Request for Project Information



Solicitation Number: MTEC-25-03-BloodBag

"Single Blood Donor Collection and Storage Bags Manufactured in Continental United States (CONUS)"

Issued by:
Advanced Technology International (ATI),
MTEC Consortium Manager (CM)
315 Sigma Drive
Summerville, SC 29486
for the
Medical Technology Enterprise Consortium (MTEC)

Request Issue Date: November 6, 2024

Project Information Paper Due Date: January 6, 2025

Noon Eastern Time

The Medical Technology Enterprise Consortium (MTEC), in support of the U.S. Army Medical Research and Development Command (USAMRDC), and Defense Health Agency (DHA), is excited to post this Request for Project Information (RPI) focused on surveying the current manufacturing capabilities of single blood donor/storage bags within the bounds of the contiguous United States.

PURPOSE OF THE PROJECT INFORMATION PAPER:

This Request for Project Information (RPI) contains background material and guidance for the preparation of project information papers to MTEC. Project Information Papers will be reviewed by the Sponsor and used in a manner that shapes DHA efforts in this technology space. The results of the Project Information Paper submission will serve to assess the development landscape and potentially focus efforts that will follow.

<u>As a note:</u> This RPI is issued solely for information and planning purposes and does not constitute a solicitation. Neither unsolicited proposals nor any other kind of offers will be considered for award in response to this RPI. Responses to this notice are not offers and will not be accepted by the government to form a binding contract. Responders are solely responsible for all expenses associated with responding to this RPI. All information received in response to this RPI that is marked "Proprietary" will be handled accordingly.

FOCUS AREA OF INTEREST:

In accord with the Department of Defense (DoD) 2022 National Defense Strategy identifying Building Enduring Advantages, there is an effort to invest in manufacturing capabilities within the continental United States (CONUS) as part of efforts to bolster the Defense Industrial Base (DIB) and securing domestic supply chains. In recent years, there has been a shortage of much needed blood storage bags, and this is acute within the DoD system where there is a requirement for singly wrapped blood bags for use in far forward situations.

"Today's DIB requires additional investment from private and government sources to modernize infrastructure and capacity to provide military capabilities at the speed and scale necessary for the U.S. to prevail in a near-peer conflict. To adapt and fortify our existing capabilities and capacities, the Department needs to focus on investment and to buy down supply chain risk and expand capacity."

DoD's diverse warfighting capabilities means that Sailors, Marines, Soldiers, Airmen, Guardians and Joint Special Operations Service members operate in a vast array of challenging, remote, and austere environments. In forward positions there is a high probability of traumatic injury and wounds leading to blood loss. Hemorrhage is the leading cause of death in combat zone

trauma. The gold standard for immediate treatment of hemorrhage is transfusion of whole blood however, the availability of whole blood and conventional blood products on forward missions is challenging. In recent years there have been supply chain disruptions across the continuum of military and civilian products. This includes components used in the manufacture of blood bags from the polymer components to the anticoagulant/preservative solutions within the bag. This has resulted in shortages of single blood storage kits most often used in austere environments especially for walking donors. According to the US Food and Drug Administration Center for Biologics Evaluation and Regulation for regulated products shortages website, the shortage of series of blood collection bag kits and products is described as ongoing. Shortages of ingredients, components and manufacturing supplies, and release timing issues are intermittent and unpredictable. Product may be placed on allocation as necessary to manage reduced or unavailable supply. This vital product is needed in steady supply to meet the needs of aiding wounded warriors within the golden hour, or sooner, out in the field at the point of injury with donated blood. Our approach is to stand up or bolster domestic production.

The Government seeks Project Information Papers regarding the development of a prototype system detailing the following:

