

**Statement of Work for**  
**U.S. Department of Homeland Security**  
**Science and Technology Directorate**  
***“Using Ground Sensing to Inform Fire Science and Decision Support”***

**I. BACKGROUND**

The U.S. Department of Homeland Security (DHS) is committed to using cutting-edge technologies and scientific talent in its quest to make America safer. The DHS Directorate of Science and Technology (S&T) is tasked with researching and organizing the scientific, engineering, and technological resources of the United States and leveraging these existing resources into technological tools to help protect the homeland.

DHS S&T began researching new and emerging technology that could be applied to wildland fire incident response at the request from former Federal Emergency Management Agency (FEMA) Administrator Fugate. In response to the request, DHS S&T—in collaboration with FEMA, the U.S. Fire Administration (USFA), and other key stakeholder experts—determined wildland urban interface (WUI) incidents and life-saving functions as the optimal areas for DHS S&T to explore technology innovation.

As a result, S&T formed an Integrated Project Team (IPT) and initiated the WUI Fire Operational Requirements and Technology Capability Analysis Project. Over the course of the project, the IPT identified areas of innovation in wildland fire incident relating to wildland fire preparedness and mitigation and enhanced wildland fire suppression practices, including resistant infrastructure planning, building materials, and building codes. To meet the Administrator’s request, however, the IPT focused its efforts on requirements for improving operational capabilities and incident response to save lives in WUI fires.

The IPT identified seven key findings that could substantially improve immediate life-saving efforts during WUI fire incidents, including the support of broader use of existing fire modeling and forecasting tools for pre-incident planning, while also advancing efforts to create high-confidence, timely WUI fire-specific models that can be used to inform response tactics during extreme conditions.

Wildfires in California are becoming increasingly severe and costly. In fact, 13 of the largest and most destructive wildfires in California happened over the last five years. In 2020 alone, fires swept across 10 million acres in the West, killing dozens and causing \$16 billion in property damage. Urgent assessment and response are necessary to save lives and property and to inform the public. DHS has a need to support the development of accurate situational awareness data on wildfires and prescribed burn activities to enhance the assessment and response to this calamity.

The scope of this project will focus on the development of the WIFIRE Edge, an integrated platform that leverages advances in edge computing. This platform is intended to assist DHS's S&T on the development of integrated sensing and artificial intelligence (AI) at the edge, leveraging existing investments of field sensors and technology.

The outcome of this project will be improved data quality, making fire models more accurate and providing dynamic data-driven capabilities to predict and monitor fires, which will in turn provide the essential information needed to allocate firefighting resources, safety procedures, and support decisions on evacuation at the wildland urban interface.

## **II. SCOPE OF WORK**

The Contractor will develop WIFIRE Edge, an integrated platform that leverages advances in edge computing, during the 18-month performance period and 12-month option period. Edge computing is a form of computing that is done on site or near a particular data source, minimizing the need for data to be processed in a remote data center. The project will develop a concept demonstration for two scenarios: (1) Initial attack response; and (2) Prescribed burn planning and monitoring using commercially available sensing technology, edge computing and next-generation fire modeling. A 12-month option period is included to conduct additional product demonstrations and validation.

The objectives of this project are to:

- 1) Develop WIFIRE Edge Platform to assist with the development of S&T's integrated sensing and AI at the edge; and
- 2) Demonstrate initial attack and prescribed burns concept scenarios to deploy and utilize WIFIRE Edge Platform.

This project is divided into the following five tasks: Project Management; Operational Scenarios; Sensor Deployment; Edge Computing; and Fire Modeling and two optional demonstration and validation tasks.

## **III. TASKS**

### **BASE PERIOD OF PERFORMANCE (18 months)**

#### **1.0 Project Management**

The Contractor shall provide Project Management support services to ensure that required reporting are submitted and that the contract Tasks are successfully completed. Reports shall be filed monthly with the appropriate point of contact at DHS, concurrent with usage statistics, engagement reports, and evaluation monitoring documentation. Task activities shall include, but are not limited to:

- 1.1** Project Kick-Off (award + 10 days);
- 1.2** Project Management Plan/Schedule (award + 15 days); and Final Plan (award + 20 days);
- 1.3** Bi-weekly Status Conference Call and Government provided Quad Reports (standing bi-weekly call date TBD), which shall include the Time Period, Work Performed, Technical Progress, Task

Status, \$ expended, Percent (%) complete, Challenges/Risks, Task Milestones and Schedule;

**1.4 Fiscal Reporting and Financial Management** (monthly on the 15th day);

**1.5 Monthly Technical Status Reports** (monthly on the 15th day); and,

**1.6 Project Management Services**, which shall include project and task execution and oversight, data calls, delivery of all reports, meeting minutes, technical documents, etc.

