



### Call for Technology Projects

<b>Project Call Released</b>	On or about <b>January 10, 2023</b>
<b>Submission Deadline for Concept Papers</b>	<b>February 7, 2023, 5:00pm ET</b>
Invitations for Presentation phase released	On or about February 17, 2023
<b>Submission Deadline for Presentations and Supporting Docs</b>	<b>March 3, 2023, 5:00pm ET</b>
<b>Team Presentations</b>	<b>March 8 and 9, 2023</b>
Final Selections Released; Subaward Negotiations Begin	On or about March 30, 2023
Target Project Start Date	May 15, 2023

**READ CAREFULLY!**  
2-step selection process.

**Table of Contents**

- 1. OVERVIEW ..... 3**
- 2. FUNDING OPPORTUNITY DESCRIPTION ..... 3**
  - 2.1. Program Description ..... 3**
  - 2.2. Project Special Topics Area (STA) ..... 4**
    - 2.2.1. Special Topic Area 1 (STA1): Point of Need Manufacturing Challenges..... 4**
  - 2.3. Project Metrics ..... 5**
- 3. AWARD AND ELIGIBILITY INFORMATION..... 8**
  - 3.1. Award Information..... 8**
  - 3.2. Project Proposer Eligibility ..... 9**
  - 3.3 Submission Dates and Times ..... 9**
- 4. SUBMISSION, REVIEW AND SELECTION..... 10**
  - 4.1. STEP 1: Concept Process ..... 10**
  - 4.2. STEP 1: Concept Paper and Quad Chart Structure ..... 10**
  - 4.3. STEP 1: Concept Paper and Quad Chart Evaluation Criteria ..... 12**
  - 4.4. STEP 1: Concept Paper Submission Requirements ..... 13**
  - 4.5. STEP 2: Overview of Presentation Phase (invitation only)..... 13**
- 5. ADMINISTRATIVE INFORMATION ..... 14**
  - 5.1. Contact Information and FAQ..... 14**
  - 5.2. Responsibility for Compliance with Legal Requirements ..... 14**
  - 5.3. Unclassified Materials Only ..... 14**
  - 5.4. Proposer Incurred Costs..... 14**
  - 5.5. Proposer Errors or Omissions ..... 15**
  - 5.6. Past Performance..... 15**
  - 5.7. Reservation of Rights ..... 15**
  - 5.8. Anticipated Number of Projects ..... 15**
  - 5.9. Pre-Award Costs ..... 15**
  - 5.10. MII Specific Administrative information ..... 15**

## 1. OVERVIEW

To best protect and pursue our interests at home and abroad, the United States relies on a robust and innovative domestic manufacturing sector. The federal government has established Manufacturing Innovation Institutes (MIIs) to be national, public-private partnerships including leaders in industry, academia, and nonprofits. The MIIs were established to develop, demonstrate, and accelerate the early adoption of advanced manufacturing by funding research, development, technology, engineering, education, and workforce development projects and by creating an ecosystem that advances advanced manufacturing.

**Funding Opportunity:** DoD Point of Need Manufacturing Challenge

**In order to increase the flow of ideas and reduce the administrative time to implement, this project call will use a two-step submission process for selecting projects:**

**Step 1:** Concept paper and Quad Chart submission. Review and down select.

**Step 2:** Presentation submission (by invitation only). Team presentation and supporting documents submission. Review and down select.

If projects are selected after Step 2, then the contracting process will occur through the Manufacturing Innovation Institute.

More details of this process are described in the following pages.

### Important Dates:

- **2/7/23**, 5:00PM Eastern Time Concept Papers Due
- On or about **2/14/23** Presentation Phase Selections Released
- **3/3/23**, 5:00PM Eastern Time Team Presentations and Supporting Material Due (by invitation only)
- **3/8/23 and 3/9/23**, Team Presentations
- On or about **3/30/23**, Final Selections Released; Contracting Process through MII Agreements Begin
- **No later than 5/15/23**, Target Project Start Date

**NOTE 1:** Submissions received after the deadlines will not be considered.

**NOTE 2:** A lead proposer that is an active member of an MII (participating with their MII) in good standing according to the eligibility requirements of their institute can provide direct submissions to this Project Call.

