

Commercial Acceleration Opportunity (CAO)
for
National Security Innovation Capital (NSIC)

HQ0845-22-S-N001

Amendment 0002
Effective Date: - 14 April 2022

This CAO document has been revised and must be completely reviewed. Amendment 0002 supersedes and replaces HQ0845-22-S-N001 Amendment 0001, dated 2 February 2022.

INTRODUCTION

1.1 Background and Authority

NSIC's mission is to strengthen the national security innovation base by addressing the shortfall of private investment from trusted sources in technology startups developing dual-use hardware products and materials - technologies which have both commercial and national security applications. NSIC funding will enable companies to further develop their products, reducing future technical risk and time to market and increasing prospects for private investment. NSIC provides funds to hardware startups which have achieved Technology Readiness Level (TRL) 3 or higher.

Under the authority of 10 U.S.C. § 4022 (2022) (previously 10 U.S.C 2371b), NSIC seeks to award Other Transaction Agreements (OTAs) to technology startups at various stages of prototype development. The products which eventually result from awarded agreements will be valuable in commercial markets as well as in defense applications, enhancing the future mission effectiveness of military personnel and the supporting platforms, systems, components, or materials proposed to be acquired or developed by the U.S. Department of Defense (DoD).

The current Topics of Interest are found at the NSIC website: <https://www.nsic.mil/>

This announcement is continuously open; Pitch Decks may be submitted and will be evaluated for the general requirements of the Commercial Acceleration Opportunity (CAO) at any time throughout the year. The availability of funds may limit the ability of the U.S. Government to make awards in specific areas. Pitch Decks are sought under Topic of Interest referenced on the NSIC website. This CAO is intended to ensure that to the maximum extent practicable, competitive procedures are used when entering into agreements to carry out these prototype projects. This announcement satisfies the competition requirements in 10

U.S.C. § 4022 (b)(2).

1.2 CAO Procedure

This CAO is a competitive solicitation seeking proposals for innovative commercial hardware technologies that accelerate development of products for both defense applications and commercial markets. This CAO will result in the award of prototype projects for the development of engineering prototypes, production prototypes, demonstration systems, pilot production lines and associated test and measurement equipment and processes.

The CAO is soliciting Pitch Decks in response to the Topic of Interest. Topics of Interest are specific categories of technology or products for which Pitch Decks can be submitted. The CAO outlines the competitive procedures to submit a response to a Topic of Interest and consists of the following stages:

Stage 1 Pitch Decks: Pitch Decks are submitted against Topic of Interest. The Government will evaluate Pitch Decks against the criteria stated in this CAO as specified in Section 3.2. The Government will not pay Companies for the costs associated with Pitch Deck submissions.

Stage 2 Pitch Sessions: Companies whose Pitch Decks are evaluated to be of merit may be invited to engage in a live presentation and discussion following the instructions provided in Section 3.3 of this CAO. This session may include a technology demonstration if relevant. The Government reserves the right to limit the number of Companies invited to a pitch session. As such, a company's solution may be evaluated to be of merit, but not invited to a pitch session. The Government will not pay Companies for costs associated with Pitch Sessions, unless otherwise stipulated.

Stage 3 Proposal: Those Companies whose technologies are evaluated to be of merit and are selected for potential award of a Prototype OTA may, if funding is available, be invited to submit a full written proposal following the instructions provided in Section 3.4 of this CAO. The Government will not pay Companies for costs associated with the Request for Prototype Proposal (RPP) (e.g., proposal development, negotiations) in Stage 3, unless otherwise stipulated.

1. Definitions:

“Commercial Acceleration Opportunity” (CAO) is NSIC’s competitive method for employing prototyping authority under 10 U.S.C. § 4022.

“Topic of Interest” means a broad technology area identified by the Government with regard to capabilities sought within the technology domains. Topics of Interest are described on the NSIC website.