**1.7 The Contractor shall provide a final presentation of overall program metrics at the completion of performance period.**

**1.8 The Contractor is required to provide any needed updates and improvements to outcomes resulting from the tasks.**

## **2.0 Operational Scenarios**

**2.1 Plan Concept Demo Scenarios:** The Contractor shall plan concept demonstration scenarios for both initial attack and prescribed burns through response activities with its partners. The initial attack scenario will be designed in partnership with the Orange County Fire Authority's Emergency Command Center, who will coordinate the fire company responsible for wearing the technology and communicating qualitative environmental conditions when responding to an emerging fire (planned for the Fall of 2022 during the peak of fire season). The prescribed fire scenario will be planned with partners at the National Park Service and executed on a prescribed fire in Yosemite National Park in May 2023. Demonstrations will be designed to optimize data collection in the field and consider regional topographic variability and connectivity.

**2.2 Develop User Interface:** The Contractor shall develop an operational interface for use in both demo scenarios.

**2.3 Execute Concept Demonstrations:** The Contractor shall execute a concept demonstration for each scenario.

**2.4 Synthesis and Reporting:** The Contractor shall provide a detailed synthesis and analysis of the concept demonstrations and project findings will be executed during the wrap up phase of the project, leading to a final written project report.

## **3.0 Sensor Deployment**

**3.1. Set Up Initial Attack Sensor Environment:** The Contractor shall create the technical documentation for the sensors to be used in the Initial Attack Sensor Environment. There are 8 individual sensors included in the IMSAFE unit, and the documentation will include specifics on each as well as a combined summary of the data for every sensor to monitor power and transmission functionality.

**3.2. Set Up Prescribed Burn Sensor Environment:** The Contractor shall design and build the sensor environment for the Prescribed Burn Demonstration. The Contractor shall update the technical documentation for the sensors to be used in the Prescribed Burn Sensor Environment. The Contractor shall work with sensor manufacturers to ensure completion by January 2023.

## **4.0 Edge Computing**

**4.1 Deploy Edge Infrastructure:** The Contractor shall provide up to 5 gateways with edge computing capability during the burns to ensure there is enough coverage for every IMSAFE unit in

deployment.

**4.2 Develop AI and Data Fusion Techniques:** The Contractor shall create a suite of edge deployable AI microservices for processing of data, including weather averages and anomaly detection alerts. These will be deployed and tested on the Edge Gateway infrastructure. The Contractor deployment support functions will be determined while the infrastructure is being built, and the support functions will be ready for burn events in October 2022 and April 2023.

**4.3 Deploy Data Fusion and Monitoring:** The Contractor shall ensure the developed suite of Edge AI services run on the concept demo environment prior to each run. The Contractor shall provide a deployable container to carry out data fusion and monitoring on the fire trucks during the demo scenarios. The Contractor shall provide on-site support for each burn that include 24 hours (3 staff at 8 hours each) on the day preceding each event, 24 hours on the day of the event, and 16 hours the day following each event to test equipment, analyze data, and compile summation reports.

## **5.0 Fire Modeling**

**5.1 Integrate Sensor Data with Initial Attack Modeling:** The Contractor shall develop workflows for the gateway edge computing device to receive data from IMSAFE sensors and to execute a FARSITE fire behavior model using reduced forms of those data. Wind speeds, relative humidity and temperature values measured from IMSAFE devices will be sent to the gateway, where 1-minute averages will be calculated. Once a point of ignition is defined by a field firefighter in the user interface, the average inputs calculated will auto-trigger the execution of the FARSITE model. Simulated fire growth outputs will feed back to the interface and to the Emergency Command Center for review.