**NOTE 3:** All information must be submitted via the methods provided by the Manufacturing Innovation Institute. The submissions will then be provided to OSD for review.

**NOTE 4:** The DoD reserves the right to add, modify, and/or delete any part of this document as needed.

## 2. OPPORTUNITY DESCRIPTION

### 2.1. Description

OSD ManTech is working with each of its Manufacturing Innovation Institutes, leveraging their project call processes under current agreements, to assemble and review white papers that address dual-use applications that are responsive to specific needs of the Department of Defense (DoD) - and the domestic manufacturing industry. This project call is focused on a single Special Topic Area (STA), which is summarized in Section 2.2 below. This STA has been derived from the DoD advanced manufacturing community and contains multiple challenges. Project teams can select one or more challenges to address.

Project teams must include their Manufacturing Innovation Institute as a team performer in their projects. At minimum, the MII should perform project management. However, some MIIs have additional capabilities that

could be leveraged for the effort. Project teams are also encouraged to leverage successfully completed MII technology development programs as well as MII Consortium Developed Intellectual Property (CDIP) in their submissions. It is highly recommended that proposers have discussions with their MIIs as soon as they intend to submit for this project call.

OSD ManTech has identified examples of point-of-need manufacturing applications of interest from our DoD partners. Project teams are being asked to bring innovative manufacturing solutions that can be deployed close to the warfighter. Technologies must be designed to operate within both of two challenging operational environments. Technologies will be demonstrated at a location chosen by DoD within the continental United States that represents one of the two operational environments listed in 2.2.1.

## **2.2. Project Special Topics Area (STA)**

The Special Topics Area relevant for this project call is listed below. Submissions may focus on one or more of this challenges within this special topic.

### **2.2.1. Special Topic Area 1 (STA1): Point of Need Manufacturing Challenges**

A successful solution conveys a technical approach or methodology that demonstrates an advanced manufacturing system that could address one or more of the challenges below. Each challenge is based on a Class of Supply. Projects shall demonstrate the technology that could address the scenario and be deployed and perform in the required operational environment:

*Scenario:* U.S. forces are engaged in an operation at an austere forward operating base (FOB) in a remote location and no access to normal logistics support. Manufacturing at the FOB will provide capabilities and sustain personnel and equipment to successfully complete their operation.

*Operational environment:* The reach of U.S. forces is global. For the sake of the challenge, the demonstration location could be either a cold weather (i.e. arctic-type) location or a hot-humid location. DoD will determine a location within the continental United States (CONUS) to host the manufacturing challenge event and this location will be either cold weather or hot-humid. The proposer's solutions must be able to operate in **both** conditions even though they will be demonstrated in only one chosen by DoD.

#### **(1) Build the FOB Challenge:**

- a. Class IV – Civil engineering teams need to build structures and infrastructure for personnel and operations at the FOB. Ideally, locally available materials would be used to build structures and infrastructure.

#### **(2) Unmanned Ground Vehicles (UGV) Challenge:**

- a. Class VII – Demonstrate the ability to manufacture and assemble a limited-capability UGV with control/navigation, power, motor, and at least one sensor.

#### **(3) Warfighter Medical, Health, and Nutrition Challenge:**

- a. Class VIIIa – In combat situations, the 60 minutes after a traumatic injury is called the Golden Hour. Demonstrate local manufacturing of care items to support traumatic injury care.
- b. Class VIIIa – If a FOB has no access to normal logistics support, standard medical care must continue. Demonstrate local manufacturing of items to support standard medical care.
- c. Class I – Provide the means for local production of nutrition for warfighters
- d. Class II – Wearables for physiological monitoring of warfighters
- e. Class II – Field manufactured clothing for extreme environments: hot humid or cold weather

#### **(4) Power Challenge**

- a. Class III - Locally produce Petroleum, Oil, Lubricants (POL) to power and sustain equipment
- b. Locally produce means for clean energy to power equipment

**(5) Cyber Challenges**

- a. Need for securely sharing files with allies or partners operating at or near FOB
- b. Digital backbone for FOB PoN manufacturing

**(6) Staying in the Fight Challenge**

- a. Class IX – Demonstrate the ability to manufacture in the field a set of repair items from a list provided by the DoD
- b. Class II – Demonstrate the ability to manufacture in the field equipment such as small arms, individual equipment, tentage, aerial delivery equipment, organizational tool sets and kits, hand tools, unclassified maps, administrative and housekeeping supplies and equipment.
- c. Class V – Demonstrate the ability to manufacture munitions in the field

**(7) Other**

- a. Proposers could identify a challenge that would correspond to the scenario of austere forward operating base (FOB) in a remote location and no access to normal logistics support in a cold weather or hot-humid environment.

