

Project Call Announcements

August 4, 2020

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Overview

	Rapid Innovation Call			
	Open Project Call	AM for Hypersonics	Government Driven	Member Driven
Announcement	July 29, 2020	July 29, 2020	August 4, 2020	August 4, 2020
Due Dates	Full Project Proposal due September 4, 2020	Step 1 Concept packet due August 28, 2020 Step 2 Full Project Proposal due October 12, 2020	Submissions considered for FY2020 funds until February 28, 2021	Submissions considered for FY2020 funds until February 28, 2021
Total Federal Funding Available	\$800,000.00	\$900,000.00	\$200,000.00	\$200,000.00
Max Federal Award per Proposal	\$175,000.00	\$450,000.00	None	None
Cost Share	Minimum 50%	100% (dollar for dollar match)	Target 25%	No minimum, but Cost Share will be considered as part of evaluation
Anticipated Number of Awards	5	2	4	4
Period of Performance (PoP)	6 months (5 months execution, 1 month final reporting) NO extensions will be considered	15 months (12 months technical, 3 months final reporting)	4 months (3 months execution, 1 month final reporting) NO extensions will be considered	4 months (3 months execution, 1 month final reporting) NO extensions will be considered
Membership Requirements				
Project Lead	Project Lead organization must be America Makes member	Project Lead organization must be America Makes member by September 21, 2020	Project Lead organization must be America Makes member.	Project Lead organization must be America Makes member.
Project Team	All Project Team organizations must be America Makes members	Project Team organizations are not required to be America Makes members	All Project Team organizations must be America Makes members	All Project Team organizations must be America Makes members

Open Project Call

- 1 step response – Full Proposal
- Shortened proposal response format
 - Technical Volume – 13 pages
 - No project team appendix
- All team members must be America Makes members
- Questions: projectcall@americamakes.us

Open Project Call	
Announcement	July 29, 2020
Due Dates	Full Project Proposal due September 4, 2020
Total Federal Funding Available	\$800,000.00
Max Federal Award per Proposal	\$175,000.00
Cost Share	Minimum 50%
Anticipated Number of Awards	5
Period of Performance (PoP)	6 months (5 months execution, 1 month final reporting) NO extensions will be considered
Membership Requirements	
Project Lead	Project Lead organization must be America Makes member
Project Team	All Project Team organizations must be America Makes members

Open Project Call FY 2020 Schedule

Event	Date
Project Call Announcement and Posting	07/29/2020
Project Call Kickoff Webinar	08/04/2020
Questions from Proposers about Scope or Approach Due	08/11/2020
Responses to Proposers about Scope or Approach Due	08/18/2020
Deadline for all team members to be an America Makes Member	08/21/2020
Fully Executed NDA with NCDMM (only if proposal contains proprietary information)	08/21/2020
Full Project Proposal Submission Due Date	09/04/2020
Anticipated Decision and Notification to Project Proposal Teams	10/09/2020
Anticipated Date to have ALL Projects on Contract	11/09/2020
All project finalized reports and deliverables received no later than	05/28/2021

Topics

- Digital Store Front materials data repository – development of methods, tools, and data models to facilitate the compilation, development, future prioritization, and tracking of mechanical and physical AM materials data for America Makes which will serve as a single touchpoint within the America Makes Digital Store Front
- Machine learning and artificial intelligence for prediction, identification, and translation of AM process parameters, quality metrics, product/material performance factors for various AM processes, materials, applications, and geometries
- Identification and documentation of design feature (geometry, orientation) in-situ sensing limitations for various types of AM materials and processes for in-situ defect detection and process quality monitoring (process parameters or process metrics within an acceptable range of operation)
- In-situ sensing process methods/practices which facilitate cross-calibration of in-situ sensing and physics-based models for metallic AM processes. Development of methods for monitoring AM processes to validate experimental results and physics-based models or vice versa
- Development of environmental controls for feedstocks which impact product quality including:
 - Recyclability, Waste handling, Guidelines/recommended practices for material handling and material safety, Software controls, In-situ monitoring methods
- Demonstration of automated data acquisition, processing and storage for various AM processes. Approaches should look to eliminate human error (manual data entry) and develop recommended practices for data gathering, formatting, and sharing
- Executive additive training courses – priority for America Makes generated and sharable content (limited or no background IP favored)
- Additive manufacturing courses for entry level engineering which embeds industry recognized credentials – priority for America Makes generated and sharable content (limited or no background IP favored)
- Cyber security for AM virtual training – priority for America Makes generated and sharable content (limited or no background IP favored)