**5.2 Validate Initial Attack Models:** The Contractor shall evaluate the speed, accuracy, and effectiveness of using the micro-scale weather data to execute a local FARSITE model and share in real-time with firefighters in the field. Sensors on firefighters will note the relative rate of spread and direction of the fire to compare fire behavior to the simulated outputs.

**5.3 Create QUIC-Fire Ensembles:** The Contractor shall run a series of fire behavior simulations using QUIC-Fire using a defined set of weather conditions desired for a prescribed fire in a specific part of Yosemite National Park.

**5.4 Validate Fire Models for Adaptive Management:** The Contractor shall evaluate the outcomes of the prescribed fire against the objectives of the burn. The IMSAFE sensor data will be used as part of the after-action reporting to compare what fire behavior was simulated with what occurred to validate if the burn stayed within the prescription window and to further evaluate the extent to which the burn objective was met.

## **OPTION PERIOD (12 months)**

## **6.0 Project Management**

The Contractor shall provide Project Management support services to ensure that required reporting are submitted and that the contract Tasks are successfully completed. Reports shall be filed monthly



with the appropriate point of contact at DHS, concurrent with usage statistics, engagement reports, and evaluation monitoring documentation. Task activities shall include, but are not limited to:

**6.1** Project Kick-Off (award + 10 days);

**6.2** Project Management Plan/Schedule (award + 15 days); and Final Plan (award + 20 days);

**6.3** Bi-weekly Status Conference Call and Government provided Quad Reports (standing bi-weekly call date TBD), which shall include the Time Period, Work Performed, Technical Progress, Task Status, \$ expended, Percent (%) complete, Challenges/Risks, Task Milestones and Schedule;

**6.4** Fiscal Reporting and Financial Management (monthly on the 15th day);

**6.5** Monthly Technical Status Reports (monthly on the 15th day); and,

**6.6** Project Management Services, which shall include project and task execution and oversight, data calls, delivery of all reports, meeting minutes, technical documents, etc.

**6.7** The Contractor shall provide a final presentation of overall program metrics at the completion of performance period.

**6.8** The Contractor is required to provide any needed updates and improvements to outcomes resulting from the tasks.

## **7.0 Scaling**

**7.1 Validation and Demo of Minimum Viable Product:** The Contractor shall test the minimum viable product in larger areas, with a focus on testing connectivity issues across varied terrain and communications back to emergency command centers. The expansion will cover complex terrain in Orange County (coastal and canyon neighborhoods) and deployments of preceded burns in collaboration with the growing BurnPro3D sites. Such scaling will refine the workflow from field sensing to putting new field measurements into field modeling on edge devices, ascertain how ATAK and other tools in the field will receive it, communicate with the emergency control center (ECC) to validate accuracy of the model in the field, and determine uncertainties and decision processes.

**7.2 Validate Edge Sensors:** The Contractor shall test additional edge sensors

## **8.0 Conceptual Research**

**8.1 Conduct Communication and Operationalization Research:** The Contractor shall research new modes of communication and operationalization.

**8.2 Execute Improvement Plan for Fire Models:** The Contractor shall use localized information to add improvements to the fire models based on the identified uncertainties in the modeling tools and examine different types of fire models (e.g., Farsite and Quicfire) to determine how higher resolution field data helps these models.

## **9.0 DELIVERABLES**

All deliverables will be submitted to DHS digitally based on a predefined schedule to allow DHS S&T to review and provide feedback within two weeks after the submission of the deliverable. All changes to the deliverable will be based on the feedback and a final deliverable will be submitted to

DHS S&T within two weeks after the feedback. The deliverables will be finalized based on an acceptance process agreed upon with DHS S&T during the award processing.

