

**STRATEGIC & SPECTRUM MISSIONS ADVANCED RESILIENT TRUSTED SYSTEMS  
(S<sup>2</sup>MARTS)  
REQUEST FOR SOLUTIONS (RFS)**

*in support of the*

**Rapid Assured Microelectronics Prototypes using Advanced Commercial Capabilities  
(RAMP)**

**PROTOTYPE PROJECT**

Project No. 20-06

*All prospective respondents must be members of the NSTXL consortium.*

- 1. Project Title:** Rapid Assured Microelectronics Prototypes using Advanced Commercial Capabilities (RAMP)
- 2. Prototype Project Sponsor/Requiring Activity:** Naval Surface Warfare Center, Crane Division, Trusted Microelectronics Division (GXV)
- 3. Contracting Activity:** Naval Surface Warfare Center, Crane Division, Code 0221
- 4. Project Background & Current Capability:** The United States Navy and Air Force, in support of the Office of the Secretary of Defense (OSD), is developing integrated circuit (IC) hardware and workflow prototypes that promote the use of assurance principles, feature protections, and correlation. The RAMP prototype will facilitate the rapid development of IC hardware for further evaluation and technology enablement of DoD, while simultaneously generating workflow prototypes using commercial best practices for DoD defense industrial base (DIB).

The RAMP prototype project addresses brand new technology development that will provide DoD relevant IC prototypes utilizing advanced node fabrication that mitigate the need for International Traffic in Arms Regulations (ITAR) fabrication. Rapid generation and assurance of microelectronic systems is directly relevant to enhancing the mission effectiveness of military personnel and the supported platforms, systems, and components acquired or developed by the DoD and enables assured microelectronics to be used by the services.

Currently, commercial industries and other non-DoD markets are significantly superseding the Department of Defense (DoD) and the traditional Defense Industrial Base (DIB) in the

design and fabrications of State-of-the Art (SOTA) ICs and System On a Chip (SoC). The RAMP project intends to address and replace the obsolete practices utilized by the United States Government in support of SOTA custom IC and SoC design, especially those associated with physical or “back-end” design.

In support of this need, the Navy and Air Force desire to leverage commercial capabilities to develop a RAMP prototype methodology to demonstrate secure enhanced design utilizing commercial fabrication processes for the DoD’s programs. The emphasis on physical design refers to the post Register Transfer Level (RTL) portion of design that includes automated place and route, timing closure, and verification of the physical design. Physical design is particularly challenging because the design methods used are tightly coupled with specific fabrication processes and facilities and because physical design has become more and more complex as semiconductor processes have become more advanced.

The primary objective of the project is to leverage the expertise of commercial industry to develop and demonstrate a novel capability for design of SOTA (defined as  $\leq 22\text{nm}$  node Si CMOS) ICs and SoCs microcircuits that can be designed and verified in the most advanced semiconductor processes. In addition, a RAMP prototype shall achieve lower power consumption, improved performance, reduced physical size, and improved reliability for application in DoD systems. It is important to note that this prototype supports, but does not directly address Packaging or Radiation Hard circuit design. These areas are addressed by other DoD programs.

Achieving the objective will require novel and innovative methods including unique and secure design tools and critical circuit modules required to design advanced custom ICs and SoCs. Secure IC and SoC design resources shall also be developed to support successful demonstration of the RAMP prototype. This objective also requires a complex IP licensing and support model, and close fabrication relationships.

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

The initial project award will encompass Phase 1, Establishment of a Prototype IC and SoC Secure Design Capability<sup>1</sup>, that emphasizes Physical Design capability and should support implementation of export-controlled DoD designs through use of protection technologies accessible to the DIB. Subsequent phases, Phase 2 (Demonstration of Prototype Designs Using the IC and SoC Physical Design Infrastructure) and Phase 3 (Validation of Designs Using the IC and SoC Physical Design Infrastructure) may be funded and executed upon successful completion of Phase 1. Successful completion of Phase 1 will be measured via the metrics identified

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<sup>1</sup> An assembly of SMEs (physically, virtually or a combination) with access to EDA tools, verification tools, compute resources, data management, and required IP to perform this work with full provenance and traceability. The building of a dedicated facility is not envisioned.

within the Deliverables table below.