Funding Overview: Five Awards

Funding Description	Amount
Total Federal Funding Available (not per award)	\$800,000
Max Federal Award Per Proposal	\$175,000
Cost Share (50% minimum)	50% of federal award amount requested per proposal
Period of Performance (PoP) – shorter periods are acceptable*	6 Months (5 months execution and 1 month reporting) – no extensions will be considered

*PoP may be longer if contracting can be expedited, but no proposed PoP's longer than 6 months will be considered for funding. Effort beyond the proposed PoP (no guarantee of follow on funding) may be included in technical volume – **counts towards page count/not considered in scoring criteria**

Minimum Deliverables

Minimum Deliverables	Timeline
Written Final Report (minimum one round of revision completed with PM/NCDMM prior to final submission)	Due on or prior to May 28, 2021 (non-negotiable deadline, no extensions will be considered)
Financial and man-hour reports	Monthly
TRX, MMX, webinar, or other America Makes hosted forum to brief membership	Minimum of one for closeout, two at most (including closeout)
Lead organization shall participate on at least one working group, advisory group, steering committee, etc. relevant to the subject matter of the project	Hours shall be tracked and reported
Data management plan, key performance parameters (KPP's), planned project deliverables list with corresponding (existing/ new) Technology/EWD roadmap requirements	Draft at time of proposal Final 1 month after award

AM of High Temperature Metals for Hypersonic Applications

- 2 step response
 - Concept then Full Proposal
- Standard response formats
- Lead Proposer must be an America Makes member
- All proposal project team members must show proof of valid DD2345 – Exhibit VI
- Questions: projectcall@americamakes.us

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Total Federal Funding Available	\$800,000.00	\$900,000.00
Max Federal Award per Proposal	\$175,000.00	\$450,000.00
Cost Share	Minimum 50%	100% (dollar for dollar match)
Anticipated Number of Awards	5	2
Period of Performance (PoP)	6 months (5 months execution, 1 month final reporting) NO extensions will be considered	15 months (12 months technical, 3 months final reporting)
Membership Requirements		
Project Lead	Project Lead organization must be America Makes member	Project Lead organization must be America Makes member by September 21, 2020
Project Team	All Project Team organizations must be America Makes members	Project Team organizations are not required to be America Makes members

Schedule

Event	Date
Project Call Announcement and Posting	07/29/2020
Project Call Kickoff Webinar	08/04/2020
Questions from Proposers about Scope or Approach Due	08/14/2020
Responses to Proposers about Scope or Approach Due	08/19/2020
Lead proposer required to be an America Makes Member	09/21/2020
Fully Executed NDA with NCDMM (only if proposal contains proprietary information)	08/21/2020
Project concept submissions due	08/28/2020
Decision and Notification to Project Concept Teams who are being asked to submit full proposals	09/11/2020
Full Project Proposal Submission Due Date	10/12/2020
Anticipated Decision and Notification to Project Proposal Teams	11/06/2020
Anticipated Date to have ALL Projects on Contract	12/1/2020

Background

- AM for high temperature metals is key to timely fielding of hypersonic capabilities and addressing shortfalls of traditional manufacturing processes which are often costly, low-yield, and labor intensive

- Critical Factors Impacting Yield, Quality and Cost
 - Distortion
 - AM material/process compatibility
 - Relevant mechanical property data

Objectives

- Validate improvements relative to comparable, existing solutions.
- High temperature alloy manufacturing pertinent to the following topics:
 - **Topic 1: Reliable manufacturing of complex scramjet flowpath**
 - **Topic 2: Gradient printing of material systems relevant to hypersonic applications**
 - **Topic 3: Scale-up capabilities for additively manufactured high temperature alloys, such as oxide dispersion strengthened (ODS) multi-principle element alloys (MPEA)**

