

**Request for Solutions (RFS)  
Cyber Warfare Prototyping (CWP) Project  
Flexible Cross Domain (FXD) Prototype  
January 12, 2022**

**1. Purpose and Authority**

This Request for Solutions (RFS) is seeking vendors for an Other Transaction Authority (OTA) agreement, for the Cyber Warfare Prototyping (CWP) Project Flexible Cross Domain (FXD) Technology Prototype for the Naval Air Warfare Center Aircraft Division (NAWCAD) Cyber Warfare Department (CWD).

The Government will evaluate the solutions with the intent to competitively award one or multiple Other Transaction (OT) Agreements for prototype projects through the Training and Readiness Accelerator (TReX) vehicle, in accordance with 10 U.S. Code § 2371b.

**2. Summary and Background**

The Cyber Warfare Department (CWD), under organizational structure of Naval Air Warfare Center Aircraft Division (NAWCAD) Digital Analytics Infrastructure & Technology Advancement (DAiTA) Group, develops and assesses cyber warfare capabilities for mission assurance, increased warfighting system lethality, and to defend Naval Air Systems Command (NAVAIR) weapon systems (including aircraft, unmanned vehicles, weapons, and sensors) and directly corresponding support systems (including data links, mission planning systems, maintenance systems, and logistics systems). At present, CWD has determined current security measures are inadequately designed for weapon systems and the corresponding support systems.

These weapon systems and corresponding support systems require new approaches to risk assessments, lethality improvements, and onboard communications for weapon systems and corresponding support systems. Increasingly interconnected platforms are increasingly reliant upon multi-level security (MLS) architectures, involving real-time bi-directional communication from sensors/payloads and data sources to command and control (C2) exploitation systems across various security domains. Additionally, the very teams who perform the risk assessments and adversarial emulation for NAVAIR weapon systems require cyber-resilient cross-domain transfer mechanisms and system architectures.

The CWP project, seeks to advance prototype capabilities that will improve the resiliency of Naval Aviation, US Navy, and DoD weapon systems. Through this project, the CWD seeks to ensure that warfighting systems and their directly

corresponding support systems can maintain operational readiness and are survivable and mission capable in the face of modern cyber warfare threats. This project will conduct cyber test tool prototyping, cyber warfare capability prototyping, and pilot demonstrations focused on the identification, development, integration, demonstration, and assessment of novel concepts and emerging and enabling technologies and capabilities. This project will address CWD-identified shortcomings related to cyber resiliency, cyber survivability, mission readiness, multi-level security, and real-time bi-directional communications from sensors/payloads and data sources to C2 exploitations across various security domains. The project will advance novel concepts and emerging technologies that will ensure Navy and DoD systems can maintain operational readiness and survive threats to the systems, platforms, and directly corresponding support systems.

In support of furthering the NAWCAD Cyber Warfare goals to advance technology for cyber warfare operations, the Government anticipates releasing several RFS' in each technology category identified below.

Specific prototype capabilities advanced by the CWP project may include a focus on, but will not be limited to:

- Flexible Cross Domain (FXD) Technologies
- Multi-Level Security Communications Systems
- Airborne Manned and Unmanned Systems
- C4ISR Cyber Resiliency Improvements
- Mission Planning Systems
- Enterprise Information Technology Systems
- Special Communications Systems
- Tactical Communications Systems
- Cyber Intrusion Detection Technologies
- Steganography Detection Technologies
- Covert C2 Detection Technologies
- Defensive cyber warfare technologies
- Offensive cyber warfare technologies

Through a phased approach, CWP will explore, develop, demonstrate, and assess and advance cyber warfare capabilities in multiple focus areas:

- Manned Aircraft Systems
  - Subsystems
  - Communications systems
  - Maintenance and/or logistics systems
- Unmanned Systems

- Subsystems
  - Communications systems
  - Maintenance and/or logistics systems
- Weapon Systems
    - Subsystems
    - Communications systems
    - Maintenance and/or logistics systems
  - Control Systems
    - Subsystems
    - Communications systems
    - Maintenance and/or logistics systems

CWD anticipates there to be a mix of deliverables depending on unique requirements identified in each RFS. Deliverables may include SW, HW, or a combination of SW and HW. The RFS will have the type of deliverable(s) and expected outcomes identified within each RFS.

This initial OTA RFS prototype project will focus on the FXD technology, NAWCAD CWD seeks to develop, demonstrate, and assess innovative enhancements to existing commercial off-the-shelf (COTS) cross-domain capabilities that will improve the cyber resiliency of Naval Aviation, US Navy (USN), and Department of Defense (DOD) weapon systems. Through this project, NAWCAD CWD seeks to ensure that warfighting systems and their directly corresponding support systems can maintain operational readiness and are survivable and mission capable in the face of modern cyber warfare threats.