The expectation is that each design capability will strongly leverage commercial expertise in physical design at SOTA technology nodes to achieve these goals. Each design capability must also be supported through a strong business plan for maintaining the capability during and after funding for the RAMP project is completed. It is preferred that the Secure Design Capability does not lead to a closed security implementation and is not tied to a single fabrication facility/flow.

Phase 1 Objectives (6 months):

The Navy and Air Force desires secure IC and SoC physical design solutions that will support advanced prototype development to drive innovation in design of advanced digital and mixed-signal integrated circuits and their use to drive innovation in DoD systems. The Phase I objective will be achieved through three major tasks:

1. Establishment of Secure Design Capability that supports an enhanced physical design by the DIB in SOTA (defined as  $\leq 22\text{nm}$  node Si CMOS) technology nodes.
2. Application of methods to ensure both the confidentiality and integrity of circuits during the manufacturing flow.
3. Definition of a DoD supply chain standard that leverages commercial microelectronics supply chain security methods to meet DoD needs.

Each of these tasks are to be described in more detail below:

#### 1. Secure Design Capability

This task will establish one or more secure design capabilities that facilitate rapid implementation of DIB digital and mixed-signal designs in SOTA ( $\leq 22\text{nm}$ ) CMOS technologies. Each capability should define optimal design flows and engineering support mechanisms to dramatically enhance the ability of the DIB to securely design and realize SOTA ICs and SoC technology. Each design capability will utilize infrastructure that supports the collection of a standard set of assurance data during the design process. Each design capability must have resident expertise and demonstrated experience with advanced technology ( $\leq 22\text{nm}$ ) design, physical implementation, and fabrication. Each design capability will have fabrication facility specific implementation knowledge to ensure the ability to effectively represent requirements, guide, and support DIB design teams through the release to manufacturing process. The expectation is that each design capability will strongly leverage commercial expertise in physical design at SOTA technology nodes to achieve these goals. Each design capability must also be supported through a strong business plan for maintaining the capability during and after funding for the RAMP project is completed. It is preferred that the Secure Design Capability does not lead to a closed security implementation and is not tied to a single fabrication facility/flow.

## 2. Methods to Ensure Confidentiality and Integrity of ICs/SoCs

This task will apply the best known methods, including government sponsored and commercially developed, for ensuring confidentiality and integrity of integrated circuits through the fabrication process. Confidentiality is defined as the protection of sensitive design information during the implementation and manufacturing process. Integrity is defined as the quantified assurance that both the high-level design (RTL) and physical (back-end) design of microelectronics fabrication are performed as expected with no unanticipated or un-attributable alterations of the design during the manufacturing process. This task will support implementation of export-controlled DoD designs in commercial foundries through the application of protection technologies. This task should demonstrate the ability to leverage fabrication knowledge to ensure confidentiality/integrity is effectively implemented for DIB designs and preserved throughout transformations that occur in the release to manufacture process.

## 3. DoD Supply Chain Security

Phase I of this task will focus on leveraging best practices of commercial microelectronics supply chain security methods. This task will define ways to leverage commercial supply chain security methods to meet DoD needs and are compatible with commercial manufacturing practices.

This task will focus on the establishment of a standard set of assurance data that will provide the quantitative evaluation of the security, confidentiality and integrity of the IC and SoC design/fabrication supply chain. It is expected that performers will heavily leverage existing, commercial sources of data such as those used for ensuring safety critical and high reliability systems. Where additional data is required to meet DoD needs, collection of this data will be compatible with commercial design and manufacturing practices. This task will include a recommended draft set of design standards with input from the Government Technical team, as needed.

These three tasks will support the overall goal of the RAMP program to greatly enhance the capability of the DIB to securely design SOTA IC and SoC designs that will support advanced prototype development and drive innovation in design of advance digital and mixed-signal SoCs. This enhanced capability will increase SOTA IC and SOC use by the DIB and drive innovation in DoD systems.

### Phase 2 Objectives (18 months):

Phase 2 (if funded) will be a continuation of tasks 1 and 2 as well as the demonstration of the secure design capability and implementation of quantifiable assurance technology by utilizing them to design and build DoD relevant designs in coordination with the DIB. Initial Operational Capability (IOC) is expected at month 12 and Full Operational Capability at month 18 (FOC) of Phase 2.

