STRATEGIC & SPECTRUM MISSIONS ADVANCED RESILIENT TRUSTED SYSTEMS (S²MARTS) REQUEST FOR SOLUTIONS (RFS)

in support of the

Standardized High Level Data Fusion (HLDF) System Architecture for Counter Unmanned Aerial Systems (CUAS) PROTOTYPE PROJECT

Project No. 21-08

All prospective respondents must be members of the NSTXL consortium.

- 1. **Project Title:** Standardized High Level Data Fusion (HLDF) System Architecture for Counter Unmanned Aerial Systems (CUAS)
- 2. Prototype Project Sponsor/Requiring Activity: Naval Surface Warfare Center (NSWC) Crane (NSWCCR), Maneuver, Surveillance and Engagement Division, Expeditionary Software Development Branch (Code JXWN)
- 3. Contracting Activity: NSWC Crane, Expeditionary Division (Code 023)
- 4. Project Background & Current Capability:

Proliferation of small unmanned aerial system (sUAS) technology presents a unique challenge for the Department of Defense (DoD) – not only can unmodified commercial drones provide cheap and non-attributable surveillance of facilities and platforms, but slight modifications can provide other attack vectors that contribute to asymmetrical warfare. While the DoD has a long history of detecting and defending against aerial threats, the new generation of sUAS present unique challenges due to their small size and high maneuverability. Additionally, sUAS technology is ever changing and rapidly developing new capabilities that must be countered. For these reasons, the traditional method of weapon system development would be too slow and cumbersome to counter the threats of today, let alone be adaptable enough to counter tomorrow's threats.

There are several systems being developed and components being integrated together to address the UAS threat. However, these systems are being designed in stove pipes and do not have interchangeable software modules or high-level data fusion capabilities that address the CUAS domain. This mentality has required each service and each Command and Control (C2) system to develop data fusion capabilities that are unique to a specific domain or are proprietary, requiring redundant funding to essentially do the same things for each of those systems. The approach of this project is to move away from proprietary system architectures and provide an open

architecture, set of requirements, documented data interfaces and C2 system interfaces that can be used to incorporate and sustain individual data fusion software module capabilities in future.

Current DoD C2 and sensor systems are vertically integrated and use different software architectures which are often proprietary to the original equipment manufacturer (OEM), preventing capabilities from being used across multiple C2 systems. The sensors currently used for CUAS are generally either Commercial Off The Shelf (COTS) or Government Off The Shelf (GOTS) and sense the environment in various parts of the electromagnetic (EM) spectrum (from radio frequency (RF) through visible light and beyond). Sensors may be active, passive, or a combination. While the sensors themselves are an important component of any CUAS system, new sensors or types of sensors, and port specifications of those sensors are not being addressed under this RFS. Furthermore, there are plenty of existing protocols that are used to connect sensors to C2 systems and to share data between systems. The scope of this RFS does not involve the replacement or replication of those efforts. The demonstrated application of this project is to ingest sensor data (using existing interfaces), perform High Level Data Fusion (HLDF) on that sensor data, and present actionable information to the C2 system.

The DoD has developed CUAS systems to counter specific threats or types of threats, there has to date been no overarching design for a generalized system that is extensible and flexible enough to counter the generalized sUAS threat by being able to interchange HLDF components with minimal modifications for non-proprietary software capabilities. The disparate nature of current CUAS systems also leads to a high cognitive workload on the operator in order to get a clear picture of the overall threat and the possible impacts it could have. Inevitably, this means different operators will reach different conclusions about the threat level and possible impacts of that threat, even when presented with the same or similar data. Instead of having the operator collate all the data to get a picture of the threat, which must occur prior to initiating any countermeasures, the DoD would like for the open HLDF architecture to be able to perform object assessment, situational assessment, and threat assessment to inform the operator of the overall threat that is present.

NSWC Crane has been funded by the Joint Counter UAS Office (JCO) to develop a flexible, scalable, reusable, and extensible open software architecture allowing services and C2 systems to develop or integrate data fusion software modules using a common data fusion architecture to enable swapping software modules between systems in order to reduce redundancy in capabilities that use unique or undocumented software architectures. The open HLDF architecture developed in performance agreements under this RFS will enable data from multiple sources to be ingested and fused to perform object assessment, situational assessment, and threat assessment of sUAS to produce actionable information to be presented to the warfighter so he or she may initiate countermeasures to deter or defeat the threat.

