans, planning materials, DECD assessments, reviews, editing, status reporting and project management.

FEMA needs to attain and maintain the ability to assist all levels of emergency management and response in developing Disaster Emergency Communications (DEC) plans and operational DEC capabilities. This will require FEMA to have sufficient contractor personnel with the proper expertise in communications planning to assist, where requested, state, tribal and local emergency mangers in the development of their own plans.

In addition, there is a need to perform an assessment of the DEC capabilities of the National Response Framework's (NRF) ESFs. This would include assessment of capabilities, review of DEC plans and development of plans where there is a lack or shortfall.

4. SPECIFIC TASKS:

Task 4.1. Program Management

4.1.1 Program Management Tasks. The Contractor shall provide the planning, direction, coordination, and control of its contractor personnel to accomplish all work requirements contained in this SOW in the form of a Functional Work Plan. A draft shall be submitted with the technical proposals.

4.1.2 Program Management Planning. The Contractor shall develop the course of actions and schedules necessary to carry out tasks set forth in this SOW as detailed in their Functional Work Plan. In addition, the contractor shall include mechanisms, for reporting to the Government, and provide the level of visibility necessary for continuous program management.

4.1.3 Progress and Cost Reporting. The Contractor shall monitor and evaluate the program activities and report to the Government the technical and financial program status on a bi-weekly basis. (Bi-Weekly Report) The Contractor shall include a list of Contractor staff that worked on each project during the reporting period and the estimated technical staff hours expended down to the two-digit SOW paragraph level.

Task 4.2. Maintain and enhance Regional, State, and Tribal Communications Plans/Annexes

4.2.1 To date, FEMA HQ DEC, in coordination with the Regions has developed a baseline of 9 of the (10) Regional Emergency Communications Plans (RECP) federal state communications annexes for all 50 states, District of Colombia and five (5) U.S. territories. Full staffing shall be available within five business days of award.

4.2.2 The development process has evolved to consider changes in state, tribal and local capabilities resulting from changes in technology, the addition of equipment due to grant implantation and the increase in interagency and cross border coordination, incorporating communication critical infrastructure analytics, Whole of Community, an emphasis on emerging interoperability, technologies, and expanded engagement with Tribal governments and Amateur radio.
4.2.3 Whole of Community expanded beyond the state's use of Amateur radio services to include the Federal HF and independent Amateur (multi band) Services (Ham) in the State, Tribal and Local, in FEMA Region, and in FEMA.

4.2.4 During the base year of the contract support will be provided to complete a minimum of one (1) additional RECPs. The existing RECPs and 56 Federal State Emergency Communications Annex (State Annex) will undergo a full update review with FEMA Region, State, Trial(s) and local stakeholders minimum 1 time every three (3) years. All 56 State Annexes will also be updated annually (summary update) via ongoing disaster communication forums such as but not limited to RECCWG meetings/calls, RISC meetings, and FEMA region/state exercises. The Contractor will use standard configuration management to record and update state annexes with summary updates quarterly.

4.2.5 The Contractor shall assist the government in the integration of modeling capabilities available within FEMA and DHS components to enhance RECP/annex analytics. The format and presentation of annex information shall be reviewed annually, maximizing operational lessons learned during incidences, FEMA and DEC annual strategic goals, exercise for Annex enhancement, and the myriad of other venues at all levels annually. Recommendations shall be provided to the government task officer for RECP/Annex format and information enhancements. Contractor expertise should include communications engineering expertise to evaluate data in the data base to include but not limited to PSN, HF, amateur (Ham service), SATCOM, LTE, LMR, Spectrum Management, Current and emerging Broad Band technology, NG911, and analytics (GIS).

4.2.6 The evaluation shall consider major geographic threats to communications to include threats such as flooding, earthquakes, Tsunami, and hurricanes. The Contractor shall provide SETA support to FEMA at the level and labor categories identified the attached proposed staffing chart to support the state, tribal, commonwealth, territory, and local DEC assessments, reviews, GIS analytics and mapping development, Communications plans, SOPs and annexes as well as assessment of FEMA command center to interact with the states and support execution of their plans.

Task 4.3. Emergency Support Team Assistance.