“Follow-on Production” means an award of a production transaction to an offeror. Follow-on production authority requires two criteria to be satisfied: 1) competitive procedures were used to select the parties to participate in the transaction (for a prototype project); and 2) the participants in the transaction successfully completed the prototype project provided for in the transaction.

“Innovative” means any new technology, process, or business practice; or any new application of an existing technology, process, or business practice that contributes to enhancing military effectiveness and sustaining global peace and U.S. national security.

“Nontraditional Defense Contractor” is defined in 10 U.S.C. § 2302(9).

“Nonprofit Institution” means a nonprofit institution, as defined in 15 U.S.C. § 3703.

“Other Transaction for Prototype Projects” refers to the type of Other Transaction Agreement (OTA) that may be awarded as a result of this CAO and associated Topic of Interest. This type of OTA is authorized by 10 U.S.C. § 4022 for prototype projects directly relevant to enhancing the mission effectiveness of military personnel and the supporting platforms, systems, components, or materials proposed to be acquired or developed by the DoD, or for the improvement of platforms, systems, components, or materials in use by the armed forces. This type of OTA is treated by DoD as an acquisition instrument, commonly referred to as an “other transaction” for a prototype project or a Section 4022 “other transaction”.

“Prototype Project” can generally be described as a proof of concept, model, reverse engineering to address obsolescence, pilot, novel application of commercial technologies for defense purposes, creation, design, development, demonstration of technical or operational utility, or combinations of the foregoing. A process, including a business process, may be the subject of a prototype project. Although assistance terms are generally not appropriate in OTA, ancillary work efforts that are necessary for completion of the prototype project, such as test site training or limited logistics support, may be included in prototype projects. A prototype may be physical, virtual, or conceptual in nature. The quantity should generally be limited to that needed to prove technical or manufacturing feasibility or evaluate military utility.

“Request for Prototype Proposal (RPP)” means the announcement by the Government to an Offeror requesting proposals for a prototype project to be performed by the Offeror to meet Government requirements.

“Small Business” is defined under Section 3 of the Small Business Act (15 U.S.C. 632).

“Successfully Completed” means a transaction for a prototype project is complete upon the written determination of the appropriate approving official for the matter in question that efforts conducted under a Prototype OT: 1) met the key technical goals of a project; 2) satisfied success metrics incorporated in the Prototype OT; or 3) accomplished a particularly favorable or unexpected result that justifies the prototype development through enhanced performance in

key areas and/or unexpected beneficial features. Furthermore, successful completion can occur prior to the conclusion of a prototype project to allow the Government to transition any aspect of the prototype project determined to provide utility into production while other aspects of the prototype project have yet to be completed.

“Pitch Decks” means the document submitted by an Offeror that describes their proposed solution related to the NSIC Topic of Interest.

GUIDELINES FOR PITCH DECKS, PITCH SESSIONS, AND PROPOSAL PROCESS

3.1 Submission Procedures

1. Unnecessarily elaborate brochures or proposals are not desired.
2. Use of diagram(s) or figure(s) to depict the essence of the proposed solution is strongly encouraged.
3. Technical data with military application may require appropriate approval, authorization, or license for lawful exportation.
4. All Pitch Decks, Pitch Sessions, and Proposals shall be unclassified. Pitch Decks, Pitch Sessions, and Proposals containing data that is not to be disclosed to the public for any purpose or used by the Government except for evaluation purposes shall include the following sentences on the cover page:

“This [select one: Pitch Deck, Pitch Session, or Proposal] includes data that shall not be disclosed outside the Government, except to non-Government personnel for evaluation purposes, and shall 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 shall 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 the 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]”

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 proposal.”

5. Submissions must be submitted electronically via the NSIC website: <https://www.nsic.mil/submit-pitch>
6. Submissions sent through other channels will not be reviewed nor evaluated.