- Production of a bag within the contiguous United States within 2 years of award that meets the following existing specification:
 - Individually wrapped single aseptic collection bag
 - Compliant with FDA (21 CFR 864.9100), ISO 10993 and 3826, USP and MIL 810H standards and guidance.
 - Supports whole blood donor phlebotomy of 500mL (+/-10%, 450-550 mL) or 450 mL (+/-10%, 405-495 mL).
 - Contains a solution of anticoagulant and preservatives meeting the USP standards that allows for storage of blood for at minimum 21 days up to 35 days.
 - Foil wrapping that is easy to open requiring no tools and if practical, textured for better grip with brightly marked notches not only at the corners but also in the center of the packaging.
 - The manufactured bags should have a shelf life of 18 24 months at room temperature.
 - Appropriate fatigue and distortion testing.
 - Experience designing medical devices specifically blood products and adhering to verification and validation guidance.
 - Within 2 years, capability to manufacture no less than 10,000 standard blood donor/storage bags per year and have a surge capability plan during times of increased demand for full single blood bag kits with compliant materials and processes.
- Any established current Good Manufacturing Practice (cGMP) ready methods with fully designed hardware and functional disposables.
 - Manufacturers implementing GMP that require financial assistance to meet all requirements of the U.S. Food and Drug Administration (FDA) with clear standard

operating procedures and compliance documentation (21 CFR 864.9100) shall provide appropriate substantiating information, including a workflow for obtaining GMP certification.

- Demonstrable redundancy in sourcing of raw materials from multiple vendors.
- A notional rough order of magnitude estimate of proposed program cost inclusive of any cost share and other funding sources that the offeror has secured.

REQUIREMENTS OF THE PROJECT INFORMATION PAPER:

Project Information Papers should clearly describe expertise in each of the aforementioned areas as it relates to the manufacturing of blood bags. Interested parties are encouraged to submit Project Information Papers using the template included in **Addendum 1 of this RPI.**

MTEC is seeking input from both MTEC members and non-members via a project information paper to be considered by the government. Project Information Papers will be shared with the reviewers under non-disclosure agreements.

Project Information Papers may be submitted at any time during the submission period but no later than the due date and time specified on the first page of this RPI using BIDS: https://submissions2.ati.org/ATI2/Portal.nsf/Start?ReadForm. See Addendum 2 of this RPI for further information regarding BIDS registration. MTEC membership is NOT required for submission of Project Information Paper.

MTEC:

The MTEC mission is to assist the U.S. Army Medical Research and Development Command (USAMRDC) and the Defense Health Agency (DHA) by providing cutting-edge technologies and supporting life cycle management to transition medical solutions to industry that protect, treat, and optimize Warfighters' health and performance across the full spectrum of military operations. MTEC is a biomedical technology consortium collaborating with multiple government agencies under a 10-year renewable Other Transaction Agreement (OTA), Agreement No. W81XWH-15-9-0001, with the U.S. Army Medical Research Acquisition Activity (USAMRAA). MTEC is currently recruiting a broad and diverse membership that includes representatives from large businesses, small businesses, "nontraditional" defense contractors, academic research institutions and not-for-profit organizations.

POINTS OF CONTACT:

For inquiries, please direct your correspondence to the following contacts:

 Technical and membership questions should be directed to the MTEC Biomedical Research Associate, Dr. Chuck Hutti, Ph.D., chuck.hutti@ati.org



Addendum 1 – Project Information Template

[Up to 10-page limit with 3-5 pages dedicated to technical capabilities; 1-2 pages on the proposed product including renderings and at least one page on the rough order of magnitude financials to achieve the goals. Times New Roman 11 point (or larger), Single-spaced, single-sided, 8.5 inches x 11 inches). Smaller type may be used in figures and tables but must be clearly legible. Margins on all sides (top, bottom, left, and right) should be at least 0.5 inch. These project information submissions will be shared with the Sponsor; therefore, all information must be **nonproprietary**. Project Information Paper should be submitted as a Word (*.docx) of PDF (*.pdf) document using the template provided in this RPI.]

Title: [Insert descriptive title of project]

Point of Contact: [Insert name, organization, email address, phone number]

Technology: [Provide a clear description of why and how the proposed technology or project fits into the described focus area of this RPI. Describe how the technology addresses the programmatic need.]

Objectives: [Provide a clear description of the objectives and aims for the proposed project.]

Technical Approach: [Provide an overview of the technical strategy to be employed during the project to achieve the abovementioned objectives. Provide a proposed period of performance. List milestones and deliverables from the proposed work.]

Technical Maturity: [Summarize the current maturity of the project, including any supporting data or information. Respondents are also encouraged to detail any expertise, capabilities, or recourses that would be used to support the development of the proposed project.]