This prototype project will be initially conducted at or below the SECRET level.

### **3. General Information**

3.1. Vendors interested in responding to this RFS must be members of the Training and Readiness Accelerator (TReX). Information about membership can be found at the following webpage: <https://nstxl.org/membership/>

3.2. The cost of preparing and submitting a response is not considered an allowable direct charge to any Government contract or agreement.

3.3. An individual vendor may not submit more than one comprehensive response to this RFS as a Prime. A vendor may participate as a subcontractor to multiple responses. Additionally, the Government will consider and accept partial solutions with majority met for this requirement.

3.4. Non-compliance with the submission instructions provided herein may preclude the vendor from being considered for award.

3.5. All Government participants and advisors in the evaluation process will be Government and are required to sign non-disclosure agreements (NDAs).

#### **4. Government Furnished Information (GFI)/ Government Furnished Property (GFP)**

4.1. The Government does not anticipate releasing GFI or GFE at the RFS stage. Due to the nature of respondents having potentially disparate and unique approaches, no GFI, nor GFE, have been prepared for use in respondents' submissions. However, respondents may identify if GFI or GFP would be necessary for the execution of the proposed solution. Responses should provide as much specificity as possible for the Government to determine the availability of the GFI and/or GFP to support a respondent's approach. During SOW collaboration, the Government team will review all requested GFI/GFE and make an assessment of the request as well as a determination of its availability.

##### **4.2. Security Vetting**

All vendors who want to compete, bid, or team with others for this effort must be willing to comply with the Vendor Contractor Vetting Process (Attachment 1). All vendors (Prime and Subs) and/or vendors must be vetted for eligibility, suitability, national status e.g., Foreign or USA Foreign Owned, Controlled and Influenced (FOCI) prior to the receipt of any award instrument.

4.3. The Government anticipates this effort along with the capabilities it researches, develops, prototypes, demonstrates, and validates will be CLASSIFIED at the SECRET level. Therefore, any vendor with an intent to prime this effort must possess an approved FOCI mitigation and SECRET FCL and is required to complete the Vendor Self Vetting Form (Attachment 6).

The Government will provide the vendor with Security Classification Guides (SCGs) related to the technology developed under the FXD technology prototype effort, to ensure that classified information is not inadvertently created by the vendor during execution of the project. Please refer to the following link for more information on SCGs:

[https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodm/520001m\\_vol1.pdf?ver=2020-08-04-092500-203](https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodm/520001m_vol1.pdf?ver=2020-08-04-092500-203)

The Government intends to provide any approved additional GFI to the awardee within 15 days after award of agreement. Any hardware and technical information provided to the vendor as GFI/Government Furnished Equipment (GFE) is anticipated to be Controlled Unclassified Information (CUI) and up to SECRET.

## 5. Solutions Paper Responses

5.1. Solution Paper responses shall consist of one volume to include an Administrative, Technical, and Price section. Responses shall be submitted in an editable/executable (not scanned) Word/Adobe PDF format. The Technical section is limited to no more than 12 standard size (8 ½" X 11") pages for the total volume count using standard 12-point Arial font. No more than 3 foldouts are allowed with a page size of 11"x17" and will be counted towards the 12-page limit. Please note, each one-sided page will count towards the page count limit. Charts or figures are not bound by the 12-point font requirement but shall be clearly legible. If the solution exceeds the page limitation, the Government may choose not to read any information exceeding the 12- page limit and the information may not be included in the solution evaluation.

Section	Subsection	Format**	Counted towards page limit		Page Limit*
			Yes	No	
Administrative	Cover Page	MS Word/PDF		X	No Page Limit
	Nontraditional Status	MS Word/PDF		X	
	FOCI Status	MS Word/PDF		X	
	OCI & Mitigation Plan	MS Word/PDF		X	
Technical	Sub-Vendor List	MS Word/PDF		X	12-Page Limit
	Vendor Experience	MS Word/PDF	X		
	Management and Facilities Capabilities	MS Word/PDF	X		
	Solution Approach	MS Word/PDF	X		
	Technical Approach	MS Word/PDF	X		
	Govt Desired Rights in Tech Data & Computer SW	MS Word/PDF		X	
	Integrated Master Schedule (IMS)	MS Project/ PDF		X	
Price	Pricing Breakout	Excel		X	No Page Limit
	Basis of Estimate (BOE)	Excel		X	
	Sustainment and Follow-on Rough Order of Magnitude (ROM)	Excel		X	