3.2 Stage 1 Pitch Decks

Pitch Decks shall be in a PowerPoint or equivalent format and should not exceed 20 slides. These limits are not required but are strongly recommended. **The deck must address the following:**

- Company Name, Title, Date, Point of Contact Name, E-Mail Address, Phone and Address.
- Nontraditional Defense Contractor Assertion
- Targeted user problem(s) and sizing of the resulting need. Must describe both commercial and defense applications
- Technology basis and data driven support for potential differentiation versus competitive approaches
- Current stage of development; include intellectual property status
- Product development plan
- High level business plan to include funding requirements in the near term and up to product launch
- Breakout of investor funding to date, including sources
- Information on qualifications and experience (technical, domain, startup, military) of key staff members and advisors to enable evaluation of their ability to make the business successful.
- Date Pitch Deck was submitted

3.2.1 Evaluation of Pitch Decks

Pitch Decks will be evaluated by NSIC and DIU staff as well as other DoD and federal organizations as appropriate.

The following are automatic disqualification criteria. If any of these is true, the submission will be disqualified (immediately non-selected).

- The company is not an independent, pre-production technology startup developing dual-use hardware products and does not intend to grow its business primarily through their volume production and sale, or the sale of services based on such products.

- The proposed prototype development does not align with a topic (or subtopic) of interest
- The company is not a U.S. company and does not have a significant existing or planned U.S. presence where the work proposed will be performed
- The company made multiple simultaneous submissions
- The submission is incomplete or inadequate to enable evaluation

If the pitch deck moves past the above automatic disqualification criteria, then it will be further evaluated against the following evaluation criteria.

- Significance of the identified current or likely future Department of Defense need within a NSIC Topic of Interest.
- The company's proposal does not overlap with an existing NSIC portfolio solution.
- Significance of the identified commercial opportunities.
- Strength of the technology differentiation versus competing approaches, including measurement data, if any, which validates the differentiation.
- Strength of the technology and product development plan to achieve production and sales (NSIC does not fund companies whose business model is contract research).
- Sound understanding and clear description of potential risks and intended mitigations of the product development plan.
- Strength of the business model and eventual go-to-market strategy.
- The Pitch Deck demonstrates that the company is an independent, pre-production technology startup developing dual-use hardware products and which intends to grow its business primarily through the volume production and sale of such products or services based on such products.
- Strength of the technical and management team.
- Confirmation that the company has received funding only from trusted sources.
- Evaluation of the funding desired at this stage of development and whether it is commensurate with the identified development plan.
- Confirmation that company has not already received substantial funding from professional venture capital firms
- Confirmation that efforts proposed are clearly defined and differentiated from work funded by other government organizations (same work cannot be funded by multiple USG sources).

The Offeror will receive an email regarding the Pitch Deck with NSIC's determination to select or non-select. Pitch decks will not be returned.

3.3 Stage 2 Pitch Session

In Stage 2, companies will be requested to provide an in-person or virtual presentation and discussion. Pitch Session which will provide further details on their proposed concept/technology/solution and the technical and business viability of the proposed solution. It may also include a technology demonstration if relevant. The Government may elect to use external market research during the demonstration to evaluate a Company's viability. In addition to the Session, the Government, at its discretion, may request for consideration of an additional written submission to further supplement the information provided in the Stage 1 Pitch Deck. During the Stage 2 Pitch Session, the Company must detail/address their Pitch Decks further in depth during a virtual or in-person demonstration.

3.3.1 Evaluation of Pitch Session

Individual Pitch Sessions will be evaluated against the criteria below. As these are the same as those used to evaluate the Pitch Deck, the difference lies in the strength of the answers given during an in-depth, probing discussion, any additional data or measurements provided and the results of the technology demonstration, if any.