5. Desired End-State Objective(s) & Success Criteria:

The goal of this project is to document and provide a prototype open systems architecture that defines the requirements and interfaces of a reference architecture for High Level Data Fusion (HLDF) capability in support of a C2 system that can fuse data from multiple sources to provide object assessment, situational assessment, and threat assessment. The architecture should be capable of allowing various software modules to be used in C2 systems that adopt the HLDF

reference architecture to enable efforts to be focused on improving specific data fusion capabilities within the system. The HLDF reference architecture developed in this project will include requirements and interfaces for software modules, as well as an assessment of existing capabilities with the purpose of reducing the cognitive workload on the operator so that they can focus on countering the threat.

The results of this prototype project will be a well-documented HLDF architecture with Computer Software Configuration Item (CSCI) requirements and associated Interface Description Documents (IDDs) that can be used for competitive design and development of complete HLDF components of C2 systems or individual data fusion software modules and can be used to allow software modules from multiple organizations or systems to be interoperable. While individual software modules may still contain proprietary aspects, the overarching HLDF architecture should be non-proprietary.

Within the HLDF system itself, the DoD would like to be able to abstract the architecture enough so that various software modules may be swapped out with best of breed approaches (i.e.—being able to replace a correlator module with a different correlator that appears to work better with radar data). This prototype project also aims to define the software architecture necessary for a generalized HLDF system for CUAS at a CSCI level, and associated IDDs to define the message data that needs to be passed between the various CSCI's in order to:

- 1. Detect, track, identify, and characterize objects (categorized under the Data Fusion model from Joint Directors of Laboratories (JDL) as Level 1 Data Fusion: Object Assessment);
- 2. Understand how the objects interact with each other and the protected area(s) (JDL Level 2: Situational Assessment);
- 3. Understand the threat the object/situation presents to the protected area(s) and assess the impact of threats (JDL Level 3: Threat Assessment).

The HLDF architecture should be extensible in order to account for advances in sensors and the continued development of CUAS systems. The HLDF architecture should be designed to implement Level 2 and Level 3 data fusion (situational assessment of the threat with respect to the protected area(s) and impact assessment of the threat with respect to the protected area(s)) in order to alleviate the operator from having to accomplish that workload manually.

This data fusion enabled open HLDF architecture will be used to improve existing C2 system and/or create new systems to counter new threats, to compete contracts for updates to individual or multiple software modules, and to test best of breed software modules. The reference open HLDF architecture should have fully documented internal and external data interfaces and data flows to ensure interoperability of equipment and components across CUAS systems regardless of manufacturer.

The HLDF C2 software architecture should be scalable from systems of components to a system of systems. The idea is that the open HLDF architecture may be deployed as a single installation (i.e.—sensors and HLDF capability installed on a single vehicle) or a network of installations (i.e.—multiple sensor suites distributed over a base perimeter with multiple operator consoles monitoring the Common Operational Picture with each operator responsible for protecting certain areas/assets).

During phase 3, a proof-of-concept HLDF capability following the documented architecture will be integrated and deployed to a government test facility. The capability will also be evaluated using existing COTS/GOTS sensors or simulators (which will be Government Furnished). The proof-of-concept HLDF capability will also demonstrate the ability to swap software modules within the open HLDF architecture to support enhanced or additional capabilities. The proof-of-concept HLDF capability will be evaluated in the ability to share data with C2 systems deemed relevant and made available (which will be Government Furnished after the relevance is determined in early phased efforts). The results of the evaluation will lead to the creation of a gaps list to enable a complete proof-of-concept for a fully implemented HLDF capability.