**\*The Administrative and Pricing Sections along with the cover pages, Sub-Vendor List, Government Desired Rights in Technical Data and Computer Software, Integrated Master Schedule (IMS), Pricing Breakout, Basis of Estimate (BOE), Sustainment and Follow-on Rough Order of Magnitude (ROM), Section 889-Telecommunications and Representations, and Acronym Definitions do not count towards the page count limit.**

**\*\*All PDF's will be editable (not locked).**

## 5.2. Administrative Section (unlimited page count)

The following shall be included in the Administrative Section:

- Cover Page
- Nontraditional status
- Foreign Owned, Controlled or Influenced (FOCI) status
- Organizational Conflicts of Interest and Mitigation Plans

### 5.2.1. Cover Page

The cover page shall include the vendor's name, Commercial and Government Entity (CAGE) Code (if available), NAICS Code, Business Size, Traditional or Non-Traditional status, address, primary point of contact, and status of U.S. ownership. NAICS code for this effort is 541330.

### 5.2.2. Nontraditional Status

The vendor shall provide its nontraditional (see paragraph 5.2.2.1 for definition) business status or its ability to meet the eligibility requirements of 10 U.S.C. §2371b. The vendor shall check **one** of the following boxes – with appropriate justification if needed.

- There is at least one nontraditional defense contractor or nonprofit research institution participating to a significant extent in the project.
- All significant participants in the transaction other than the Federal Government are small businesses or nontraditional defense contractors.
- At least one third of the total cost of the project is to be provided by sources other than the Federal Government.

If the vendor is not a nontraditional defense contractor (NDC) additional information is needed. Vendor shall provide the name and CAGE code information for the NDC participating in the prototype project. Additionally, the vendor shall provide what portion of the work the NDC is performing and an explanation of the significance of the NDC's contribution to the prototype project.

5.2.2.1. Definition of Nontraditional Defense Contractor – an entity that is not currently performing and has not performed, for at least one-year period preceding the solicitation of sources by the Department of Defense (DoD) for the procurement or 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.C §1502 and the regulations implementing such section.

### 5.2.3. Foreign Ownership, Control, or Interest (FOCI) Status

In accordance with RFS Attachment 1, Vendor Contractor Vetting Process, the vendor must include certification that the vendor (and subcontractor(s) is not Foreign Owned or under USA FOCI status (and are not in merger or purchasing discussions for a Foreign company or USA FOCI Company). Should a prospective vendor be unable to so certify, they will be ineligible for award unless the mitigating circumstances in Attachment 1 Vendor Contractor Vetting Process are met. In such a case, these mitigating circumstances shall be detailed in an appendix to the Administrative Section.

### 5.2.4. Organizational Conflicts of Interest and Mitigation Plan

Vendors will submit an Organizational Conflict of Interest (OCI) Mitigation Plan via an appendix to the Administrative Section. In the event there are no real or perceived OCIs, simply state so and annotate what actions would be taken in the event that one is realized.

### 5.3. Technical Section (12-page count)

The following shall be included within the Technical Section:

- Sub-Vendor List
- Vendor Experience
- Project Management
- Solution Approach
- Technical Approach
- Government Desired Rights in Technical Data and Computer Software
- Integrated Master Schedule (IMS)

#### 5.3.1. Sub-Vendor List

Vendor shall provide a list of all sub-vendors involved and their role within the performance of your submission as an appendix to the Technical Section (which will not count towards the page count). The list shall include FOCI status and OCI, Commercial and Government Entity (CAGE) Code, Business Size and Type (Traditional/ Non- Traditional).

#### 5.3.2. Vendor Experience

Vendor shall describe their company or team's, recent and relevant previous experience designing, developing, prototyping, and producing cyber warfare technologies. This experience should also include supporting test and assessment that is similar to the required work of this prototype project. Projects worked in the last three (3) years are considered recent.

#### 5.3.3. Management and Facilities Capabilities

Vendor shall describe their company's methodologies, staffing, organizational structure, and quality assurance processes they intend to use to manage this

prototype project as well as their team composition/personnel and sub-vendor involvement, including a description of subcontractor tasks. Detailed manufacturing and facility capabilities approach to demonstrate the required capabilities to manage and produce the Sustainment and production ramp up.

#### 5.3.4. Solution Approach

Solution Approach responses shall include the vendor's proposed technical solution clearly describing the approach, feasibility and technical risks and mitigation solutions identified in fulfilling the Project Technical Objectives and associated deliverables identified below. The approach shall clearly address planned documentation deliverables (including format and content) and any planned demonstrations, design reviews (including product line quality factors such as agility and reuse), feasibility of implementation, total project risk, and management reviews.