- Significance of the identified current or likely future Department of Defense need within a NSIC Topic of Interest.
- The company's proposal does not overlap with an existing NSIC portfolio solution.
- Significance of the identified commercial opportunities.
- Strength of the technology differentiation versus competing approaches, including measurement data, if any, which validates the differentiation.
- Sound understanding and clear description of potential risks and intended mitigations of the product development plan.
- Strength of the technology and product development plan to achieve production and sales (NSIC does not fund companies whose business model is contract research).
- Strength of the business model and eventual go-to-market strategy.
- The Pitch Session demonstrates that the company is an independent, pre-production technology startup developing dual-use hardware products and which intends to grow its business primarily through the volume production and sale of such products or services based on such products.
- Strength of the technical and management team.

- Confirmation that the company has received funding only from trusted sources.
- Evaluation of the funding desired at this stage of development and whether it is commensurate with the identified development plan.
- Confirmation that company has not already received substantial funding from professional venture capital firms
- Confirmation that efforts proposed are clearly defined and differentiated from work funded by other government organizations (same work cannot be funded by multiple USG sources).

3.4 Stage 3 Proposal

The final stage of the CAO process is the Request for Prototype Proposal (RPP) issued by the Government. The Company will be invited to develop and submit a full written proposal and negotiate appropriate terms and conditions governing the prototype project. Companies may discuss ideas and details of the proposal during the writing process with the Government. Each proposal submitted shall consist of two sections:

3.4.1 Technical Proposal

Describe the background and objectives of the proposed work, the approach, deliverables, and the resources needed to execute it. Include the nature and extent of the anticipated results.

Include ancillary and operational issues such as certifications, algorithms, and any engineering/software development and test methodologies to be used. This proposal must include a Statement of Work (SOW) identifying the work to be performed and the deliverables. Provide a detailed project schedule that outlines the various phases of work to be accomplished within the proposed period of performance. You may refer to the Pitch Deck that prompted this proposal request, but do not duplicate it. The proposal should identify the type of support, if any, the Company requests of the Government in general such as facilities, equipment, data, materials or information.

3.4.2 Price Proposal

The Company shall propose a firm fixed price to complete the prototype project and provide any other data or supporting information that is necessary for the determination of a fair and reasonable price. This can include, but is not limited to, commercial price catalog or other proprietary information to help the Government assess project cost.

Additionally, while not required to be specifically addressed in the proposal, the Government will review the proposal to determine if the following statutory requirements are met:

- Fits the definition of a prototype
- Quantity: quantity is limited to that needed to prove technical or manufacturing feasibility or evaluate military utility

- Meets mission effectiveness standard: Is directly relevant to enhancing DoD mission effectiveness
- Defense Utility: Solution is applicable to a DoD platform, system or component

These proposals will be assessed by NSIC and DIU staff as well as other DoD and federal organizations, as appropriate. Companies should note that there are certain terms and conditions the Government is unable to accept. However, projects awarded through the CAO are flexible to adopt customary industry standards where it is otherwise legal and where it meets the Government's needs.

AWARDS

4.1 Guidelines

Upon favorable review and available funds, the Government may choose to make an award. Awards will be made using OTAs. The Agreements Officer will negotiate directly with the Company on the terms and conditions of the OTA, including payments, and will execute the OTA on behalf of the Government. Only an Agreements Officer has the authority to enter into, or modify, a binding agreement on behalf of the Government.

Companies must have a Dunn and Bradstreet (DUNS): <https://www.dnb.com/duns-number/get-a-duns.html> number and must register in the System for Award Management (SAM): <https://www.sam.gov/SAM/pages/public/index.jsf> to receive an award. Companies are advised to commence SAM registration upon receipt of an RPP.

Companies must also register in the prescribed Government invoicing system (e.g. Wide Area Workflow): <https://piee.eb.mil/xhtml/unauth/web/homepage/helpFederalCustomers.xhtml>. NSIC will provide assistance to those Companies from whom a full proposal is requested.

The Company must be determined to be responsible by the Agreements Officer and must not be suspended or debarred from award by the Federal Government nor be prohibited by Presidential Executive Order and/or law from receiving the award.