**Class of supply definitions**

Classes marked with an asterisk (\*) are represented in the challenge

- **\*Class I** – Rations – Subsistence (food and drinking water), gratuitous (free) health and comfort items.
- **\*Class II** – Clothing And Equipment – individual equipment, tentage, some aerial delivery equipment, organizational tool sets and kits, hand tools, unclassified maps, administrative and housekeeping supplies and equipment.
- **\*Class III** – POL – Petroleum, Oil and Lubricants (POL) (package and bulk): Petroleum, fuels, lubricants, hydraulic and insulating oils, preservatives, liquids and gases, bulk chemical products, coolants, deicer and antifreeze compounds, components, and additives of petroleum and chemical products, and coal.
- **\*Class IV** – Construction materials, including installed equipment and all fortification and barrier materials.
- **\*Class V** – Ammunition of all types, bombs, explosives, mines, fuses, detonators, pyrotechnics, missiles, rockets, propellants, and associated items.
- **Class VI** – Personal demand items (such as health and hygiene products, soaps and toothpaste, writing material, snack food, beverages, cigarettes, batteries, alcohol, and cameras—nonmilitary sales items).
- **\*Class VII** – Major end items such as launchers, tanks, mobile machine shops, some parachute systems and vehicles.
- **\*Class VIII** – Medical material (equipment and consumables) including repair parts particular to medical equipment. (Class VIIIa – Medical consumable supplies not including blood & blood products; Class VIIIb – Blood & blood components (whole blood, platelets, plasma, packed red cells, etc.).
- **\*Class IX** – Repair parts and components to include kits, assemblies, and subassemblies (repairable or non-repairable) required for maintenance support of all equipment.
- **Class X** – Material to support nonmilitary programs such as agriculture and economic development (not included in Classes I through IX).
- **Miscellaneous** – Water, salvage, and captured material.

**2.3. Project Metrics**

All submissions will specify a set of key performance parameters (KPPs) for the project technology. The KPPs selected should be described as to their relevance to the proposed project, and the related project call topic areas. The related metrics that will be measured to evaluate achievement of each KPP should also be specified as well as a baseline for comparison, threshold for minimum achievement during the project, and objective for stretch goals during the project.

OSD requires that metrics be defined for each technology project that will be used to evaluate the progress in achieving the goals of the proposed project and the identified KPPs. A metrics and evaluation framework is provided that can guide what types of metrics should be specified for various aspects of a project, consisting of **cardinal metrics** (categories of measures: performance, productivity, efficiency, acquisition cost, sustaining cost, investment prudence) and **project levels** (elements of the project technology being measured by a metric: component, task, process, or system). Competitive submissions will consider and formulate all the cardinal metrics listed below for their projects:

1. **Performance:** Measures of the characteristics of the entire advanced manufacturing system, its components, or the execution of a manufacturing task. Units for performance metrics will vary based on the advanced manufacturing system, component, or task they are applied to. Performance metrics include those both qualitative and quantitative. Types of performance metrics include accuracy, capabilities, completeness, ergonomics, generalizability, quality, reconfigurability, success/error rate, and usability. Performance metrics should align with the key attributes of Point of Need manufacturing systems listed below.
2. **Productivity:** The rate at which a manufacturing process is occurring, expressed in units (e.g., items, articles, batches) per time interval (e.g., minute, hour, day). Types of productivity metrics include defect rate, first time yield, and throughput rate.
3. **Efficiency:** The amount of time required to perform a manufacturing task or the percentage of time spent in set-up, calibration, transition, production, etc., compared to total cycle time of a manufacturing process. Units for these metrics should be time intervals (e.g., minutes, hours, days). Types of efficiency metrics include performance time, set-up time, and touch time.
4. **Acquisition:** Cost for initial acquisition of the proposed system. Types of acquisition cost metrics include capital cost and implementation cost.
5. **Sustaining Cost:** Costs, labor, and/or time measures associated with continued operation of the manufacturing process using the proposed system. Types of sustaining cost metrics include involved labor, operational cost, process cost, safety, SRR cost, and training time.