It is anticipated that an OT, or multiple OTs, will be issued. Iterative prototyping is anticipated after the initial period of performance. Further prototyping may require integration, connection, and testing with USG classified and/or unclassified networks as well as transmit classified and unclassified information

#### 5.3.5. Technical Approach

The FXD technology prototype project seeks to develop, demonstrate, and assess innovative enhancements to existing commercial off-the-shelf (COTS) cross-domain capabilities that will improve the cyber resiliency of Naval Aviation, US Navy (Navy), and Department of Defense (DOD) weapon systems.

Through the FXD technology prototype project, NAWCAD CWD seeks to ensure that warfighting systems and their directly corresponding support systems can maintain operational readiness and are survivable and mission capable in the face of modern cyber warfare threats.

Under this project, the vendor will prototype cross-domain enhancements, perform pilot demonstrations and integration support of such technology, focused on the identification, development, integration, demonstration, and assessment of novel concepts and emerging and enabling technologies and capabilities.

This project will address:

- a. Shortcomings related to multi-level security, real-time bi-directional communications from sensors/payloads and data sources to command and control (C2) exploitations across various security domains.
- b. Dependence on the bureaucracy associated with adding new static file types or streaming data types to cross-domain / MLS technologies and will seek to



prototype enhancements to the overall cyber resiliency of cross-domain / MLS technologies.

- c. Through improving the cyber-resiliency of cross-domain technologies, better ensure Navy and DOD systems can maintain operational readiness and survive threats to the systems, platforms, and directly corresponding support systems in cyber-contested warfighting environments.

The above capabilities are not listed in any specific order of priority and are provided to help focus vendor responses. In addition to describing the approach to delivering these capabilities, the technical solution shall also include a full discussion of:

- a. Anticipated development risks.
- b. Proposed timeline tied to milestone activities. The estimated period of performance for completion of Phases 1, 2, and 3.

The vendor's proposed technical solution(s) shall focus on one or more of the following focus areas:

- Manned Aircraft Systems
  - Subsystems
  - Communications Systems
  - Maintenance and/or Logistics Systems
- Unmanned Systems
  - Subsystems
  - Communications Systems
  - Maintenance and/or Logistics Systems
- Weapon Systems
  - Subsystems
  - Communications Systems
  - Maintenance and/or Logistics Systems
- Control Systems
  - Subsystems
  - Communications Systems
  - Maintenance and/or Logistics Systems

The vendor's proposed technical solution shall describe its approach to providing the solution based on the technical objectives identified below:

- a. A design approach that demonstrates a thorough understanding of desired prototype objectives.
- b. Team composition and subcontractor involvement.

- c. Vendors shall also include their capability to handle simultaneous development and production efforts for multiple CWP scenarios, involving multiple platforms, missions, and locations. As outlined throughout Section 5.3, Technical Section, the potential to have several scenarios being developed at the same time is high, as is the possibility of needing to deploy capabilities at more than one (1) user site simultaneously. The Government is interested in understanding the vendor's ability to meet this demand if presented.

A detailed manufacturing and facility capabilities approach to demonstrate the required capabilities to manage and produce the Sustainment and Follow-On Activities described in Section 9. The approach will outline an understanding production capabilities and facilities, production capacities, a notional timeline of Follow-On production activities, technical milestones and integration schedule, production task alignment, material and physical resource requirements, hardware (HW) / software (SW) requirements, and financial management.

The Government estimates the total Period of Performance (PoP) will be 60-months from date of award. Vendors shall include the anticipated delivery schedule to reflect their individual solutions.

The FXD technology effort will be managed and supervised by NAWCAD CWD government personnel. The FXD technology project management team will be comprised of the NAWCAD CWD government representatives and a FXD Project Lead (PL) who will also serve as the Agreements Officer's Representative (AOR). The PL will be supported by other Government and contract personnel. It is expected that the vendor, the Government, and other key stakeholders will collaborate within an Integrated Product Team (IPT) structure to accomplish the objectives identified in this effort. IPT meetings and Technical Interchange Meetings (TIMs) will be conducted as required. It is anticipated that the selected vendor(s) will begin to deliver FXD technology prototypes in spirals of evolution as early as six months after award, and thereafter throughout the entire 60-month period of performance.

FXD Technologies Objectives (Phases):

NAWCAD CWD will implement a phased approach with associated objectives as follows:

Phase 1 (approx. 3 months per spiral): Concept Exploration with the following objectives:

- a. Discerning and refining requirements.
- b. Conceptual/theoretical trade-space assessments.