### 9.1 DELIVERABLE TABLE

Submit all deliverables, electronically whenever possible, in the format(s) given to the administering contracting officer, Contracting Officer's Representative (COR) is TBD and the DHS PM is [denis.gustv@hq.dhs.gov](mailto:denis.gustv@hq.dhs.gov)

### 10.0 Project Timeline

#	Task	Deliverable	Timeframe
<b>Base Period</b>			
1	1.1 Kickoff Meeting	Project kickoff	Award + 10 days
2	1.2 Project Management Plan & Schedule	Project management plan/schedule	Award + 15 days
3	1.2 Project Management Plan & Schedule	Final plan	Award + 20 days
4	1.3 Bi-weekly Conference Calls and Status Quads Reports	Bi-weekly Status Conference Call and Government provided Quad Reports (standing bi-weekly call date TBD) which shall include the Time Period, Work Performed, Technical Progress, Task Status, \$ expended, Percent (%) complete, Challenges/Risks, Task Milestones and Schedule;	Bi-weekly
5	1.4 Monthly Status Reports (Financial), 7.0 G	Monthly financial status reports	Monthly on the 15th day
6	1.5 Monthly Status Reports (Technical), 7.0 G	Monthly technical status reports	Monthly on the 15th day
7	1.6 Project Management Services	Project management services	Upon request
8	1.7 Final Presentation	Final presentation	Award + 18 months
9	1.8 Updates	Project management updates	As required
10	2.1 Plan Concept Demo Scenarios	Written concept demo scenarios	Award + 1 month

11	2.2 Develop User interface	Mock-ups of interface wireframes	Award + 2 months
12	2.2 Develop User interface	Website and maps with links, external tools - ATAK, Firemap, BurnPro3D	Award + 5 months
13	2.2 Develop User interface	System documentation and test reports	Award + 6 months
14	2.2 Develop User interface	Operational interface for WIFIRE Edge	Award + 14 months
15	2.3 Execute Concept Demos	Report synthesizing demo outcomes	Award + 14 months
16	2.3 Execute Concept Demos	Technical reports with data, photos, videos, and user feedback	Award + 14 months
17	2.4 Synthesis and Reporting	Final project report	Award + 18 months
18	3.1 Set Up Initial Attack Sensor Environment	Technical documentation of specs	Award + 3 months
19	3.1 Set Up Initial Attack Sensor Environment	Technical report with pictures, test results, and description of sensing units	Award + 6 months
20	3.1 Set Up Initial Attack Sensor Environment	Visual documentation of deployment with checklist	Award + 7 months
21	3.1. Set Up Initial Attack Sensor Environment	Final report for Initial Attack	Award + 8 months
22	3.2 Set Up Prescribed Burn Sensor Environment	Technical documentation of specs	Award + 10 months
23	3.2 Set Up Prescribed Burn Sensor Environment	Technical report with pictures, test results and description of sensing units	Award + 12 months
24	3.2. Set Up Prescribed Burn Sensor Environment	Final report for Prescribed Burn Deployment	Award + 14 months
25	3.2 Set Up Prescribed Burn Sensor Environment	Visual documentation of deployment with checklist	Award + 14 months
26	4.1 Deploy Edge Infrastructure	Properly synchronized edge	Award + 14 months

		devices ready for deployment	months
27	4.2 Develop AI/ Data Fusion Techniques	Documentation of environment setup, testing and deployment support	Award + 14 months
28	4.2 Develop AI/ Data Fusion Techniques	Synthesis report on edge AI findings	Award + 16 months
29	4.2 Develop AI/ Data Fusion Techniques	Archive of deployable AI code and microservices in GitHub with technical report; QUIC-Fire ensemble results published in WIFIRE Data Commons	Award + 16 months
30	4.3 Deploy Data Fusion and Monitoring	Deployable container with associated Edge System documentation and report	Award + 14 months
31	5.1 Integrate Sensor Data with Initial Attack Modeling	GIS-compatible data layers in ATAK and Firemap with demo of edge-informed models in Firemap	Award + 6 months
32	5.2 Validate Initial Attack Models	Technical report on the fire models within the demo exercise; after-action review documenting sensor data compared to nearest stationary weather stations and model prediction to real fire progression	Award + 9 months



33	5.3 Create QUIC-Fire Ensembles	Dataset and visualizations for ensembles for Yosemite in BurnPro3D	Award + 14 months
34	5.4 Validate Fire Models for Adaptive Management	Technical report of the FEMO: documentation of burn success based on burn objective criteria with narrative for possible reasons why objectives were or were not met, including simulations and map burn outcomes	Award + 16 months
<b>Option Period</b>			
1	6.1 Kickoff Meeting	Project kickoff	Award + 558 days
2	6.2 Project Management Plan & Schedule	Project management plan/schedule	Award + 563 days
3	6.2 Project Management Plan & Schedule	Final plan	Award + 568 days
4	6.3 Bi-weekly Conference Calls and Status Quads Reports	Bi-weekly Status Conference Call and Government provided Quad Reports (standing bi- weekly call date TBD) which shall include the Time Period, Work Performed, Technical Progress, Task Status, \$ expended, Percent (%) complete, Challenges/Risks, Task Milestones and Schedule;	Bi-weekly