4.3.1 Contractor shall provide SETA support to FEMA to support a detailed assessment of Disaster Emergency Communications (DEC) capabilities, plans and processes for the Emergency Support Teams under the NRP and development of communications plans, SOPs and annexes. The contractor shall assist the government task officer in the review of evolving Inter-Agency Disaster Response plans and provide recommendations for modifications to current Emergency Support Function-2 (Communications) to best incorporate NISM/RISM objectives. Full staffing shall be available within five business days of award.

4.3.2 Additionally the Contractor will provide support to the Disaster Emergency Communications Division in supporting the activities of DHS/FEMA related initiatives and the EXCOM as they relate to Disaster Emergency Communications Response Operations. The Contractor shall provide technical analysis of communications trends and implied FEMA tasking as represented in the National Emergency Communications Plan (NECP) published by the Office of Emergency Communications.


4.4.1 The RECCWG have continued to develop over the past 3 years. RECCWG membership, organization and issue development continue to mature. The Contractor shall provide SETA support to FEMA to support the development of National level strategies for RECCWG continued development. Additionally, the contractor shall assist the National RECCWG Coordinator in facilitating the involvement of Federal Partners in the RECCWG process and development of a process by which the efforts of individual RECCWG can be supported and best integrated into a National RECCWG strategy. The Contractor shall assist in the development of reporting tools, charters, meeting agendas summaries and policy documentation to aid in RECCWG institutionalization. Full staffing shall be
available within five business days of award.

4.4.2 The Contractor shall provide SETA support to each of the 10 FEMA Regions to support the administration and technical deliberations of the RECCWG. The contractor shall support the Regional RECCWG Coordinators in the administration of the RECCWG process, develop tracking and reporting tools consistent with national guidance, assist the RECCWG Chairperson and committees in developing meeting summaries, documenting Working Group assessments and assisting the RECCWG in report requirements. Supporting contractor staff will be knowledgeable in, current technologies related to Interoperable communications planning, legislative activities related to governance and state, tribal and local mechanisms involved in inter-intra state and regional interoperability planning.

Task 4.5. DECD Technology Programs Support

4.5.1 The Mobile Emergency Response System (MERS) is the operational component of the Disaster Emergency Communications Division. There are 6 MERS detachments geographically dispersed across the United States. The collective resources and capabilities of DEC/MERS provide for the initial logistics and communications support to the FEMA response efforts and augments state, tribal, and local efforts as required and coordinated through the response mechanism. The communications resources of the MERS detachments must be continually evaluated in light of technology advancements, State, Tribal and local capabilities and anticipated requirements. In this task the contractor will continue the efforts and build upon the Tactical End-State Architecture (TESA) to develop strategic initiatives for the continued refresh and life cycle management of MERS technology to support the response missions. Full staffing shall be available within five business days of award.

4.5.2 The contractor shall include an analysis of data available in the DEC State Annexes and Regional plans (RECP, Region All Hazards plan and other regional event specific plans) providing an assessment of how best MERS capabilities can meet anticipated state requirements. Additionally the contractor shall evaluate 5 year anticipated technology trends by building upon ad updating the As Is and To Be TESA, Technology Roadmap, Equipment Analysis, and State strategic communications plans and provide recommendations to the DECD on how best to make improvements on FEMA organic capabilities to better support the Disaster Response mission.

4.5.3 Furthermore, the contractor shall provide technical, engineering and CAD/GIS support teams to conduct baseline analysis, documentation, and engineering drawings for each MERS detachments' and Mobile Communications Office Vehicle (MCOV) Program's communications systems. Building upon the To Be TESA and Technology Roadmap, the contractor will then provide recommendations and supporting documentation on a standardized equipment and life-cycle upgrade plan. The contractor will also provide technical support and assistance to the DEC Electronic Maintenance (ELM) Facility as required. Additionally, technical analytical support is to be provided to access emerging technologies and trends that may affect how federal, state, tribal and local response organizations employ communications capabilities to support disaster response. Examples include, but are not limited to LTE, Broadband, and next generation 911 and the deployment of FIRSTNET in all states and territories.