- c. Risk mitigation options / Alternative solutions.
- d. Demonstration of exit criteria.

At the end of Phase 1, the vendor will be expected to provide a conceptual overview briefing that lays out a spiral development plan for iterations of FXD Technology development and prototyping activities. In this briefing, it should be detailed how the vendor will meet each of the collaborated SOW requirements. Any known programmatic and technical risks should be brought to the attention of the Government during this briefing for an open discussion on how best to meet all program objectives. The performer will incorporate any feedback and lessons learned from interactions with the CWD Government representatives into their technical and programmatic approaches for future phases and spirals.

Phase 2 (approx. 6 months per spiral): Engineering, Integration, and Experimentation with the following objectives:

- a. Component-level trade space analysis.
- b. Transition partner candidate reviews.
- c. Risk mitigation options, technical issue resolution, and/or get-well plan pursuits.
- d. Technology demonstration prototype fabrication design review.
- e. Demonstration of exit criteria.

Performer(s) are expected to provide regular briefings at an interval to be determined during SOW and milestone collaboration. However, the Government, may, at any time during Phase 2, request the performer(s) to provide CWD Government representatives with a status brief. At the conclusion of Phase 2, the performer(s) will provide a briefing, technology, demonstration, and design review with opportunity for Q&A and feedback. The performer will incorporate any feedback and lessons learned from interactions with the CWD Government representatives into their technical and programmatic approaches for future phases and spirals.

Phases 3 (approx. 6 months per spiral): Pilot Demonstrations with the following objectives:

- a. Interim developmental test plans and verifications.
- b. Risk mitigation options, technical issue resolution, and/or reduced performance prototype resolution.
- c. Prototype demonstration test plan development and approval.
- d. Prototype demonstration in a relevant environment.
- e. Demonstration and assessment of (or not of) Military Utility.

At the conclusion of Phase 3, the performer(s) will provide a briefing, technology, demonstration, and design review with opportunity for Q&A and feedback. The

performer(s) will provide all COTS or developed software to the Government via DVD-ROM with the minimum required Government Purpose Rights (GPR). The performer(s) will also supply and support installation of a prototype into a relevant environment of the FXD Technology Project Lead's choosing. The performer will incorporate any feedback and lessons learned from interactions with the CWD Government representatives into their technical and programmatic approaches for future phases and spirals.

Vendors should note that each phase will conclude with a decision point that determines whether the project will or will not move into the next phase. The Government will be using an agile iteration cycle allowing for additional decision points throughout each phase to be determined at SOW and Milestone collaboration. Vendors shall identify these points in the milestone schedule submitted with their solution.

To facilitate each phase, the selected performer(s) will be working directly with NAWCAD CWD personnel and end users at the discretion of the NAWCAD CWD project team. Working with the selected performer(s) during SOW and Milestone Collaborations, NAWCAD CWD anticipates incorporating spiral development benchmarks, status briefings, stand-ups, and other spiral techniques as necessary throughout each spiral development and phase. This is a proven approach to support positive, effective, and efficient project communication and outcomes.

#### 5.3.6. Government Rights in Technical Data and Computer Software

The Government requires Government Purpose Rights (GPR) in all technical data (including computer software documentation) and computer software developed under any OT awarded pursuant to the RFS, for, at least, a five-year period. The five-year period, or such other period as may be negotiated, shall commence upon execution of the OT that requires development of the technical data (including computer software documentation) and computer software. Upon expiration of the five-year period, (or other negotiated period), the Government desires up to unlimited rights in the technical data (including computer software documentation) and computer software to be negotiated at any point during SOW collaboration through the follow-on production milestone.

Printed deliverable (e.g., printed hardcopies, .doc, web-based html, etc.) will be labeled and contain all appropriate markings associated with the distribution classification. The vendor shall analyze feasible non-proprietary solutions and incorporate them when applicable to the effort. This includes, but is not limited to, software rights, technical data, source code, drawings and other product definition data, manuals, warranties, and integration efforts.

All technical data, intellectual property and non-commercial off the shelf (COTS) software are desired to be provided with a minimum of GPR.

The vendor shall provide a data rights assertion table (Attachment 3) for all technical data (including computer software documentation) and computer software to be developed or delivered under the OTA. The data rights assertion table shall identify at the lowest segregable level the technical data (including computer software documentation) and computer software to be developed or delivered under the OT, the vendor's assertion as to the government's rights in each item of technical data (including computer software documentation) and computer software, the basis for such assertion, and the name of the person asserting any restrictions.