All metrics should be expressed in explicit measures using relevant units (e.g., microinches, seconds, dollars) and in terms of percentage improvement to a baseline. One or more metrics may be specified in each cardinal metric category, although it is not required that metrics for every cardinal metric category or project level be measured. If a cardinal metric is not relevant for a particular project, state so and explain in the project submission. If advancement in one or more cardinal metrics is more germane to demonstrating success of the project, this should be articulated in the proposal; e.g., consistency of sanding quality (Performance) will have higher impact on the industry than performing the task faster (Efficiency). This may present tradeoffs in the project KPPs/metrics, which should also be described; e.g., a more consistent sanding quality (Performance) is achieved by a system that is more expensive than the baseline (Acquisition Cost), but the savings in SRR costs are worthwhile (Sustaining Cost).

Eligible projects must also show through analysis and demonstration that they advance one or more of the key attributes of expeditionary (i.e., point of need) manufacturing:

1. Mobile
  - a. Designed to be moved with forces to include airlift, convoy driving, and offroad vehicle conditions. The system can be transported using Material Handling Equipment (MHE). Advanced manufacturing equipment can be transported and housed in shipping containers,

expandable shipping containers, vehicle mounted shelters, expandable vehicle mounted shelters, and ruggedized containers (for example: Pelican Cases).

2. Rugged:
  - a. The system can function in the operational environment at the point of need. Proposers should consider how to enclose their demonstration systems if necessary, but proposers must recognize that high levels of cleanliness or very low levels of humidity might not be possible.
3. Secure:
  - a. Physical and cyber security steps are taken to prevent unauthorized operation, intrusion, corruption of data, or interruption of process. Authority to Operate (ATO) on DOD networks is not required for this demonstration. However, consideration towards cyber security design should be given to reduce the hurdles during the ATO process if DOD acquires the technology.
4. Reliable:
  - a. Proposers should consider that military end user will want the system will function when needed to operate. A specific mean time between failure or mean time between repair will not be specified here, but reliability will be a consideration during the demonstration.
5. Ease of use:
  - a. The system has intuitive user interfaces. Training or skill is minimized to the best extent possible. The skill level of operation is such that a junior enlisted member with the appropriate training can operate the equipment.
6. Fast:
  - a. The system produces parts at a relevant speed to the warfighter's need. The speed of the demonstration system is better than existing field processes and better than the supply system.
7. Materials:
  - a. The materials being fabricated should be relevant to the DoD. The materials should have a performance level that meets DoD needs. Feedstock must be survivable and minimally reactive to ease handling and mitigate combat effect.

All proposed projects and their components should start no lower than **Technology Readiness Level (TRL) 4** and/or **Manufacturing Readiness Level (MRL) 4** and should intend to mature to, or make a significant advancement to, TRL 7 and/or MRL 7. All submissions must specify the start and end TRL/MRL for the project's key components over the course of project execution, not just the project as a whole.

Successful submissions will clearly identify project deliverables and the benefit to other members of the Manufacturing Innovation Institute.

[The rest of this page is intentionally blank]

### 3. AWARD AND ELIGIBILITY INFORMATION

#### 3.1. Award Information

The DoD expects awarding up to \$1.5 M to fund multiple projects under the MII Point of Need Challenge. Individual project budgets must not exceed \$500 K requested from DoD. Cost share is not required. However, cost share would be reviewed favorably, and any cost share must follow the requirements set forth under the assistance agreement with OSD-ManTech of the respective Manufacturing Innovation Institute involved in the submission. The period of performance is expected to be no longer than 6 months. **All projects must be completed and closed prior to Dec. 15, 2023.** For example, all development tasks under the award must be completed, all deliverables must be submitted and approved, technical reports and all close-out documentation required under the the MII's sub- agreement with the project performer(s) must be submitted by this date.

Award of Subaward Agreement(s) resulting from this Project Call will be based upon the most responsive proposer(s) whose offer(s) will best advance the MII's mission in terms of cost, functionality and the additional factors specified in this Project Call.