Primary deliverables include the following items that have unlimited government rights to be used in future competitive contracting actions:

- Phase 1: Objective: Completed in <3 months after agreement award.
 - O Assessment of current system architectures used for C-sUAS missions to determine if some software modules can be adopted rather than created from scratch. Note that the Government will be responsible for providing existing CUAS system documentation and that some of this documentation may have restricted data rights that require a Non-Disclosure Agreement (NDA), which will be marked and disclosed accordingly as they are made available to the project.
 - Notional HLDF architecture necessary to implement HLDF
 - O Initial assessment of data requirements for various sensor modalities used for CUAS and documented recommendations to influence common external sensor/system interfaces to support future application of this effort (such as influence on the Forward Area Air Defense C2 (FAAD-C2) Interface Control Documents (ICDs), Multi-Environmental Domain Unmanned Systems Application (MEDUSA) ICDs, Universal Command and Control (UC2) ICDs, etc.).
- Phase 2: Objective Completed <15 months after agreement award.
 - Final HLDF software architecture definition (Block diagram due within 9 months ARO).
 - o Adoption or creation of documented CSCI requirements for all software modules within the HLDF C2 architecture
 - o Adoption or creation of IDD(s) between each CSCI with generalized external interface IDDs (i.e.—data feeds, C2 systems, and deployment environments).
 - Updated assessment of data requirements for various sensor modalities used for CUAS and documented recommendations to influence common external sensor/system interfaces outside of the focus of this effort (FAAD-C2 ICDs, MEDUSA ICDs, UC2 ICDs, etc.).
- Phase 3: Objective <21 months after agreement award. May require additional funding.
 - System Integration Lab (SIL) infrastructure to facilitate interoperability and performance testing with existing software capabilities integrated together using the open HLDF software architecture.

- Conversion of existing software capabilities to adapt to architecture.
 - This can be done by influencing system owners to adapt to the HLDF Architecture with their own funding, or writing wrappers around existing modules to enable them to work in the HLDF Architecture.
- A gap list of capabilities not implemented in the SIL because the software/data fusion capability does not yet exist or the adaptation of existing capabilities is not feasible within the time or budget allotted. The aim is to have a working module for each CSCI such that there is a baseline for comparison and testing of software modules developed in the future.
- Final assessment of data requirements for various sensor modalities used for CUAS and documented recommendations to influence common external sensor/system interfaces outside of the focus of this effort (FAAD-C2 ICDs, MEDUSA ICDs, UC2 ICDs, etc.).
- Phase 4: Objective < 24 months after agreement award. Currently unfunded.
 - Software development to fill in gap list identified in Phase 3. Ideally, all CSCI's would be implemented so there is a fully functional test system.
 - This phase is not currently funded, though the Government expects this to be funded as the next logical step if the prior phases are completed satisfactorily.

6. Project Deliverables:

#	Deliverable(s)	Description	Frequency	Delivery	Data Rights
				Method	
1	Assessment Of Existing C2 Architectures	Assessment of existing architectures stating what portions of those could/should be adopted	1	Electronic	Unlimited Rights (UR)
2	Block Diagram Of CSCIs Necessary For HLDF C2 Architecture	Notional C2 architecture necessary to implement HLDF	Initial and Final	Electronic	UR
3	HLDF C2 CSCI Requirements Documented	Document requirements of each individual CSCI so they can be developed	1	Electronic	UR
4	HLDF C2 CSCI IDDs	Well defined interfaces between CSCIs and to document external interfaces	1	Electronic	UR
5	Recommendations For Updates To Existing External Interfaces	Initial assessment of data requirements for various sensor modalities used for C-sUAS and documented recommendations to influence common external sensor/system interfaces outside of the focus of this effort (FAAD-C2 ICDs, MEDUSA ICDs, UC2 ICDs, etc.).	Initial and Final	Electronic	UR
6	System Integration Lab / Software Modules	Software to implement HLDF C2 architecture using existing and/or new CSCI components defined in Phases I and II. This will not be a single delivery of software, but rather a collaborative development process using tools and storage locations accessible to both Government and Contractor(s). The Government plans to use an agile development methodology, so deliveries are as required and the software may be built and deployed in various locations.	As required.	Electronic	UR
7	Gap List Of Capabilities Not In SIL	Essentially, a requirements document laying out any missing capabilities in the delivered SIL.	Initial and updates after software deliverables	Electronic	UR

#	Deliverable(s)	Description	Frequency	Delivery Method	Data Rights
8	Monthly Status Report	Summary of actions and work completed during prior month	1/month	Electronic	UR

7. Current Project Budget: \$3.5 Million

This value represents what is currently available for the subject project at the time of the RFS release. This value is subject to change but is being provided for planning purposes. Respondents are encouraged to clearly explain how much of their solution can be developed for the advertised amount. Capabilities or project phases that will require additional funding beyond the project budget must be identified as such.