Any commercial or COTS shall be provided with a transferable license that allows distribution of the software and transfer of the license to any Government agency or DoD vendor for any CWP prototype project related purpose. All software licensing shall include a minimum term of five years of use. All software shall be provided with any available major upgrades, minor updates, security patches and technical support for the entire period of performance. When the addition of new software or hardware is proposed for the system or developed under this solicitation with Government funding or partial Government funding, the vendor shall ensure that sufficient rights in technical data (software and hardware) are procured to enable the Government to maintain and modify the system using Government personnel and/or third-party vendors.

At any point during the development of the prototype, the Vendor(s) may be requested to provide pricing to acquire any portion of their solution which is delivered with limited or restricted rights. The Government may choose to license or purchase the rights to these proprietary data upon successful completion of the prototype.

All technical data and information developed under this effort should be marked with the appropriate marking in accordance with DoDI 5320.24, Distribution Statements on Technical Documents. 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 PEO STRI."

For the purposes of this RFS and final award document, the Government will use the data rights and computer software related terms defined in Attachment 4, Data Rights License Terms Definitions.

Vendor shall complete the Data Rights Assertions Tables using the format provided in Attachment 3, Data Rights Assertions Tables. The vendor's assertions, including any assertions of its subcontractors or suppliers must be submitted as an appendix to the Technical Section. The tables must be completed in the format set forth in the attachment, dated and signed by an official authorized to contractually obligate the vendor. If additional space is necessary, additional pages may be included. There is no page limit for the Data Rights Assertions Tables, and they do not count against the proposed technical solution page limitation.

### 5.3.7. Integrated Master Schedule (IMS)

An IMS shall be provided in both MS Project and PDF format. The IMS should be resource loaded with each task including a predecessor (if applicable). For each phase and objective, a proposed manning level containing labor categories and direct labor hours broken down per month and tied to the IMS with an accompanying BOE for the labor-hours. The IMS may be attached as an appendix file. The IMS is not included in the total page count and page count is unlimited.

## 5.4 Pricing Section

Vendors shall submit a firm-fixed price (FFP) amount for its solution, further divided into severable milestones for all phases. The Government is not dictating a specific price mechanism. Vendor submitted proposals may require other than FFP based on the government's requirements and the submitted vendor solution(s). However, proposed payments should be linked to clearly definable, detailed milestones in each phase. It should be clear, with sufficient detail, what is being delivered at each milestone. The vendor's pricing milestones may vary from the defined decision points, depending on the proposed solution. Milestones should be established and priced in a manner that enables milestone efforts be worked concurrently. Each milestone price should reflect the anticipated value the Government will receive toward accomplishment of the OTA goals and objectives at the time the milestone is completed. The price volume has no page number limitation.

### 5.4.1. Basis of Estimate (BOE)

Vendor will provide a BOE for the entire proposed effort. BOE should be in Microsoft Excel format. For each phase and objective, a proposed manning level containing labor categories and direct labor hours broken down per month shall be included in the BOE and tied to the IMS.

### 5.4.2. Sustainment and Follow-On Rough Order Magnitude (ROM)

Vendors shall provide ROM pricing for both Sustainment and Follow-On Activities as described in Section 9, Follow-On Activities.

Please note, the Sustainment and Follow-On Activities ROMs will assist in future planning efforts for potential Sustainment and Follow-On efforts. **The Sustainment and Follow-On Activities ROM is not part of the evaluation.**

## 6. RFS Response Instructions

6.1. The Government intends to make one or more OT awards as a result of this RFS.

6.2. All questions related to this RFS shall be submitted utilizing the Vendor Questions Form provided in Attachment 2. Questions must be submitted via email to

[initiatives@nstxl.org](mailto:initiatives@nstxl.org), with “FXD Technology Prototype Vendor Questions” in the subject line.

6.3. Questions must be submitted no later than 12:00 PM Eastern on **January 20, 2022**. Questions received after the deadline may not be answered. Questions shall not include proprietary data as the Government reserves the right to post submitted questions and answers, as necessary (and appropriate) to facilitate vendor solution responses.

6.4. The Government reserves the right to post submitted questions and answers, as necessary (and appropriate) to facilitate vendor Solution Paper responses. Submitted questions will be posted without identifying company names.

6.5. Solution Responses shall be submitted no later than 12:00 PM Eastern on **February 10, 2022**. Solution Responses shall be submitted electronically to [initiatives@nstxl.org](mailto:initiatives@nstxl.org), with “FXD Technology Prototype” used in the subject line. Any submissions received after this time on this date may be rejected as late and not considered.