For any topic area described in Section 2 of this Project Call, OSD ManTech and the MIIs reserve the right to:

- reject any or all offers and discontinue this Project Call process without obligation or liability to any potential proposer;
- accept other than the lowest priced submission;
- select for award negotiations based on initial offers received, without discussions or requests for best and final offers, and
- select all, some, one or none of the submissions, in full or in part, for award negotiations in any of the topic areas.



Proposals selected and successfully negotiated in response to this Project Call will be incorporated into corresponding Subaward Agreement(s) between the Manufacturing Innovation Institute and the selected proposer(s).

### 3.2. Project Proposer Eligibility

To address the needs of this Project Call, OSD ManTech encourages proposers to work cooperatively in presenting integrated solutions. OSD ManTech recommends proposer team arrangements that enable the organizations involved to complement each other's unique capabilities, while offering the best combination of performance, cost and delivery. **OSD ManTech will recognize the integrity and validity of proposer team arrangements provided that:**

- The lead proposer (or prime) on the project submission is a current member of one of the Manufacturing Innovation Institutes in good standing (i.e., membership dues paid and up to date) by the concept paper submission deadline. Contact the Manufacturing Innovation Institute for details on membership.
- The membership status of other organizations participating as project team members on the submission must be in accordance with the membership policies and assistance agreement terms and conditions of the participating OSD-ManTech partner MII. It is anticipated that in most circumstances team members will be current Institute members in good standing (i.e., membership dues paid and up to date).
- Each team must contain at least one industry organization who is capable of delivering a system to a DoD acquisition organization and who can: a) provide the use case(s) that will guide the overall development and integration, b) conduct the final system demonstration(s) in the operational environment, and c) provide the business rationale and economic justification for pursuing the development.
- Team lead organizations will be evaluated on past program performance, overall programmatic experience and capabilities, and their overall capability for ultimately commercializing any technology developed.
- Team arrangements are identified, and relationships are fully disclosed.
- **The lead proposer (or prime) is fully responsible for all project and subrecipient performance.**
- If a project will manage **export-controlled information or restricted material, Foreign Nationals** will not be permitted to perform work under this project at lead proposer or any subrecipient facilities, remotely, or otherwise. As used in this provision, the term "Foreign National" means any natural person who is not a lawful permanent resident as defined by 8 U.S.C. 1101(a)(20) or who is not a protected individual as defined by 8 U.S.C. 1324b(a)(3). It also means any foreign corporation, business association, partnership, trust, society or any other entity or group that is not incorporated or organized to do business in the United States.

### 3.3 Submission Dates and Times

**Concept Paper Deadline:** Submissions must be received by 5:00 pm Eastern Time on February 7, 2023 through Manufacturing Innovation Institute. Each MII will provide their submission instructions. Multiple submissions from a lead proposer addressing different challenges within the Special Topic Area are permitted. Submissions received through method besides the method directed by the MII will not be considered. Submissions received after the deadline will not be considered.

**Submission Address:** Lead proposers must submit their concept in accordance with the instructions from their Manufacturing Innovation Institutes.

**Expected Timeline:**

FINAL Project Call Released..... On or about January 10, 2023

Supporting documents Released; Website Open .....	On or about January 10, 2023
Submission Deadline for Concept Papers .....	February 7, 2023, 5:00pm ET
Invitations for Presentation Submission released .....	On or about February 17, 2023
Submission Deadline for Presentation Packages .....	March 3, 2023, 5:00pm ET
Final Selections Released; Subaward Negotiations Begin .....	On or about March 30, 2023
Target Project Start Date .....	Not later than May 15, 2023

#### 4. SUBMISSION, REVIEW AND SELECTION

This project call involves a two-step process with each step having a submission, review and selection stage. The goal of this two-step process is to solicit a broad range of project concepts in Step 1, while making efficient use of the proposer’s bid and concept resources and OSD ManTech’s concept evaluation resources by inviting only teams with the most promising concept papers to submit a Step 2: Project Presentation. In that spirit, we include here a detailed description of the Step 1 process and provide a higher-level overview of the Step 2 process. The full details for Project Presentation submission will be supplied with the invitations to submit.