Phase 2 will demonstrate the implementation of the capabilities developed in tasks 1 and 2 by exercising the design, fabrication, and will be required to test at least three DoD relevant Designs. At least one must be a SOC that incorporates commercial and DoD application specific IP, one must be a Digital IC and the third must be a mixed-signal IC. All demonstration designs will be selected in coordination with the DoD evaluation team. The demonstration ICs should be designed by the DIB and should span a wide range of physical design support models from support-only to turn-key physical design by the design capability. Each demonstration IC design will include techniques to ensure Confidentiality and Integrity are preserved during fabrication in the commercial SOTA foundry. The task will conduct an independent assessment of the techniques and resulting demonstration articles. The demonstration articles will be provided to the government with all necessary information to conduct a government led evaluation. The design capability should provide to the government a standard set of assurance data, with provenance and traceability, created by EDA tools during the integrated circuit design process: 3rd party IP sources, tools, scripts, versions of software used for design and verification, individuals accessing the design during the flow, etc. The data collection, independent assessment, and government provided information will inform the development of draft design standards for confidentiality and integrity.

Task 3 from Phase 2 will be a demonstration of implementation of those prototype standards from Task 3 in at least one dual-use integrated circuit. Demonstration of implementation of those prototype standards from Task 3 in at least one custom DoD integrated circuit.

The below tables reflect the prototype project schedule and the number of total designs per year to support this prototype project.

**Table 1: Prototype Project Phase Schedule**

Phase	Duration
<b>Phase 1</b>	<b>6 months</b>
<b>Phase 2</b>	<b>18 months</b> <ul style="list-style-type: none"> <li>• <i>IOC @ month 12</i></li> <li>• <i>FOC @ month 18</i></li> </ul>

**Table 2: Total Designs Per Year**

Category	IOC	FOC
<b>Capacity: Volume</b>	<b>5/year</b>	<b>10/year</b>
Digital	<b>Required</b>	<b>Required</b>
Mixed Signal	<b>Required</b>	<b>Required</b>
Rad-Hard	<b>Not Required</b>	<b>Not Required</b>
RF	<b>Not Required</b>	<b>Not Required</b>
Security	ITAR	ITAR/Classified

**6. Project Deliverables:**

<b>Item No.</b>	<b>Item/Deliverable</b>	<b>Quantity/Frequency</b>	<b>Due/Method of Submission</b>
1	Phase 1 Draft RAMP Report comprised of the following elements: <ul style="list-style-type: none"> <li>• Task 1 Detailed description of the Secure Design Capability</li> <li>• Task 2 Methods to Ensure Confidentiality and Integrity of ICs/SoCs</li> <li>• Task 3 DoD Supply Chain Security standards along with justification for those standards</li> </ul>	1/Once	No Later Than four (4) months from project award.
2	Phase 1 Final RAMP Report comprised of the following elements: <ul style="list-style-type: none"> <li>• Task 1 Detailed description of the Secure Design Capability</li> <li>• Task 2 Methods to Ensure Confidentiality and Integrity of ICs/SoCs</li> <li>• Task 3 DoD Supply Chain Security standards along with justification for those standards</li> </ul>	1/Once	No Later Than six (6) months from project award.
3	Phase 1 Technical Interchange Meeting (TIM) and Meeting Minutes	6/Monthly	Five (5) business days after end of previous month
4	Phase 2 Design Review	4/Quarterly	Five (5) business days after end of previous Quarter
5	Phase 2 RAMP Demonstration of the following elements:	1/Once	No Later Than eighteen (18)

	<ul style="list-style-type: none"> <li>• Task 1 Secure Design Demonstration</li> <li>• Task 2 Design Demonstration on the below: <ul style="list-style-type: none"> <li>○ SOC</li> <li>○ Digital IC</li> <li>○ Mixed-signal IC</li> </ul> </li> <li>• Task 3 Supply Chain Demonstration on the below: <ul style="list-style-type: none"> <li>○ Dual-use IC</li> <li>○ Custom DoD IC</li> </ul> </li> </ul>		months from Phase 2 award
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**7. Current Project Budget: \$50,000,000**

This value represents what is currently available for the subject project for Phase 1 and Phase 2 at the time of the RFS release. Respondents are encouraged to clearly explain how much of their solution can be developed for the advertised amount. Multiple awards are anticipated, thus cost effectiveness and the leveraging of existing capabilities will be strongly considered during evaluation. 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:**

The RFS has been released under Distribution Statement A: Approved for Public Release

This project encompasses the following restrictions:

a. Security Classification: Unclassified

The work to be performed may require access to, and handling of classified material. The contractor must possess the required facility clearance and possess personnel with security clearance applicable to the classification requirement.