5	6.4 Monthly Status Reports (Financial), 7.0 G	Monthly financial status reports	Monthly on the 15th day
6	6.5 Monthly Status Reports (Technical), 7.0 G	Monthly technical status reports	Monthly on the 15th day
7	6.6 Project Management Services	Project management services	Upon request
8	6.7 Final Presentation	Final presentation	Award + 30 months
9	6.8 Updates	Project management updates	As required
10	7.1 Validation and Demo of Minimum Viable Product	Testing and evaluation Plan	Award + 19 months
11	7.1 Validation and Demo of Minimum Viable Product	Demonstration	Award + 30 months
12	7.1 Validation and Demo of Minimum Viable Product	Final project report	Award + 30 months
13	7.2 Validate Edge Sensors	Testing and evaluation plan	Award + 20 months
14	7.2 Validate Edge Sensors	Final project report	Award + 30 months
15	8.1 Conduct Communication and Operationalization Research	Research plan	Award + 19 months
16	8.1 Conduct Communication and Operationalization Research	Final research report	Award + 30 months
17	8.2 Execute Improvement Plan for Fire Models	Improvement plan	Award + 23 months
18	8.2 Execute Improvement Plan for Fire Models	Improved fire models ready for deployment	Award + 30 months

Base Period						
Key Milestone Due Dates						
Tasks	1	2	3	4	5	6
<b>1 Project Management</b>	X	X	X	X	X	X
1.1 Kickoff Meeting	X					
1.2 Project Management Plan & Schedule	X					
1.3 Bi-weekly Conference Calls and Status Quads Reports	X	X	X	X	X	X
1.4 Monthly Status Reports (Financial)	X	X	X	X	X	X
1.5 Monthly Status Reports (Technical)	X	X	X	X	X	X
1.6 Project Management Services	X	X	X	X	X	X
1.7 Final Presentation						X
1.8 Updates (as needed)						
<b>2 Operational Scenarios</b>	X	X	X	X	X	X
2.1 Plan Concept Demo Scenarios	X					
2.2 Develop User Interface	X	X	X	X	X	X
<b>3 Sensor Deployment</b>	X	X	X	X	X	X
3.1 Set Up Initial Attack Sensor Environment	X	X	X	X	X	X
<b>4 Edge Computing</b>			X	X	X	X
4.1 Deploy Edge Infrastructure			X	X	X	X
4.2 Develop AI/Data Fusion Techniques			X	X	.X	X
<b>5 Fire Modeling</b>				X	X	X
5.1 Integrate Sensor Data with Initial Attack Modeling				X	X	X

Key Milestone Due Dates												
Tasks	7	8	9	10	11	12	13	14	15	16	17	18
<b>2 Operational Scenarios</b>	X	X	X	X	X	X	X	X	X	X	X	X
2.2 Develop User Interface	X	X	X	X	X	X	X	X				
2.3 Execute Concept Demos	X							X				
2.4 Synthesis and Reporting									X	X	X	X
<b>3 Sensor Deployment</b>	X	X	X	X	X	X	X	X				
3.1 Set Up Initial Attack Sensor Environment	X	X										
3.2 Set Up Prescribed Burn Sensor Environment			X	X	X	X	X	X				
<b>4 Edge Computing</b>	X	X	X	X	X	X	X	X	X	X		
4.1 Deploy Edge Infrastructure	X	X	X	X	X	X	X	X				
4.2 Develop AI/Data Fusion Techniques	X	X	X	X	X	X	X	X	X	X		
4.3 Deploy Data Fusion and Monitoring	X	X	X	X	X	X	X	X				
<b>5 Fire Modeling</b>	X	X	X	X	X	X	X	X	X	X		
5.2 Validate Initial Attack Models	X	X	X									
5.3 Create QUIC-Fire Ensembles				X	X	X	X	X				
5.4 Validate Fire Models for Adaptive Management									X	X		