Anticipated Regulatory and Commercialization Strategy: [Provide a brief description of the anticipated regulatory pathway and commercialization plans, as applicable. Include information on any previous interactions with the FDA.]

Personnel: [Briefly state the qualifications of the key personnel to perform the work.]

Estimated Funding Required to Advance Project: [Please estimate the required funding needed for each major task that advances the project into its next stage of development/milestone dependent upon its current maturity. Do not provide budget detail – only provide a total estimated budget for each major milestone. This information will be used to provide the Sponsor with a reasonable

representation of the amount of funding required to advance the project.]

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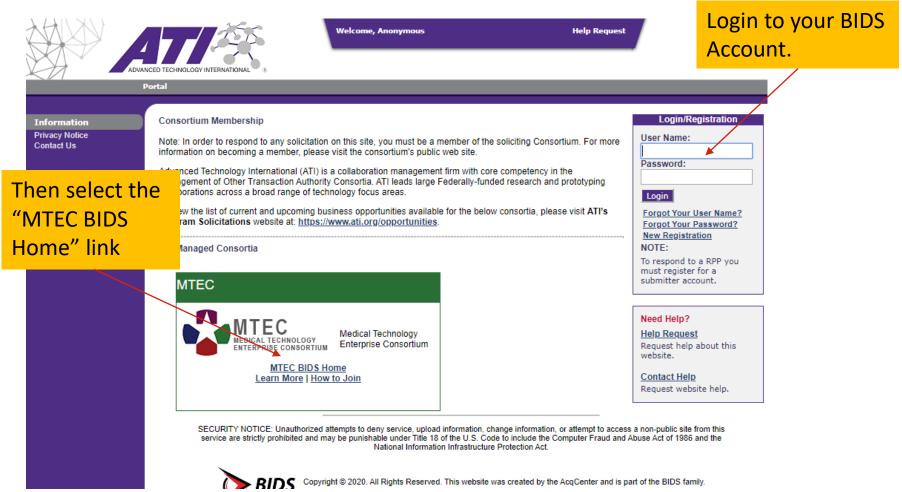
MTEC BIDS PROPOSAL SUBMISSION

MTEC BIDS URL:

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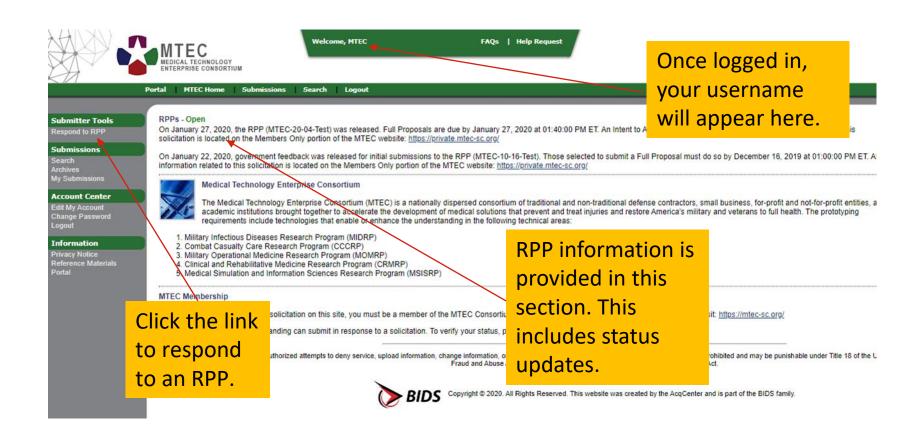


Navigate to the MTEC BIDS site and login. After login select the "MTEC BIDS Home" link.