Task 4.6. Operations Support:

4.6.1 DEC Operations requires technical support for the development of Standard Operating Procedures (SOPs), and the development of a mechanism to identify Pre-Scripted Mission Assignments (PSMA). The contractor shall assist in the identification, during actual events and through planning activities and exercises source of PSMAs. Additionally the contractor shall assist DEC Operations in the review and updating operational guidelines addressing changes in authority, organization, and interdepartmental relationships. Full staffing shall be available within five business days of award.

4.6.2 The contractor shall assist in the development of an expanded DEC Communications guide for Response Support to Operations and assist the government in identifying the best utilization of available information sharing capabilities to ensure Operations partnerships at the HQ/Regional
and inter-department/Agency levels are provided access to DEC operational guidelines, and assist
in the identification, during actual events and through planning activities and exercises sources of
PSMAs.

4.6.3 The contractor shall assist DEC Operations in the review and updating operational guidelines
addressing changes in authority, organization, and inter-departmental relationships. The contractor
shall assist in the development of an expanded DEC Communications guide for Response Support
to Operations and assist the government in identifying the best utilization of available information
sharing capabilities to ensure Operations partnerships at the HQ/Reginal and inter-
departmental/Agency levels are provided access to DEC Operations guidelines.

Task 4.7. System Security and Certification Support:

4.7.1 The Contractor shall ensure that a MPPR is submitted outlining the, progress, status, and any problems/
issues encountered in the performance of this task. The MPPR shall also include the labor hours expended, by
labor category, for each task and sub-task. The Contractor shall submit the MPPR within ten (10) calendar days
after the end of reporting period. Full staffing shall be available within five business days of award.

4.7.2 The contractor shall evaluate and recommend a security document management solution and methodology.
If implemented, support and maintain the document management solution. Provide expert analysis of new
federal guidance and/or changes to the security environment as it impacts security documentation. Support and
maintain the confidentiality, integrity, and availability of security documentation. Optimize the content and
usability of policy- and procedure-related security documentation. Perform annual review and recommend
updates within 11 months of last government approval date. Perform periodic testing and evaluation of the
effectiveness of information security policies, procedures, practices, and security controls to be performed with a
frequency depending on risk, but no less than annually.

4.7.3 The contractor shall provide recommendations for comprehensive strategy to manage risk to organization
and assets. Provide a concept of operations for evaluating risk across the agency with respect to risk tolerance.
Recommend risk executive function to facilitate consistent, agency-wide application of the risk management
strategy. Develop a plan for implementation of a Risk Management Framework and assist in implementation.
Provide an annual update of the Agency Risk Management Framework.

4.7.4 The contractor shall compile documents that will be used in the formation of the Information Security
Security Program Plan.

4.7.5 The Contractor shall conduct Certification and Accreditation (C&A) package reviews for General Support
Systems to ensure compliance with all federal, and agency requirements for up to 3 General Support Systems per
calendar year. Prepare and/or revise C&A packages of application systems for review for up to 6 IT systems per
calendar year. Review and/or revise all C&A supporting documentation to ensure consistency across interrelated
C&A package components including required revisions in IACS database.

4.7.6 The contractor shall provide security expertise and guidance to ensure the consistent application of C&A
processes across all major information systems. Maintain and provide reports on the status of all C&A materials
and supporting documentation. Provide C&A expertise in the application of best practices to standardize and
enhance C&A processes, ensuring compliance with both federal and DHS requirements. Provide ongoing
awareness of relevant security issues and threats. Develop security metrics to demonstrate security efficacy.
Implement web-based reporting tool for displaying metrics.

4.7.7 The contractor shall perform enterprise-wide internal and external vulnerability testing and scanning
monthly to assess the agency security posture using NESSUS. Prepare report on scanning results monthly.
Prepare a report monthly of analysis of security configuration management.

Task 4.8 Program Management Office Support:
8.1.1 DEC Project Management Office requires project management support for the myriad of current, proposed, and potential projects undertaken to ensure the technical and operational viability of the vehicles, systems, and services DEC elements provide in support of incident response and National Special Security Events / Special Security Events (NSSE/SSE).

8.1.2 The contractor shall assist in the oversight and strategic control of technical projects. The areas of support include but not limited to project risk identification and management, schedule management, cost awareness, training, guidance, National Security (NS) best practices.

8.1.3 The contractor shall work with the DEC Director, Deputy Director, DEC Project Management Office, and DEC Branches/Detachments to ensure projects align with the DEC Program Plan, FEMA, DHS, and enterprise architectures.