6.6. Vendors must clearly state assumptions made within their response. Vendors are encouraged to challenge any Government assumptions or restrictive requirements in its individual solution and should articulate any major discrepancies between the RFS and its technical solution. Should a vendor’s solution require a change in policy and/or statute, the vendor shall outline within their technical volume, and describe why the change is needed to realize the benefit of the vendor’s prototype (and potential production).

6.7. Vendor’s solutions shall be valid for at least 180 days after submission.

## **7. Evaluation and Selection Process**

7.1. Solution papers will be evaluated with consideration given to the vendor’s ability to provide a clear description of the proposed solution, technical merit and feasibility of implementation, vendor’s experience, and total project risk. The proposed project price, delivery schedule, and data rights assertions will be considered as aspects of the entire response when weighing risk.

7.2. The Government will evaluate the degree to which the submission provides a thorough, flexible, and sound approach in response to the ability to fulfill the requirements identified in Section 5 of this RFS.

7.3. The Government will review each vendor’s submittal against the criteria, with major consideration given in no specific order of importance to the vendor’s ability to

provide a clear description of the proposed solution, technical merit and feasibility, vendor's experience, vendor's capacity capabilities, management capabilities, and total project risk. The proposed data rights assertions, IMS, and price will be considered as aspects of the entire response when weighing risk. Further, the Government will evaluate the degree to which the proposed concept provides an innovative, unique – yet realistic and sustainable – approach to meeting the FXD technology prototype technical capabilities and objectives. The evaluation will include consideration of the following, listed in no particular order of importance:

- a. Technical Merit and Feasibility – A thorough understanding of the desired objectives, the vendor's technical analysis and design approach to carry out the project requirements as identified in RFS Section 5.
- b. The vendor's recent experience as described in Section 5 to include:
  - I. The vendor's experience in designing, developing, prototyping, and producing cyber warfare technologies
  - II. The vendor's experience supporting the test and assessment of cyber warfare technologies.
  - III. The vendor's experience working with the Government in an agile and adaptable manner through collaboration and iteration.

Project references should not exceed four (4) references.

Recency references shall be within the last three (3) years from the release of the Final RFS.

- c. Management and Facilities Capabilities - Vendor shall describe their company's methodologies, staffing, organizational structure, and quality assurance processes they intend to use to manage this prototype project as well as their team composition/personnel and sub-vendor involvement, including a description of subcontractor tasks. Detailed manufacturing and facility capabilities approach to demonstrate the required capabilities to manage and produce the Sustainment and production ramp up.
- d. Data Rights - The vendor's technical response will require that they clearly outline the appropriate assertion rights in technical data, computer software and software documentation that will be delivered with their solutions along with meeting the minimum GPR data rights requirement.
- e. Integrated Master Schedule (IMS) as it pertains to the entire effort - The Government will evaluate the IMS as acceptable nor not acceptable as it pertains to the approach and the associated milestones.
- f. Price - Vendors shall submit a fixed price amount price for its solution, further divided into severable milestones.

It is important to note, the entire 60-month Period of Performance (PoP) has an anticipated maximum ceiling budget of \$57,000,000. The Government anticipates up to \$3,000,000 are available for the first year of the prototype with additional funding available based on availability of funds. While the Government will evaluate the



overall IMS as it pertains to the solution, the Government will evaluate the vendor's pricing solution to determine if the solution price is within budget. This will support determining the level of associated risk.

7.4. Assessment of risk is subjective. If the risk is obvious or the schedule seems overly aggressive, the Government will consider that in the total risk assessment. Vendors are responsible for identifying risks within their submissions, as well as providing specific mitigation solutions. If sufficient validation of the proposed information is not provided, the Government may reject the submission.

7.5. Unsupported assertions will be discounted by the evaluators. Technology and Manufacturing Readiness Levels (TMRLs) will be considered when weighing the benefit of the solution.

#### 7.6. Selection Process

7.6.1. The Government anticipates awarding one or more OT prototype project(s), through TReX, to the vendor or vendors that propose(s) a solution that best satisfies the Government's objectives. The Government reserves the right to award to a vendor that does not meet all of the requirements but provides attributes or partial solutions of value. Responses will be evaluated by Government personnel.

7.6.2. If more than one vendor submits highly rated solutions, the Government may down select the number of vendors during the solution(s) evaluation process to those with the most technically feasible proposed solutions in order to hold expanded conversations on the proposed solution(s). The Government reserves the right to award to a vendor that does not meet all of the requirements but provides attributes or partial solutions of value.