Option Period												
Key Milestone Due Dates												
Tasks	19	20	21	22	23	24	25	26	27	28	29	30
<b>6 Project Management</b>	X	X	X	X	X	X	X	X	X	X	X	X
6.1 Kickoff Meeting	X											
6.2 Project Management Plan & Schedule	X											
6.3 Bi-weekly Conference Calls and Status Quads Reports	X	X	X	X	X	X	X	X	X	X	X	X
6.4 Monthly Status Reports (Financial)	X	X	X	X	X	X	X	X	X	X	X	X
6.5 Monthly Status Reports (Technical)	X	X	X	X	X	X	X	X	X	X	X	X
6.6 Project Management Services	X	X	X	X	X	X	X	X	X	X	X	X
6.7 Final Presentation												X
6.8 Updates (as needed)												
<b>7 Scaling</b>	X	X	X	X	X	X	X	X	X	X	X	X
7.1 Validation and Demo of Minimum Viable Product	X	X	X	X	X	X	X	X	X	X	X	X
7.2 Validate Edge Sensors	X	X	X	X	X	X	X	X	X	X	X	X
<b>8 Conceptual Research</b>	X	X	X	X	X	X	X	X	X	X	X	X
8.1 Conduct Communication and Operationalization Research	X	X	X	X	X	X	X	X	X	X	X	X
8.2 Execute Improvement Plan for Fire Models	X	X	X	X	X	X	X	X	X	X	X	X

## 1.0 OTHER CONTRACT DETAILS

### A. Period of Performance.

The period of performance for this effort is expected to be 18 months from the date of award for the base period of performance, with a 12-month option period.

### B. Travel.

Travel will be required in the performance of the duties listed herein. It is anticipated that travel will be mutually agreed by both parties. The contractor shall be responsible for obtaining COR

approval (electronic mail is acceptable) for all reimbursable travel in advance of each travel event. All travel and other direct costs associated with the execution of the tasks indicated in this SOW will be reimbursed in accordance with the limits set forth in the Federal Travel Regulations, provided the performer provides appropriate supporting documentation.

**C. DHS-Furnished Information and Equipment.**

1. DHS will provide certain DHS information, materials, and forms unique to DHS to the contractor to support certain tasks under this SOW.
2. The DHS S&T COR identified in this SOW shall be the point of contact (POC) for identification of any required information to be supplied by DHS.
3. The contractor shall prepare any documentation according to the guidelines provided by DHS.

**D. Place(s) of Performance.**

All design and development work on the project will occur at the contractor facilities in La Jolla, CA.

Meetings and reviews will be attended as required by the appropriate contractor team personnel at the location to be determined by the DHS S&T COR.

**E. DHS-Furnished Property.**

DHS property will not be provided to the contractor unless otherwise agreed in a modification issued under this contract. In such instances, DHS will maintain property records. Shipping, installation, and commissioning of any GFE equipment not included in the tasks above is not included in the Contractor's pricing.

**E. Intellectual Property**

Contractor is responsible for ensuring any non-Federal volunteers (which does not include employees or subcontractors of Contractor) execute a gratuitous service agreement and waiver of any IP rights in any provided information, data, or sample provided in support of this contract.

**F. Deliverables.**

The contractor shall provide all deliverables identified in this SOW directly to the DHS S&T COR, S&T PM, and DHS S&T Contracting Officer, with a copy of the transmittal letter to the Financial Analyst.

**G. Monthly Status Reports.**

The contractor shall deliver financial and technical monthly status reports (MSR) to the DHS S&T COR, S&T PM, and DHS S&T Financial Analyst on the 15th day of every month containing metrics pertaining to financial, schedule, scope, risk, and performance assessment information in S&T's provided template. This MSR will describe the previous 30 calendar days' activity, technical progress achieved against goals, difficulties encountered, recovery plans (if needed), plans for the next 30 calendar day period, and financial status (see Invoices below). The MSR template will be provided by the DHS S&T COR to the Contractor at project kickoff.