- Respondents must be compliant with DoDI 8582.01, “Security of Unclassified DoD Information on Non-DoD Information Systems” and DoDM 5200.01 Volume 4, “DoD Information Security Program: Controlled Unclassified Information.”
- Respondents must implement the security requirements in NIST SP 800-171, “Protecting Controlled Unclassified Information in Non-Federal Information Systems and Organizations.”

- For classified, respondents must possess a Facility Security Officer who shall (1) be responsible for all security aspects of the work performed, (2) ensure compliance with the National Industry Security Program Operating Manual (DODINST 5220.22M), and (3) ensure compliance with any written instructions from NSWC Crane Security Officer
  - Respondents performing work shall as a minimum be U.S. Citizens.
  - The contractor may require access to classified information systems at Contractor or Government locations.
- b. ITAR Compliance is required.
- c. Respondent Restrictions (e.g., domestic companies only): None
- d. Hazardous Material: None
- e. Any additional restrictions applicable to this project: None

## 9. Level of Data Rights Requested by the Government:

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.

At a minimum the Government is requesting the delivery of all intellectual properties (IPs) developed during and used for the project. The performer shall deliver all the CAD and EDA files, including scripts, RTL, HDL, netlists, simulation files (e.g., MATLAB, ADS, SPICE, Cadence, Synopsys, Mentor Graphics, etc.), testbenches, schematics, layouts (e.g. GDS, mask-ready GDS, etc.), design databases, timing information, and mechanical drawings of the Integrated Circuits and Systems; algorithms; test assemblies; all package design and drawings (schematics, layouts, etc.); the PCB/module test/evaluation board designs, schematics, bill of materials (BOMs), and drawings; full design and verification projects, testbenches, and behavioral and functional models for all IPs' functions and operations; comprehensive reports and documentation including information for future IP re-use by another party; comprehensive reports including the principles of function, operation,

performance, design methodologies and choices, verification methodologies and choices; hierarchical list identifying all ancillary/building blocks, foundation IP, functional IP, and verification IP; list and versions of all EDA/CAD tools, internal tools, methodologies, scripts, and PDK versions; all design review (e.g. PDR, CDR, FDR, etc.) documents; interfacing of the designs of the integrated circuits and systems along with detailed test and verification plans and developed supporting software; engineering support; and performing hardware prototypes/test articles demonstrating capabilities. The performer shall ensure that all IPs are licensed appropriately including the complete transfer/transition to the Government. The performer shall deliver above items no later than 1 month after the completion of effort. All of these requests should be incorporated in the easy-to-use, data-driven database for use by a novice circuit designer.

**10. RFS and Response Process:**

- a. The following is requested from all respondents:

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

	Technical Response	Price Response
Page Maximum	20	5

- 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 PDF and/or Microsoft Word formats only. Price volumes must be submitted in an editable, unlocked Excel file
- b. Each submittal **must include** (i) a Cover Page, (ii) a Technical Response, and (iii) a Price Response that each align to the instructions below:
    - i. Cover Page: (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. Solution Narrative: 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

companies who fall within the FOCI category visit <https://www.dss.mil> for additional guidance and instruction.

4. Government Furnished Property or Information: 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. Mandatory Compliance with Restrictions: 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. Task Description Document (Not Included Within Page Count): 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. Milestones must include metrics that are measurable by the Government. 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. Summary of Subcontractor Participation (if applicable): 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. Data Rights Assertions and Level of Rights Proposed:

- 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 9(b)(iii)(3) 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 a separate file from the technical response. No pricing details shall be included in the technical response. This project will employ a Fixed Price structure with Payable Milestones.

1. 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 S<sup>2</sup>MARTS (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. Rapid Assured Microelectronics (RAMP) Flow

### **14. Important Dates**

- a. Questions related to this RFS shall be submitted no later than 1200 Noon EDT on 27-April 2020.

To submit any questions, visit the opportunities page at [www.nstxl.org/opportunities](http://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, May 29, 2020 no later than 2 PM EDT.
- c. To submit your proposal, visit the opportunities page at [www.nstxl.org/opportunities](http://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. As a result of the Request For Solution, the Government may award multiple Other Transaction Agreements with each award addressing all three of the outlined tasks and strongly encouraged to include teaming. 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).