8. Security Classification, Respondent Restrictions, and other required compliances:

This RFS has been released under the following—
☑ Distribution Statement A: Approved for public release
☐ Distribution Statement B: Distribution authorized to U.S. Government agencies only (fill in reason) (date of determination). Other requests for this document shall be referred to (insert controlling DoD office)."
☐ Distribution Statement C: Distribution authorized to U.S. Government agencies and their contractors (fill in reason) (date of determination). Other requests for this document shall be referred to (insert controlling DoD office)."
☐ Distribution Statement D: Distribution authorized to the Department of Defense and U.S. DoD contractors only (fill in reason) (date of determination). Other requests shall be referred to (insert controlling DoD office).
☐ Distribution Statement E: Distribution authorized to DoD Components only (fill in reason) (date of determination). Other requests shall be referred to (insert controlling DoD office)."

This project encompasses the following restrictions:

- a. Security Classification: Project will be at UNCLASSIFIED level, however, some of the documentation and/or systems to be reviewed may be at SECRET level. All deliverables are anticipated to be UNCLASSIFIED at this time.
- b. ITAR Compliance is required at time of project award.
- c. Respondent Restrictions (e.g., domestic companies only): Domestic Companies Only
- d. Section 889(a)(1)(B) Prohibition on Contracting with Entities Using Certain Telecommunications and Video Surveillance Services or Equipment Offeror shall provide their representation in RFS Attachment b.

9. Level of Data Rights Requested by the Government:

☑ <u>Unlimited rights</u>: The right to use, modify, reproduce, perform, display, release, or disclose technical data in whole or in part, in any manner, and for any purpose whatsoever, and to have or authorize others to do so.

Any additional restrictions applicable to this project: Data Rights, Intellectual Property and Planned Terms and Conditions: The Government will retain rights to the software and documentation developed as part of this proposal as outlined in the Project Deliverables above. Rights and IP will be subject to 48 CFR § 252.227-7013, 7014, 7015, 7016, 7017, 7018, 7019, 7025, 7028, 7030, 7037, 7038, and 48 CFR § 252.246-7001.

□ Government Purpose Rights: The right to use, modify, reproduce, release, perform, display, or disclose technical data within the Government without restriction. This also includes the rights to release or disclose technical data outside the Government and authorize persons to whom release or disclosure has been made to use, modify, reproduce, release, perform, display, or disclose technical data for United States government purposes. This level of restriction is set at five-years but may be negotiated & tailored to a specific project. The five-year period, or such other period that may be negotiated, would commence upon execution of the agreement that required development of the items, components, or processes or creation of the data. The performer will have the exclusive right, including the right to license others, to use technical data in which the Government has obtained government purpose rights under this agreement for any commercial purpose during the five-year period. Upon expiration of the five-year period (or other negotiated length of time), the Government will receive unlimited rights in the technical data and computer software.

☐ <u>Limited rights</u>: The rights to use, modify, reproduce, release, perform, display, or disclose technical data, in whole or in part, within the Government. The Government may not, without the written permission of the party asserting limited rights, release or disclose the technical data outside the Government, use the technical data for manufacture, or authorize the technical data to be used by another party, except that the Government may reproduce, release, or disclose such data or authorize the use or reproduction of the data by persons outside the Government if—

- (i) The reproduction, release, disclosure, or use is—
 - (A) Necessary for emergency repair and overhaul; or
 - (B) A release or disclosure to—
 - (1) A covered Government support contractor in performance of its covered Government support contract for use, modification, reproduction, performance, display, or release or disclosure to a person authorized to receive limited rights technical data; or (2) A foreign government, of technical data other than detailed manufacturing or process data, when use of such data by the foreign government is in the interest of the Government and is required for evaluational or informational purposes;
- (ii) The recipient of the technical data is subject to a prohibition on the further reproduction, release, disclosure, or use of the technical data; and

reproduction, release, disclosure, or use.
☐ <u>Other – Customized Level of Rights</u> :

(iii) The contractor or subcontractor asserting the restriction is notified of such

10. RFS and Response Process:

a. The following is requested from all respondents:

	Technical Response	Price Response
Page Maximum	20	10

For written submissions, the following formatting guidelines shall be followed by respondents:

- 10-point font (or larger) for all response narratives; smaller type may be used in figures and tables but must be clearly legible.
- Single-spaced, single-sided (8.5 by 11 inches).
- Margins on all sides (top, bottom, left, and right) should be at least 1 inch.
- Page limitations shall not be circumvented by including inserted text boxes/pop-ups
 or internet links to additional information. Such inclusions are not acceptable and will
 not be considered as part of the response
- Files must be submitted in <u>PDF and/or Microsoft Word formats only</u>. <u>Price volumes may be submitted in an editable, unlocked Excel file.</u>
- b. Each submittal <u>must include</u> (i) a Cover Page, (ii) a Technical Response, and (iii) a Price Response that each align to the instructions below:
 - i. <u>Cover Page</u>: (Not included within page count) The cover page shall include the company's name, Commercial and Government Entity (CAGE) Code (if available), level of facility clearance (if available), address, primary point of contact, business size, and status of U.S. ownership.

Respondents shall also identify the applicable 10 U.S.C. § 2371b eligibility criteria related to the response (*please identify only one*):

• There is at least one nontraditional defense contractor (*defined below*) or nonprofit research institution participating to a significant extent in the project; **OR**

- All significant participants in the transaction other than the Federal Government are small businesses (including small businesses participating in a program described under section 9 of the Small Business Act (15 U.S.C. § 638)) or nontraditional defense contractors; **OR**
- At least one third of the total cost of the project is to be provided by sources other than the Federal Government.

Note: A *Nontraditional Defense Contractor* is defined as an entity that is not currently performing and has not performed, for at least the one-year period preceding the solicitation of sources by the Department of Defense (DOD) for the procurement of transaction, any contract or subcontract for the DOD that is subject to full coverage under the cost accounting standards prescribed pursuant to 41 U.S. Code § 1502 and the regulations implementing such section.

ii. Technical Response:

Responses should be constructed to align with the order of the instructions below (1 - 8).

1. <u>Solution Narrative</u>: Respondents shall describe the approach used to design/deliver a unique prototype solution for the prototype technology objectives defined in RFS Section 5, Desired End-State Objective(s), to include any attachments. While these focus areas are of significant importance, responses will be considered as a whole. No pricing shall be included in the technical response.

The Solution Narrative must also include a discussion on schedule and the timing of all deliverable(s) to include those outlined within RFS Section 6, Project Deliverables.

2. Explanation Supporting Eligibility for Award of a Prototype OTA:

Respondents shall provide rationale to support the specific condition that permits award of an OTA to the proposed prime contractor/performer. The onus of proof to support nontraditional participation to a significant extent; small business or nontraditional defense contractor status; or any cost sharing arrangement lies with the respondent and has a direct correlation to award eligibility.

3. Foreign Owned, Controlled, or Influenced (FOCI) Documentation (if applicable): Documentation may include, but is not limited to: Standard Form 328 (Certificate Pertaining to Foreign Interest); Listing of Key Management Personnel; an Organizational Chart; Security Control Agreements: Special Security Agreements; and Proxy Agreements or Voting Trust Agreements. It is recommended that companies who fall within the FOCI category visit https://www.dss.mil for additional guidance and instruction.

- 4. <u>Government Furnished Property or Information</u>: Respondents must clearly identify if its proposed solution depends on Government Furnished Information (GFI) / Government Furnished Property (GFP) or other forms of Government support (i.e. laboratory or facility access), etc.
 - If so, the response must specify the GFI/GFP required. Respondents must clearly identify if its proposed solution depends on GFI/GFP or other forms of Government support be provided, the impact to the solution if the requested information/property/asset is not available, and will confirm the details with the respondent prior to any proposal revisions or selection, if applicable.
- 5. <u>Mandatory Compliance with Restrictions:</u> Respondents must address the restrictions identified within RFS Section 8, Security Classification, Respondent Restrictions, and other Required Compliance, and explain how each regulation or standard is currently, or will be met.
- 6. <u>Task Description Document (Not Included Within Page Count)</u>: Respondents must provide a Task Description Document (TDD) outlining the project tasks to be performed along with schedule milestones and delivery dates required for successful completion. It is anticipated that, if selected, the proposed TDD will be incorporated into the resultant OTA. Respondents are encouraged to be concise but thorough when outlining their work statements. The TDD may be submitted as an appendix or a separate file as part of the proposal.
- 7. <u>Summary of Subcontractor Participation (if applicable)</u>: Respondents must identify all subcontractors involved and their role within the performance of the proposed concept. The information must include the following:
 - a. Subcontractor company name, Commercial and Government Entity (CAGE) Code (if available), level of facility clearance (if available), address, primary point of contact, business size, and status of U.S. ownership.
 - b. If the subcontracted company's involvement is considered significant, rationale supporting the significance must be present within the narrative. The onus of proof to support participation to a significant extent or any cost sharing arrangement lies with the respondent and has a direct correlation to award eligibility.
 - c. If applicable, Foreign Owned, Controlled, or Influenced (FOCI)
 Mitigation Documentation shall be provided for subcontractors and will
 not count towards the page count.
- 8. <u>Data Rights Assertions and Level of Rights Proposed:</u>