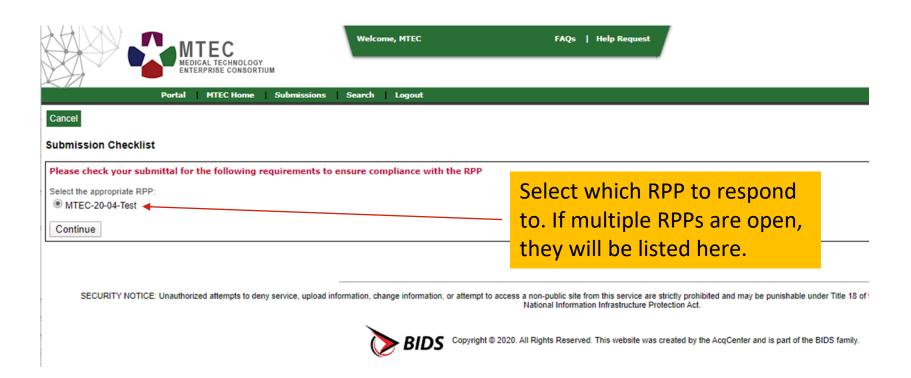


Select the "Respond to RPP" link under the submitter tools



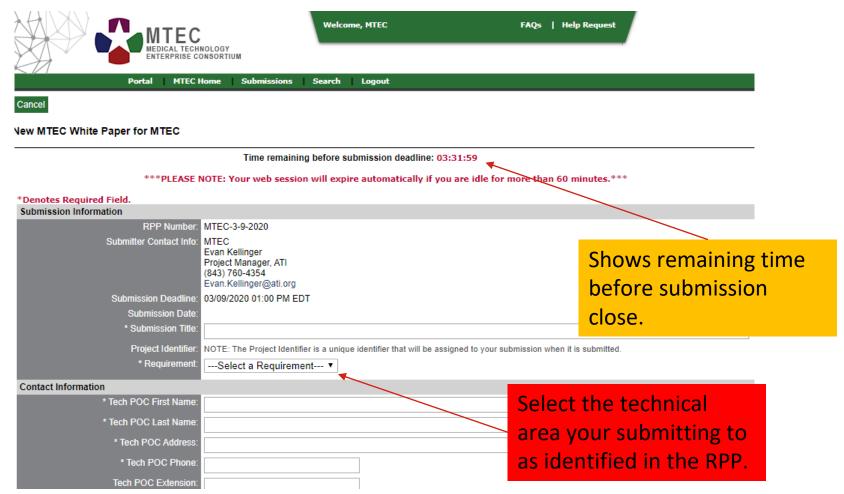


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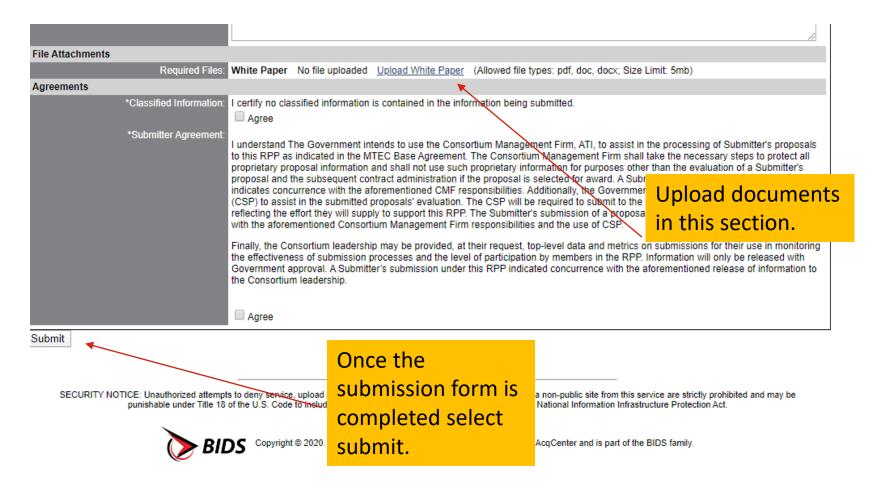


Complete the submission form.





Complete the submission form by uploading the required documents and click submit.





Once you have successfully submitted a proposal, you will receive a notification with your submission number (ex. MTEC-23-24-Everest-045).

- Submission documents can be modified anytime prior to the due date and time from your BIDS account.
- To make changes to your submission, prior to the due date/time, select the submission link from the home page and navigate to your submission.

Please note: For RPPs that are <u>two stages</u> (i.e. White Paper to Full Proposal) <u>only the account that submitted the stage 1 proposal</u> (the White Paper) <u>will be allowed to submit for stage 2</u> (the Full Proposal), if selected.

ALL PROPOSALS MUST BE SUBMITTED BEFORE THE SUBMISSION DUE DATE AND TIME. LATE PROPOSALS CAN NOT BE ACCEPTED.