7.6.3. The Government will award to the vendor(s) whose response will be most advantageous to the Government with price and other factors considered. In making the final decision it may become necessary to compare the solutions of each vendor against the other, but the Government anticipates that its decision is more likely to be made based on each vendor's submittal as evaluated against the criteria described and a determination of which solution(s) is/are deemed most promising to satisfy the Government's need.

7.6.4. The Agreements Officer (AO) will serve as the Selection Official. Evaluations will be conducted by Government personnel (no contractor personnel will participate in the evaluation process). The Selection Official for this effort will be the AO, John T. McCabe

## 8. Additional Information

### 8.1. Export Controls

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 recipient will 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).

8.2. Interaction and/or Disclosure with Foreign Country/Foreign National Personnel  
The Vendor should comply with foreign disclosure processes described in US Army Regulation (AR) 380-10, Foreign Disclosure and Contacts with Foreign Representatives; Department of Defense Directive (DoDD) 5230.11, Disclosure of Classified Military Information to Foreign Governments and International Organizations; and DoDD 5230.20, Visits and Assignments of Foreign Nationals.

8.3 Cyber Incident Reporting: The awardee will properly protect data and comply with specific Government reporting procedures in the event Government data is compromised.

8.4. By submitting a response, respondents shall certify whether covered telecommunications equipment or services **will or will not** be included as a part of its offered products or services to the Government in the performance of this effort. RFS Attachment 7 includes additional detail regarding the representation which must be signed and returned with any submissions.

8.5. All submissions will be unclassified. Submissions containing data that is not to be disclosed to the public for any purpose or used by the Government except for evaluation purposes will include the following sentences on the cover page:

*“This submission includes data that will not be disclosed outside the Government, except to non-Government personnel for evaluation purposes, and will not be duplicated, used, or disclosed -- in whole or in part -- for any purpose other than to evaluate this submission. If, however, an agreement is awarded to this Company as a result of -- or in connection with -- the submission of this data, the Government will have the right to duplicate, use, or disclose the data to the extent agreed upon by both parties in the resulting agreement. This restriction does not limit the Government's right to use information contained in this data if it is obtained from another source without restriction. The data subject to this restriction are contained in sheets [insert numbers or other identification of sheets]”*

8.6. Each restricted data sheet should be marked as follows:

*“Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this submission.”*

## **9. Follow-On Activities**

Upon successful completion of the prototype(s), NAWCAD CWD anticipates deploying the solution across multiple domains which, along with the actual installation, may require some level of life cycle maintenance to sustain prototype capabilities. Follow-On activities could include system and software updates, life cycle maintenance, evolving training requirements and technology insertion. The successful completion requirements will be further defined in the collaborated SOW.

Pursuant to 10 U.S.C. 2371b(f), if competitive procedures were used for the selection of parties for participation in the transaction for a prototype pilot and the participants in the transaction successfully completed the prototype project, production OTs are authorized and offer a streamlined method for transitioning into Follow-On production without competition. Potential Follow-On production contracts may be either sole source, based on successful completion of the prototype project within the scope of this document, or competed at the discretion of the Government. The Follow-On agreement for the FXD production phase could take many forms, including a new OT for Production agreement.

It is anticipated that upon successful completion of the prototype, a follow-on production OT agreement(s) or FAR based contract(s) may be issued to the vendor(s) without the use of competitive procedures. Successful completion will occur when the prototype has been validated and is accepted by the Government. Successful completion will be defined in the negotiated Statement of Work (SOW) for this prototype project.

Further, the Government reserves the right to determine part or all of the prototype project is successfully completed if the vendor shows a particularly favorable or unexpected result justifying the transition to production. These conditions will be specifically defined in the SOW.

Vendors shall provide a Follow-on Production ROM for their approach for handling the potential follow-on production activities. The follow-on production ROM will assist in future planning efforts for potential follow-on production efforts. **Please note that the follow-on production ROM(s) are NOT part of the evaluation.**

Prior to issuing a sole source Follow-On production agreement or contract, the Government will enter into negotiations with the awarded vendor. The negotiations may include evaluation of all potential cost element categories applicable to the effort and may also use price realism analysis. The Government will utilize the most applicable customary method in determining cost elements and prices are fair and reasonable.

## 10. Attachments

Attachment 1, Vendor Contractor Vetting Process

Attachment 2, Questions Form

Attachment 3, Data Rights Assertions Tables  
Attachment 4, Data Rights License Terms and Definitions  
Attachment 5, Terms and Conditions and EULA  
Attachment 6, Vendor Self Vetting Form  
Attachment 7, Section 889, Telecommunications and Representation