- a. The rights offered should be displayed in a manner that allows for ease of discussion in determining trade-offs and potential options for long-term sustainability of the deliverables of this effort.
- b. If rights are being asserted at a level less than the Government's desired level of allocation (see RFS Section 9, Level of Data Rights Requested by the Government), respondents must provide detail explaining the specific rationale for the assertion. Please also review 10(b)(iii)(5) below for additional requirements related to data rights pricing.
- c. Any items previously developed with federal funding (and used for the proposed solution) should clearly identify all individual components funded by the Government and the recipient of the deliverables.
- d. If commercial software is proposed as part of the prototype solution, all applicable software licenses must be identified and included with the response. Note that any software license term or condition inconsistent with federal law will be negotiated out of the license.

iii. Price Response:

The price response shall be submitted as <u>a separate file</u> from the technical response. No pricing details shall be included in the technical response. This project will employ the following pricing structure:

☐ Fixed Price with Payable Milestones (The Government prefers Fixed Price with
Payable Milestone Pricing however, Expenditure Based solutions will also be
considered).

☐ Expenditure Basis (cost reimbursable)

- The overall total price should be divided among severable increments that align to a proposed milestone payment schedule. Milestones are not required to match actual expenditures but should realistically align to the effort expended or products delivered.
- 2. In order to support the Government's evaluation of fair and reasonable pricing, the respondent shall delineate the key pricing components, and show clear traceability to the phases and/or milestones of the Technical Response. At a minimum, key pricing components include Labor Total(s), Other Direct Costs/Material Total(s), License prices and Subcontractor price(s). Data should be segregated by each key objective, milestone, and/or phase proposed.
- 3. Include a brief narrative that explains your pricing structure and maps the proposed prices to the solution's technical approach.

- 4. Including a Basis of Estimate to support your pricing may substantially expedite evaluation of your response.
- 5. If limited or restricted rights are being asserted within the response, a table that includes prices for both Government Purpose Rights and Unlimited Rights for any limited or restricted item must be included.
- 6. Any additional features or capabilities that extend beyond the currently requested core technical objectives shall be separately priced for the Government's consideration. Pending funding availability and need, the Government may fund these advanced features at a later date.

11. Evaluation Process and Methodology:

- a. Individual responses will be evaluated with consideration given to:
 - i. Demonstrated expertise and overall technical merit of the response;
 - ii. Feasibility of implementation; and
 - iii. Total project risk as it relates to the technical focus areas, price and schedule
- b. The Government will evaluate the degree to which the proposed solution provides a thorough, flexible, and sound approach in response to the prototype technical objectives as stated in RFS Section 5, Desired End-State Objectives, as well as the ability to fulfill the objectives in this RFS.
- c. The Government will award this project, via S²MARTS (Agreement No. N00164-19-9-0001), to the respondent(s) whose solution is assessed to be the most advantageous to the Government, when price, schedule, technical risks, the level of data rights, and other factors are considered. The Government reserves the right to award to a respondent that does not meet all the requirements of the RFS.
- d. The proposed project price, schedule, and intellectual property/data rights assertions will be considered as aspects of the entire response when weighing risk and reward. The assessment of risks is subjective and will consider all aspects of the proposed solution. Respondents are responsible for identifying risks within their submissions, as well as providing specific mitigating solutions.
- e. The Government reserves the right to reject a submission and deem it ineligible for consideration if the response is incomplete and/or does not clearly provide the requested information. Debriefings will not be provided.