##### 4.1. STEP 1: Concept Process

- 1) **Pre-submission Document Review.** All documents and guidelines necessary for submission and subaward negotiation will be made available through the Manufacturing Innovation Institute website on or about the Final Project Call release date. Lead proposers are strongly encouraged to review these documents and guidelines thoroughly and early in this project call process and contact their MII with any questions or clarifications. **To administer this Project Call as efficiently as possible, it is The Institute’s intent that any due dates associated with document submission and subaward negotiation and execution be strictly enforced.**
- 2) **Submission of Documents.** The lead proposer submits a **Concept Paper** and **Quad Chart** electronically that succinctly describes the proposed project using the prescribed structure described in Section 4.2.
- 3) **Initial Compliance Screening.** All submissions will receive an administrative review for adherence to the eligibility, structure and format requirements in Sections 3.2, 4.2 and 4.4. Ineligible and/or incomplete submissions are subject to elimination from further review.
- 4) **Evaluation and Peer Review.** Submissions determined eligible and complete will proceed for a full evaluation by evaluators who are subject matter experts and either DoD employees or DoD support contractors. Evaluation criteria in Section 4.3 serves as the basis for scoring of Concept Papers.
- 5) **Selection to Submit a Presentation.** Selections will be based on most eligible submission, and how the concept contributes to the balance (technologies and solutions addressed, risk, cost, impact, etc.) in the overall technology investment portfolios. Proposers selected will be invited to submit a project presentation through a notification from OSD ManTech. If selected to submit a presentation, lead proposers are strongly encouraged to review draft sub-award agreements.

##### 4.2. STEP 1: Concept Paper and Quad Chart Structure

- 1) **All material will be submitted via the respective OSD-ManTech Manufacturing Innovation Institute’s project call process. The lead proposer (or prime) should follow the instructions provided by the MII or contact the MII for instructions.**
- 2) **Concept Paper (5-page maximum, excluding Title Page)**

The concept paper must use the MS Word template provided and contain the following sections:

**a) Title Page (1-page)**

- i) Concept Paper title.
- ii) Proposed Challenge topics within Special Topic Area 1 (STA1)
- iii) Lead Organization submitting Concept.
- iv) Technical point of contact must include salutation, last name, first name, street address, city, state, zip code (+4), telephone, fax (if available), & electronic mail.
- v) Administrative point of contact must include salutation, last name, first name, street address, city, state, zip code (+4), telephone, fax (if available), & electronic mail.
- vi) Team composition and corresponding subrecipient organizations (at least one investigator per organization).
- vii) Proposed program duration (in months).
- viii) Total proposed funds requested from DoD, total cost share (if included), and total project cost including cost share.

**b) Problem Statement**

- i) Describes the problem or need being addressed.
- ii) Dual-use (i.e., defense/commercial) implication explained.

**c) Technical Approach and Methodology**

- i) Describes the technology being developed relative to the proposed application or use case.
- ii) Indicate re-use of any MII CDIP and/or follow-on of a past MII Project
- iii) Includes details of the technical approach or methods being used to address the problem statement.
- iv) Scientific and technical merit of the project (such as citing proof of concept studies, relevant patents, and publications).
- v) Improvements made possible by the proposed solution.
- vi) Type of data that will be needed, collected, and used as part of proposed solution.
- vii) How success will be measured; key performance parameters (KPPs) and metrics to be used; the advancement of the TRL/MRL; Targets to Improve?
- viii) Includes demonstration commensurate with proposed TRL.

**d) Benefits (Impact, Technology Transition)**

- i) Describe the benefits this project will have on DoD point of need manufacturing
- ii) Describes the benefits this project will potentially have on your business and industry (i.e., defense & commercial).
- iii) How will the technology be transitioned and used in an operational environment?

**3) Concept Quad Chart (template provided):** The concept paper must be accompanied with a concept Quad Chart. The quad chart must use the MS Power Point template provided and contain the following sections:

- (1) **Description:** What is the concept technology being proposed and what problem does it address?

Who is your internal and/or external customer and what are the requirement(s)?

- (2) **Delivering:** What objectives and/or requirements are you addressing with the proposed concept? (e.g., Hardware, Manufacturing Process, Models, New Materials). What is your concept of operations?
- (3) **Technical Approach:** What is the technology being demonstrated and how does it advance over current state of the art (SOTA)? What efforts will be performed to prepare for the demonstration and then conduct the demonstration (i.e. development, integration, evaluation, etc.)?
- (4) **Benefits:** Technical development and manufacturing improvements / targets based on the requirements, is there a dual-use application(s), what is the potential return on investment (ROI) and any co-investment, and what will be delivered (e.g., 50% improvement in throughput)? Is there a technology transition plan?