Minimum Deliverables

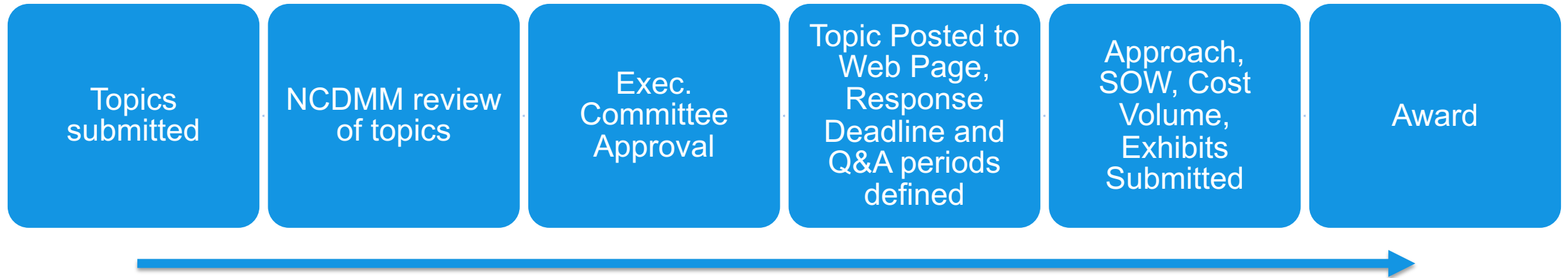
Deliverables	Timeline
Written technical progress reports	Quarterly
Project update calls or virtual meetings between project team, America Makes PM, and Government advisor	Monthly
Financial and man-hour reports	Monthly
Annual briefing to America Makes members	Annually (MMX, TRX)
Lead organization shall participate on at least one swimlane working group relevant to subject matter of the project	Quarterly (documented in technical project reports)
Data Management Plan, Key performance parameters (KPP's), planned project deliverables list with corresponding (existing/new) Technology Roadmap Requirements	Draft at time of proposal Final 1 month after award
Written Final Project Report (minimum one round of revision completed with PM/NCDMM prior to final submission).	15 months after award Preliminary draft submission 12 months after award
Additional Deliverables specific to the proposed effort	"Deliver as you go" – As soon as data or deliverable is finalized for release

Rapid Innovation Call (RIC)

- 1 step response
- Shortened proposal response format
 - Technical Volume – 4 pages
 - No project team appendix
- All proposal project team members must be an America Makes member
- RIC Information Guide on website
- Questions: ric@americamakes.us

	Rapid Innovation Call	
	Government Driven	Member Driven
Announcement	August 4, 2020	August 4, 2020
Due Dates	Submissions considered for FY2020 funds until February 28, 2021	Submissions considered for FY2020 funds until February 28, 2021
Total Federal Funding Available	\$200,000.00	\$200,000.00
Max Federal Award per Proposal	None	None
Cost Share	Target 25%	No minimum, but Cost Share will be considered as part of evaluation
Anticipated Number of Awards	4	4
Period of Performance (PoP)	4 months (3 months execution, 1 month final reporting) NO extensions will be considered	4 months (3 months execution, 1 month final reporting) NO extensions will be considered
Membership Requirements		
Project Lead	Project Lead organization must be America Makes member.	Project Lead organization must be America Makes member.
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Process is Similar to One Step Project Call



“Government Driven” concepts shared with Chartered Groups (awareness)

“Member Driven” is submitted by Chartered Group (WG/AG/Committee)

All team members must be America Makes member – Signed membership agreement/MoU for cost share

Topics submitted must be unclassified, approved for public release, non-proprietary

Schedule

Event	Date
Announcement and Posting	08/04/2020
Rapid Innovation Call Kickoff Webinar	08/04/2020
Immediate call for topics	08/04/2020
Anticipated date to release first RIC opportunity (posted topic(s) released)	10/06/2020*
America Makes Member/MoU Execution Deadline	Min. 45 days prior to project start
Fully Executed NDA with NCDMM (only if proposal contains proprietary information)	Prior to proposal submission
Proposal Submissions for FY 2020 Funding Considered Until	02/28/2021

- **No deadline to submit a topic for consideration**
- **Submit topics to <https://www.americamakes.us/government-driven-project-call/> or <https://www.americamakes.us/member-driven-project-call/> via the online form**
- ***Anticipated receipt of topic concepts by 09/18/2020 for 09/22/2020 EC meeting**

Minimum Deliverables

Minimum Deliverables	Timeline
Written Final Report (minimum one round of revision completed with PM/NCDMM prior to final submission)	Due no later than PoP end date (non-negotiable deadline, no extensions will be considered)
Financial and man-hour reports	Monthly
TRX, MMX, webinar, or other America Makes hosted forum to brief membership	Minimum of one for closeout, two at most (including closeout)
Lead organization shall participate on at least one working group, advisory group, steering committee, etc. relevant to the subject matter of the project.	Hours shall be tracked and reported
Data management plan, key performance parameters (KPP's), planned project deliverables list with corresponding (existing/ new) Technology/EWD roadmap requirements	Draft at time of proposal Final 1 month after award

When America Makes America Works