12. Follow-On Activity:

a. Upon successful completion of this prototype effort, the Government anticipates that a follow-on production effort may be awarded via either contract or transaction, without the use of competitive procedures if the participants in this transaction successfully complete the prototype project as competitively awarded from this

- document. The prototype effort will be considered successfully complete upon demonstration of the aforementioned technology objectives.
- b. Successful completion for a specific capability may occur prior to the conclusion of the project to allow the Government to transition that aspect of the prototype project into production while other aspects of the prototype project have yet to be completed.
- c. Requirements of other potential follow-on activities could involve, though not limited to, continued development and baseline management, fielding, sustainment, training, further scaling of the solution, integration of future capabilities, or integration of the solution with other capabilities.

13. Attachments

- a. Section 889 Prohibition and Reporting
- b. Section 889 Verification and Representation
- c. DD Form 254

14. Important Dates

- a. Questions related to this RFS shall be submitted no later than March 15, 2021.
 - To submit any questions, visit the opportunities page at www.nstxl.org/opportunities, select the "Current" tab, locate the respective project, and select "Submit a Question".
- b. Proposals submitted in response to this RFS are due no later than Friday, April 9, 2021 at 12PM EST.
- c. To submit your proposal, visit the opportunities page at www.nstxl.org/opportunities, select the "Current" tab, locate the respective project, and select the "Submit Proposal" link. You must have an active account and be logged-in to submit your response.
- d. RFS Respondents must be active members of the consortium at the time of proposal submission.

15. Additional Project Information

- a. The Government intends to award one Other Transaction Agreement as a result of this RFS; however, more than one award may be made if determined to be in the Government's best interest. The Government also reserves the right to not select any of the solutions proposed.
- b. Acceptable responses not selected for the immediate award will be retained by NSTXL & the Government for possible future execution and funding. The non-selected proposals will be considered as viable alternatives for up to 36 months. If a

proposal (that was not previously selected) is determined to be a suitable alternative, the company will be contacted to discuss any proposal updates and details of a subsequent project award.

Respondents whose proposals are not selected for the initial award shall not contact the Government or NSTXL to inquire about the status of any ongoing effort as it relates to the likelihood of their company being selected as a future alternative.

- c. The United States Navy, specifically Naval Surface Warfare Center, Crane Division, has release authority on any publications related to this prototype project.
- d. Unsuccessful respondents will be notified, however, debriefings for this project are not required nor planned at this time.
- e. If resource-sharing is proposed in accordance with 10 U.S. Code § 2371b(d)(1)(C), then the non-Federal amounts counted as provided, or to be provided, by parties other than the Federal Government may not include costs that were incurred before the date on which the OT agreement becomes effective. Costs offered as a resource-share that were incurred for a project after the beginning of negotiations, but prior to the date the OT agreement becomes effective, may be counted as non-Federal amounts if and to the extent that the Agreements Officer determines in writing that: (1) the party other than the Federal Government incurred the costs in anticipation of the OT agreement; and (2) it was appropriate for the entity to incur the costs before the OT agreement became effective in order to ensure the successful implementation of the OT agreement.
- f. Certain types of information submitted to the Department during the RFS and award process of an OT are exempt from disclosure requirements of 5 U.S.C. §552 (the Freedom of Information Act or FOIA) for a period of five years from the date the Department receives the information. It is recommended that respondents mark business plans and technical information that are to be protected for five years from FOIA disclosure with a legend identifying the documents as being submitted on a business confidential basis.
- g. No classified data shall be submitted within the proposal. To the extent that the project involves DoD controlled unclassified information, respondents must comply with DoDI 8582.01 and DoDM 5200.01 Volume 4. Respondents must implement the security requirements in NIST SP 800-171 for safeguarding the unclassified internal information system; and must report any cyber incidents that affect the controlled unclassified information directly to DoD at https://dibnet.dod.mil.
- h. Export controls (if applicable): Research findings and technology developments arising from the resulting proposed solution may constitute a significant enhancement to the national defense and to the economic vitality of the United States. As such, in the conduct of all work related to this effort, the selected performer must comply strictly with the International Traffic in Arms Regulation (22 C.F.R. §§ 120-130), the

National Industrial Security Program Operating Manual (DoD 5220.22-M) and the Department of Commerce Export Regulation (15 C.F.R. §§ 730-774).