### 4.3. STEP 1: Concept Paper and Quad Chart Evaluation Criteria

The Concept Submission will be evaluated for completeness and adherence to the descriptions below.

#### A. Relevance to Special Topic Area(s)

Proposed project is explicitly linked to the Special Topic Area and at least one of the STA challenges in this Project Call and demonstrates a significant advancement of an advanced manufacturing capability towards use in a point-of-need operational environment. Concept team conveys that they have a sound understanding of the problem statement and the benefactor's requirements.

#### B. Quality of Technical Approach and Methodology

The concept team clearly articulates a technology approach or strategy for addressing the problem statement. Technical approach is thorough, sound, and feasible. Concept team is composed of the organizations and individuals with the required skills and facilities to accomplish the tasking within the compressed timeline. Technical approach demonstrates adequate resources and access to complete the project without delay and takes into account any occupancy or travel restrictions that the team may need to work under. **NOTE: All proposed projects are required to hold, at a minimum, a full system demonstration at an operationally relevant location determined by DoD within the continental United States.**

#### C. Quality of Key Performance Parameters and Metrics

Concept clearly defines plans to evaluate the identified KPPs and generate metrics for performance (based on the point of need attributes in 2.3), efficiency, productivity, acquisition cost, sustaining cost, and investment prudence. Defines the manufacturing process being improved with the project technology and what tasks/processes each individual project focuses on. Conveys understanding of TRL/MRL assessment of the technology presently and at the completion of the project.

#### D. Impact and Technology Transition Plan

Proposed project clearly describes the significance, magnitude, and timeliness of the project impact. Project demonstrates both near-term and long-term impact. This includes not only the demonstration within the project scope of work, but also any follow-on plans to scale and implement the developed technology to a wide audience, maximizing the reach of the investment.

#### 4.4. STEP 1: Concept Paper Submission Requirements

- A. In its response to this Project Call, the Proposer shall submit through its respective Manufacturing Innovation Institute:**
- 1) Concept Paper in MS Word Format compliant with the instructions above.
  - 2) Quad Chart using the **template provided by OSD ManTech.**
- B.** Paper, email, and fax submissions will not be accepted. All documents must be submitted through the method dictated by the Manufacturing Innovation Institute.
- C.** Figures, graphs, images, and pictures. Figures and tables must be numbered and referenced in the text by their corresponding number. Figures and tables should be of a size that is easily readable, may be in landscape orientation and must be formatted to print on an 8.5 x 11-inch paper size.
- D.** Font. All concept text is to be prepared **single spaced, with either Times New Roman 11-point for or Arial 10-point font**, inclusive of figure and table captions. Smaller font may be used within figures and tables but must be legible. Do not write prose in a table to save space.
- E.** Page Layout. The concept paper must be in portrait orientation except for figures, graphs, images and pictures. Pages must be 8.5 x 11 inches, with at least 0.75-inch margins on both sides, top and bottom.
- F.** Page Numbering. Number pages sequentially within each section of the concept showing concept section and page number.
- G.** No formal transmittal letter is required.
- H.** Concept Language. English.

#### 4.5. STEP 2: Overview of Presentation Phase (invitation only)

- A.** Submission of Proposed Project Presentation. In the second step in the process, an invited proposer will submit a Presentation in PowerPoint format (.ppt or .pptx) that describes the proposed project in detail. The final instructions for these presentations will be included with the invitations to submit Proposed Project Presentations. Only invited Project Presentations will be considered for award. Presentation files and all supporting documentation will be due to OSD ManTech on March 3, 2023 by 5:00pm Eastern Time.
- B.** Submission of Supporting Documents. If invited to prepare a presentation, the following proposed project supporting documents must be submitted by the lead proposer no later than March 3, 2023 at 5:00pm EST. The location to submit will be provided in the invitation.

