

PROJECT CALL Q&A:

IMPROVEMENTS IN MANUFACTURING PRODUCTIVITY VIA ADDITIVE CAPABILITIES AND TECHNO-ECONOMIC ANALYSIS (IMPACT)

The following questions were submitted regarding the IMPACT Project Call.

Q: As a professor at a university and the CEO of the proposing team, is it permissible to also be the Principal Investigator of the project (Contractual or Technical Point of Contact)?

A: *There are no criteria that prohibit this.*

Q: The RFP mentions that one electronic copy should be emailed in response to this Project Call. However, there are separate volumes including technical proposal, cost volume with an Excel file, Project Team Appendix, and Exhibits I-VII. Is it acceptable to email all of these documents in a compressed folder?

A: *Yes, it is acceptable to submit a compressed folder containing all proposal documents.*

Q: Is a budget justification statement to be included in the cost volume, in addition to Exhibit VII and the Excel file?

A: *Yes, a budget justification should be included detailing the basis and reasonability of all costs.*

Q: For this project, the AM membership deadline for topics 1-8 is June 14, and June 23 for topics 9-10. The Non-Disclosure Agreement (NDA) needs to be signed by June 14. Does this deadline apply to new members?

A: *The NDA only needs to be completed if the proposal contains proprietary information. The NDA can be signed while the membership is being processed.*

Q: Can proposers include the following confidentiality statement in the proposal: "This proposal includes data that shall not be disclosed outside the Government and shall not be duplicated, used, or disclosed in whole or in part for any purpose other than to evaluate this proposal. If, however, a contract is awarded to this offeror 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 provided in the resulting contract. 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 pages xx, yy, zz."

A: *It is acceptable to include this confidentiality statement within your proposal.*

Q: Topic 2 specifically mentions printed ceramic mold shells. Are proposals that also include 3D-printed cores allowed?

A: *The focus of this topic area is printed ceramic mold shells. If the proposer feels that 3D-printed cores add value and can outline an approach that shows the merits of 3D-printed cores as it relates to improvements in productivity, lead time, yield, and cost for the manufacturing of shells for investment casting applications, then the proposal will be considered. Alternatively, this could fit topic area 7. As per the RFP, topic area 7 includes approaches that fall outside of topic areas 1 through 6 and offers the opportunity to combine concepts aligned to multiple topic areas.*

Q: Should part certification include machining, assembly, and flight test or include only casting certification (profile, radiographic requirements, etc.)?

A: *We recognize that at the current funding level it may not be possible to complete all of these activities, but because we are interested in transition, an approach that leads to product certification should be outlined. Please outline an approach that leads to or explains how your approach is integral to or would accelerate transition and that encompasses the complete pathway to certification, including machining, assembly, flight test, etc.*

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Q: Are there any expected maximum or minimum roles (in terms of % of the project budget) for the lead proposing organization or any team members?

A: *There is no expected maximum or minimum % of total project funding that must go to the project lead or team members. The budget should reflect what is needed to execute the project successfully and each team member is expected to contribute to the merit of the project.*

Q: With such a short lead time for proposal response to the RFP, is it possible for a one-month extension? Many foundry industry people are traveling to business conferences (GIFA-INTERNATIONAL FOUNDRY CONFERENCE) and personal vacations.

A: *No, we are not able to extend the submission date.*

Q: The focus of topic area 2 is on maturing AM ceramic technologies and promoting the adaption of a rapid, low-volume production process for investment castings for defense applications. Is it outside of the program scope to consider AM ceramic cores as well, since they are integral to wax patterns for many investment castings?

A: *The focus of this topic area is printed ceramic mold shells. If the proposer feels that 3D-printed cores add value and can outline an approach that shows the merits of 3D-printed cores as it relates to improvements in productivity, lead time, yield, and cost for the manufacturing of shells for investment casting applications, then the proposal will be considered. Alternatively, this could fit topic area 7. As per the RFP, topic area 7 includes approaches that fall outside of topic areas 1 through 6 and offers the opportunity to combine concepts aligned to multiple topic areas.*

Q: Will there be any requirements and funding to finish (i.e., machine) the cast parts for validation to a final assembly, or is this request only to deliver parts in their cast state after shell removal and cut-off?

A: *We recognize that at the current funding level it may not be possible to complete all of these activities, but because we are interested in transition, an approach that leads to product certification should be outlined. Please outline an approach that leads to or explains how your approach is integral to or would accelerate transition and that encompasses the complete pathway to certification, including machining, assembly, flight test, etc.*

Q: To clarify, is the maximum federal award available per proposal inclusive of the cost-share, or is the cost share portion on top of that amount?

A: *The cost-share portion is on top of the requested federal funding. For example, if \$1 of federal funding is requested, then the project team must contribute \$0.50 cents of cost share for a total of \$1.50.*

Q: Section 3.4 of the RFP requires a data management plan compliant with DOD 3200.12. Are there any other data management requirements that are anticipated under the America Makes CORE system?