5. DELIVERABLES & DELIVERY SCHEDULE:

<table>
<thead>
<tr>
<th>Task Section #</th>
<th>Deliverable Name</th>
<th>Start to Finish Date</th>
</tr>
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<tbody>
<tr>
<td>4.1</td>
<td>Functional Work Plan</td>
<td>Draft – With Proposal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Final – 5 days after Award</td>
</tr>
<tr>
<td>4.1</td>
<td>Bi-Weekly Report</td>
<td>Bi-weekly</td>
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<tr>
<td>4.2</td>
<td>Development of/Revisions to selected national, region, state, territory Communications Plans Develop a minimum of 1 RECP (BE), Update 56 Communications Annex and 10 RECPs on 3 year schedule and annual summary updates (BE &amp; O1-4)</td>
<td>Annually As Required</td>
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<tr>
<td>4.2</td>
<td>Development of/Revisions to selected based on changes in inter/intra-agency operational and policy changes as required.</td>
<td>As Required</td>
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<tr>
<td>4.2</td>
<td>RECCWG Annual Report Regional/National consolidation Review and update of RECCWG Policy guidance as required Regional Plenary onsite support as required. Regional monthly and working group support as required.</td>
<td>As Required</td>
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<tr>
<td>4.3</td>
<td>Technical report on Technology trends and implications to DEC operational requirements. Baseline analysis documentation and engineering drawings of each MERS detachment and Mobile Communications Office Vehicle (MCOV) communications system and recommendations</td>
<td>As Required</td>
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<tr>
<td>4.5</td>
<td>Updated DEC Capabilities Guide (old MERS Capabilities Guide)</td>
<td>Annually</td>
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<tr>
<td>4.5</td>
<td>Updated architecture (As Is and To Be) documents, Technology Roadmap, and Equipment Analysis</td>
<td>Bi-Annually As Required</td>
</tr>
<tr>
<td>4.6</td>
<td>Update, maintain, document new and coordinate to add new communications resources with Mission Assignments branch Pre-Scripted Mission Assignments</td>
<td>As Required Annually</td>
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### 4.7
Manage MERS risk related to information systems and a risk management strategy. Conduct Certification and Accreditation (C&A) package reviews for new and pre-existing General Support Systems to ensure compliance with all federal, and (multiple) agency requirements. Review and/or revise all C&A supporting documentation to ensure consistency across interrelated C&A package components including required revisions in IACS database

| As Required | Annually |

### 4.8
Develop templates, processes, procedures, and track status of DEC projects using best practices and standardized PM tools

| As Required |

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6. **GOVERNMENT-FURNISHED EQUIPMENT AND INFORMATION:** Government furnished equipment will be provided to all support staff working minimum 50% on the contract. The Government will provide access to plans already developed as examples of the comprehensive and quality expected.

7. **PLACE OF PERFORMANCE:** Work will be performed at the Contractor’s site and in the FEMA regions identified in this SOW. Government Furnished work space will be provided for this effort in support of (ISO)tasks as required.

8. **PERIOD OF PERFORMANCE:**

   Base Effort: Date of Award through 12 months

   Option 1: Starting at the end of base and lasting 12 months

   Option 2: Starting at the end of option 1 and lasting 12 months

   Option 3: Starting at the end of option 2 and lasting 12 months

   Option 4: Starting at the end of option 3 and lasting 12 months

9. **TRAVEL AND OTHER DIRECT COSTS:** All Other Direct Cost (ODC) and Travel are Government estimated Not-To-Exceed (NTE) amounts. Contractors will not quote ODCs and Travel as these shall be reimbursed on an actual-cost basis only and Travel will be in accordance with the Federal Travel Regulation. ODCs may include such items as materials, supplies, phone charges, postage, reproduction costs, etc. Travel will include such items as airfare, rental car, hotel, etc. During contract period of performance, all ODCs and Travel require COTR prior approval.

10. **KEY PERSONNEL:** The following labor categories are considered to be key personnel:

   - Project Manager
   - Subject Matter Expert-Telecomm Analyst
   - Senior Information Engineer (GIS Analytics)
   - Senior Information Tech. Associate
   - Senior Operations Research Analyst