## **H. Invoices.**

The contractor shall deliver a monthly invoice to [invoicesat.consolidation@ice.dhs.gov](mailto:invoicesat.consolidation@ice.dhs.gov) on the 15<sup>th</sup> day of each month. Invoices shall contain the following details for both the month invoiced and cumulative: milestone and associated milestone amount

**I. Funding Requirements.** DHS will provide funding to the contractor in accordance with DHS's appropriations and available funds.

## **J. Security Requirements.**

Work performed under this SOW will not require access to classified information.

It is anticipated that the contractor will not have access to Sensitive Security Information (SSI) under this contract.

Each individual employed under the contract who will have access to sensitive information shall be a citizen of the United States of America, or an alien who has been lawfully admitted for permanent residence as evidenced by a Permanent Resident Card (USCIS I-551). Any exceptions must be approved by the DHS S&T Chief Security Officer or designee. Contractor personnel on the contract having access to SSI data shall be required to have or obtain a DHS Suitability Clearance. All contractor employees and subcontractors with access to SSI shall sign a DHS Form 11000-6 (Non-Disclosure Agreement) and mark both the sensitive information box and the SSI box.

DHS has and will exercise full control over granting, denying, withholding, or terminating unescorted Government facility and/or sensitive Government information access for Contractor employees, based upon the results of a background investigation. DHS may, as it deems appropriate, authorize and make a favorable entry of duty (EOD) decision based on preliminary security checks. The favorable EOD decision would allow the contractor to commence work temporarily prior to the completion of the full investigation. The granting of a favorable EOD decision shall not be considered as assurance that a full employment contractor fitness (suitability) authorization will follow as a result thereof. The granting of a favorable EOD decision or a full contractor fitness (suitability) authorization determination shall in no way prevent, preclude, or bar the withdrawal or termination of any such access by DHS, at any time during the term of the task order. No employee of the contractor shall be allowed unescorted access to a Government facility, access to any sensitive information or access to DHS IT Systems without a favorable EOD decision or contractor fitness (suitability) determination by the DHS Office of Security. Contract employees assigned to the task order not needing access to sensitive DHS information or recurring access to DHS facilities will not be subject to security contractor fitness (suitability) screening. Contract employees waiting and EOD decision may not begin work on the task order. Limited access to Government buildings is allowable prior to the EOD decision if the contractor is escorted by a Government employee. This limited access is to allow contractors to attend briefings, nonrecurring meetings, and begin transition work. Classified information is Government information which requires protection in accordance with Executive Order 13526, National Security Information (NSI) as amended and supplemental directives. If the contractor has access to classified information at a DHS owned or leased facility, it shall comply with the security requirements of DHS and the facility. If the contractor is required to have access to classified information at another Government Facility, it shall abide by the requirements set forth by the agency.

FAR 52.204-2 Security Requirements (Mar 2021)

(a) This clause applies to the extent that this contract involves access to information classified "Confidential," "Secret," or "Top Secret."

(b) The Contractor shall comply with-

(1) The Security Agreement DD Form 441), including the *National Industrial Security Program Operating Manual* (32 CFR part 117); and

(2) Any revisions to that manual, notice of which has been furnished to the Contractor.

(c) If, subsequent to the date of this contract, the security classification or security requirements under this contract are changed by the Government and if the changes cause an increase or decrease in security costs or otherwise affect any other term or condition of this contract, the contract shall be subject to an equitable adjustment as if the changes were directed under the Changes clause of this contract.

(d) The Contractor agrees to insert terms that conform substantially to the language of this clause, including this paragraph (d) but excluding any reference to the Changes clause of this contract, in all subcontracts under this contract that involve access to classified information.

(End of clause)

HSAR 15-01 Clauses Safeguarding of Sensitive Information (MAR 2015) and Information Technology Security and Privacy Training (March 2015) apply to this contract and are found in Section I of the Terms and Conditions.

## POINTS OF CONTACT

The contractor's Points of Contact (POCs) are as follows:

### UCSD POCs:

[REDACTED]  
9500 Gilman Drive, MC 0505  
La Jolla, CA 92093-0505  
[REDACTED]

### Government POCs:

[REDACTED]  
Department of Homeland Security  
Science & Technology  
Washington, DC 20005  
[REDACTED]

Contracting Officer's Representative: TBD