A: *Data management should be considered from project start to finish. It should follow FAIR data principles and outline the data to be collected, the file types the data will encompass, how data will be stored, file-types, upload cadence throughout the project, etc.*

Q: Can a DoD site (such a Tinker AFB) or a staff member at the DoD site be a team member in a proposal?

A: *Yes, they can be a team member, but they cannot receive any federal funding.*

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- Q:** If the DoD site and/or staff member cannot be a team member on the proposal, then as part of supporting materials with the proposal, is it allowed and/or helpful to provide a supporting letter or equivalent statement of need from the DoD site stating a need for the technology and a plan to transition this technology to the DoD site?
- A:** *Yes, a letter of support from DoD advisors is highly encouraged.*
- Q:** We have interest in submitting for Topic 7, but have a concern about the statement on page 24 regarding Original Equipment Manufacturer (OEM). Can you clarify, when the RFP is referring to OEM, does it mean an Additive Manufacturer or does it mean an OEM like Raytheon, Boeing, etc.?
- A:** *Topic 7 requires that an OEM be a part of the project team. This OEM should be an organization with design authority over the part or application on which the project focuses as they would outline the acceptance criteria for said part. A detailed technology transition plan from the OEM/supplier must be included in responses for this topic area.*
- Q:** Are you able to provide a list of the approved/qualified vendors or suppliers?
- A:** *We are not able to provide this information. It is up to the proposer to identify vendors or suppliers in their approach.*
- Q:** Clarification is needed regarding the RFP mention of, "Number of qualified part numbers." What parts are being referenced?
- A:** *We are not able to provide this information. It is up to the proposer to identify the part in their approach.*
- Q:** Are there specific benchmark (in 3D-printing speak, "benchy") test parts that government preferred/qualified foundries use and that are valued at the moment?
- A:** *It is the responsibility of the team to identify a part.*
- Q:** Does the requirement for OEM or tiered supplier mean companies like Boeing (OEM) and GKN (Tier 1) or does it mean foundries/forges that supply higher tiers' original parts or the DLA directly with replacements?
- A:** *Topic 7 requires an OEM to be a part of the project team. This OEM should be an organization with design authority over the part or application on which the project focuses as they would outline the acceptance criteria for said part. A detailed technology transition plan from the OEM/supplier must be included in responses for this topic area.*
- Q:** Is it acceptable to consider a TRL 2 submission to topic 7, recognizing that AM usually wants TRL 4 or higher?
- A:** *A submission outlining an approach that is at TRL 2 may be considered if accompanied by a strong defense including complete risk management and a strong transition plan by an OEM with design authority. We are looking for something that has been demonstrated in a lab environment.*
- Q:** Are there any negative connotations associated with having people who are foreign on the project?
- A:** *Per the RFP there are topics that do not allow foreign national participation. Otherwise, any foreign persons conducting work on the project shall be declared within the Project Team Appendix. Any project activities occurring outside of the U.S. or by non-U.S. persons must be reported and approved in advance by the America Makes Program Management Office. Execution of activity outside of the U.S. in response to this project call is discouraged. For topic areas 8 and 9 all project team members must have a valid DD2345 in*

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order to participate in projects in response to these topic areas. It is anticipated that the outcomes of this effort will be able to be desensitized at its conclusion (at a later time) to benefit a wider cross-section of the casting, forging, and AM community. No foreign national participation for topic areas 8 or 9 will be allowed. Foreign national participation as a critical path is not suggested.

Q: In the solicitation, you do not discuss US-based, but foreign-owned organizations. Can we include such organizations, for example, to produce castings during the project?

A: *Per the RFP there are topics that do not allow foreign national participation. Otherwise, any foreign persons conducting work on the project shall be declared within the Project Team Appendix. Any project activities occurring outside of the U.S. or by non-U.S. persons must be reported and approved in advance by the America Makes Program Management Office. Execution of activity outside of the U.S. in response to this project call is discouraged. For topic areas 8 and 9, all project team members must have a valid DD2345 in order to participate in projects in response to these topic areas. It is anticipated that the outcomes of this effort will be able to be desensitized at its conclusion (at a later time) to benefit a wider cross-section of the casting, forging, and AM community. Foreign national participation for topic areas 8 or 9 will not be allowed. Foreign national participation as a critical path is not suggested.*

Q: The RFP states, "Any non-America Makes members contributing to proposed effort execution are not permitted to participate in project team discussions until completing a fully executed America Makes Membership Agreement."

A: *From the RFP: The lead proposer for responses to topic areas 1 through 8 is a current member of America Makes and in good standing by Wednesday, June 14, 2023. The lead proposer for responses to topic areas 9 or 10 is a current member of America Makes and in good standing by Friday, June 23, 2023. Non-members may contribute but should be firewalled from the detailed project discussions. Goods and services can be contracted but once the data is obtained that should be the end of their participation unless they have a fully executed membership agreement.*