Receipt of an RPP does not guarantee that a Company will receive an award. The Government reserves the right, at any point prior to award of an OTA, to cancel the RPP.

4.2 Comptroller General Access to Information

In projects that provide for payments in a total amount in excess of \$5,000,000, the Agreement will include a mandatory clause that provides for the Comptroller General the ability to examine the records of any party to the agreement or any entity that participates in the performance of the agreement.

4.3 Procurement Integrity Act (PIA)

As required by 10 U.S.C. § 4022(h), all Agreements awarded under this CAO shall be treated as Federal Agency procurements for the purpose of 41 U.S.C. Chapter 21. Accordingly, the CAO competitive solicitation process and awards made thereof must

adhere to the ethical standards required by the PIA.

4.4 Iterative Prototyping

As it is the mission of NSIC to enable access to commercially-derived disruptive capabilities across the entirety of the DoD enterprise, Prototype OTAs awarded against this CAO will allow for an iterative prototyping process.

An iterative prototyping process will allow the Government to modify, by mutual agreement, the work in a prototype project to allow the adaptation and modification of the technology being prototyped to meet additional unique and discrete purposes/mission sets. These additional unique and discrete purposes/mission sets can be generated by the original Government customer or originate with other organizations within the Federal Government.

5.0 Follow-On Production

Upon successful completion of a prototype project under the OTA, the Government and Company may negotiate a follow-on production contract or agreement without further competition. Any concept/technology/solution successfully proven through a Prototype OTA can be transitioned to production.

Topic of Interest posted by the Government under this CAO and Prototype OTAs awarded will include language providing for the potential award of a follow-on production contract or agreement as authorized under 10 U.S.C. § 4022(f). Individual prototype OTAs will explicitly identify follow-on Prototype OTAs as a potential outcome of a successful prototyping effort.

6.0 Successful Completion

A transaction for a prototype project is complete upon the written determination of the appropriate approving official (program manager, Agreement Officer) that efforts conducted under a Prototype OTA: (1) met the key technical goals of a project; (2) satisfied success metrics incorporated into the Prototype OTA; or (3) accomplished a particularly favorable or unexpected result that justifies the transition to production. Furthermore, successful completion can occur prior to the conclusion of a prototype project to allow the Government to transition any aspect of the prototype project determined to provide utility into production while other aspects of the prototype project have yet to be completed. Any Prototype OTA shall contain a provision that sets forth the conditions under which that prototype agreement must be successfully completed.

7.0 Non-Government Advisors

Non-Government advisors may be used in the evaluation of Pitch Decks, Pitch Sessions and during Proposal development and negotiations. Non-Government advisors will have signed non-disclosure agreements (NDAs) with the Government. Companies may enter into specific NDAs directly with the Non-Government advisors or their corporate entities. Submission of an offer under this CAO will constitute a grant of authority by the submitting company to the Government to allow the use of non-Government advisors to participate in

evaluations of all phases of the CAO process.

The Government understands that information provided in response to this CAO is presented in confidence and may contain trade secret or commercial or financial information, and it agrees to protect such information from unauthorized disclosure to the maximum extent permitted or required by Law, to include:

- a. 18 U.S.C. § 1905 (Trade Secrets Act);
- b. 18 U.S.C. § 1831 et seq. (Economic Espionage Act);
- c. 5 U.S.C. § 552(b)(4) (Freedom of Information Act);
- d. Executive Order 12600 (Pre-disclosure Notification Procedures for Confidential Commercial Information); and,
- e. Any other statute, regulation, or requirement applicable to Government employees.

NSIC policy is to treat all submissions as confidential information, and to disclose their contents only for the purpose of evaluation. Restrictive notices notwithstanding, during the evaluation process, submissions may be handled by support contractors for administrative purposes and/or to assist with technical evaluation. All NSIC and DoD support contractors performing this role are expressly prohibited from performing NSIC-sponsored technical research and are bound by appropriate NDAs.

Submissions will not be returned.