##### 1) Statement of Work (no page limit)

The Statement of Work must use the MS Word template provided and contain the following sections:

- Introduction/Background
- Project Team Composition
- Objectives and Scope
- Tasks
- Key Performance Parameters (aka Metrics)
- Milestone Descriptions
- Plan of Action and Milestones (POA&M) Gantt Chart

## **2) Budget and Justification (no page limit)**

The Budget and Justification must use the MS Excel template provided

## **3) Letter of Commitment**

A Letter of Commitment from the Lead Organization is required. An organization's Letter of Commitment must state that the organization commits to provide the level of effort and cost share (if cost share is included) as stated in the corresponding parts of the Concept (and specified in the Letter) and that the organization will abide by the terms and conditions of the partner MII's Membership Agreement and Policies and the terms and conditions of the assistance agreement between OSD-ManTech and its respective MII. Each letter must contain: Proposer Legal name, Proposer Address, Total Funds Requested, Cost-Share Commitments, Proposed Period of Performance, Proposer Principal Investigator, and Contact's name, email, and phone number.

- C. Project Presentation.** Project teams will present their proposed projects in March to an audience of subject matter experts (SME) comprised of relevant DoD employees and DoD support contractors. Each team will have approximately 20 minutes for project presentation followed by 25 minutes of question and answer from the audience. Project presentations will not be open to the general public or to other project teams. The date for presentations is March 8-9, 2023.
- D. Project Presentation Evaluation.** Following the in-person presentations, proposed projects will be evaluated, at a high level, according to the criteria presented in Section 4.3.
- E. Selection for Negotiation for Award.** Proposed project teams will be notified on or about March 30, 2023 regarding project selections. Contract actions between the proposer and the MII will also begin on this date. Final instructions for completing the MII subaward agreement package and the exact challenge award end date will be provided at that time.

[The rest of this page is intentionally blank]

## **5. ADMINISTRATIVE INFORMATION**

### **5.1. Contact Information and FAQ**

Submit all questions concerning this Project Call through the lead proposer's (or prime's) Manufacturing Innovation Institute.

To receive a response sufficiently in advance of submission due dates, send your question(s) by no later than two weeks prior to the submission due dates.

### **5.2. Responsibility for Compliance with Legal Requirements**

The lead proposer is responsible for having all its products, services, and facilities in full compliance with all applicable federal, state, and local laws, regulations, codes, standards and ordinances regardless of whether they are referred to by OSD ManTech or the MII.

### **5.3. Unclassified Materials Only**

Information contained in submissions must be unclassified and free of export controlled data.

### **5.4. Proposer Incurred Costs**

The proposer is responsible for all costs incurred in preparing or responding to this Project Call. Materials and documents submitted in response to the Project Call will not be returned. Costs incurred in preparing or responding to this Project Call cannot be claimed as cost share.

### **5.5. Proposer Errors or Omissions**

OSD ManTech and the MIIs are not responsible for any proposer errors or omissions concerning the Project Call process.

### **5.6. Past Performance**

OSD ManTech and the MIIs reserve the right to disqualify any proposer for demonstrated under-performance in financial and programmatic management of other active or completed MII projects.

### **5.7. Reservation of Rights**

This Project Call does not commit OSD Mantech and the Manufacturing Innovation Institutes to award any legally binding agreement or contract, to pay any costs incurred in the preparation of a submission to this request, or to procure or contract for services or supplies. If selected, the Manufacturing Innovation Institute may require the proposer to participate in negotiations and to submit such monetary, technical, or other revisions of its submissions that may result from preliminary review and negotiations.

### **5.8. Anticipated Number of Projects**

The number of project awards and federal funding amount allocated to this Project Call will be determined based on the quality and quantity of submissions received and the availability of funds. OSD Mantech and the Manufacturing Innovation Institutes reserve the right to select all, some, one or none of the submitted Concepts and/or Proposals, in whole or in part, for award negotiations.

### **5.9. Pre-Award Costs**

Please note that pre-award costs have not been approved by the federal awarding agency for any potentially awarded subawards and will not be considered an allowable cost under any resulting subaward for this call.

### **5.10. MII Specific Administrative information**

Lead proposers should contact their Manufacturing Innovation Institute for administrative issues around award and project management to include but not limited to: Proposer Rights and Marking, Consortium Developed Intellectual Property, Subrecipient Agreement, Allowable Cost Share, Expected Reporting Requirements, Modification or Withdraw of a Concept, and Media and Publications Guidance.

[The rest of this page is intentionally blank]