

Request for Project Proposals



Solicitation Number: MTEC-24-06-SimulationEcosystem
**“Simulation Ecosystem Development for Validation of Emerging Technologies within the
Autonomous Casualty Care (AC2) Research Portfolio ”**

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: February 8, 2024

Enhanced White Paper Due Date: March 8, 2024
Noon Eastern Time

Table of Contents

1	Executive Summary.....	3
1.1.	The Medical Technology Enterprise Consortium.....	3
1.2.	Purpose	3
2	Administrative Overview	3
2.1.	Request for Project Proposals (RPP).....	3
2.2.	Funding Availability and Period of Performance	4
2.3.	Acquisition Approach.....	4
2.4.	Offeror Eligibility	5
2.5.	Proposers Conference.....	5
2.6.	Proprietary Information.....	5
2.7.	MTEC Member Teaming	6
2.8.	Intellectual Property	6
2.9.	Expected Award Date.....	7
2.10.	Anticipated Proposal Selection Notification	7
3	Technical Requirements.....	7
3.1.	Background	7
3.2.	Technical Objective.....	8
3.3.	Desired Solution Characteristics	8
4	Proposal Preparation and Process	10
4.1.	General Instructions.....	10
4.2.	Instructions for the Preparation & Submission of the Enhanced White Paper.....	10
4.3.	Stage 2: Cost Proposal (for Only Those Offerors Recommended for Funding).....	11
4.4.	Enhanced White Paper and Cost Proposal Preparation	12
5	Selection.....	12
5.1.	General Information	12
5.2.	Enhanced White Paper Evaluation	12
5.3.	Definition of General Terms Used in Evaluations.....	13
6	Points-of-Contact	14
7	Acronyms/Abbreviations	14
8	Enhanced White Paper Template	16
	Addendum 1 – Stage 2 Evaluation Criteria.....	21

1 Executive Summary

1.1. The Medical Technology Enterprise Consortium

The Medical Technology Enterprise Consortium (MTEC) is an enterprise partnership in collaboration with industry and academia to facilitate research and development activities, in cooperation with the Department of Defense (DoD) U.S. Army Medical Research and Development Command (USAMRDC) and other Government agencies in the biomedical sciences (including but not limited to drugs, biologics, vaccines, medical software and medical devices) to protect, treat and optimize the health and performance of U.S. military personnel.

MTEC operates under an Other Transaction Agreement (OTA) for prototype projects with USAMRDC. In accordance with 10 USC 4022, the MTEC OTA enables the Government to carry out prototype projects that are 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 Department of Defense, or to improvement of platforms, systems, components, or materials in use by the armed forces. For more information on the MTEC, its mission, and the definition of prototype, see the MTEC website (www.mtec-sc.org).

1.2. Purpose

This solicitation, issued by the MTEC Consortium Manager (CM), Advanced Technology International (ATI), represents a Request for Project Proposals (RPP) for MTEC in support of the Telemedicine and Advanced Technology Research Center (TATRC) focused on establishing an array of venues where medics, other caregivers and simulated patients agree to participate in tactical combat casualty care (TCCC) training while wearing suites of sensing technologies. This effort is aimed at providing a controlled venue to conduct these training events that is hyper realistic with respect to battlefield conditions.

2 Administrative Overview

2.1. Request for Project Proposals (RPP)

MTEC is utilizing an accelerated approach to award for this RPP. This streamlined approach is anticipated to be a better means to highlight Offeror methodologies and skills required to address the technical requirements described herein. The Enhanced White Paper process requires quick turnaround times by Offerors. The following sections describe the formats and requirements of the Enhanced White Paper.

Additionally, the Proposal Preparation Guide (PPG) contains several templates required for this RPP. The PPG can be found on the MTEC members only site, <https://private.mtec-sc.org/>. For information on how to join MTEC, please visit <http://mtec-sc.org/how-to-join/>. If you are already a member and would like to request access to the Members Only Website, please visit <https://mtec-sc.org/members-only-access-request/>.

Offerors who submit Enhanced White Papers in response to this RPP should submit by the date on the cover page of this RPP. Enhanced White Papers may not be considered under this RPP unless received on or before the due date specified on the cover page.

Each Enhanced White Paper submitted must be in accordance with the mandatory format provided in

Section 8 of the RPP. Enhanced White Papers that fail to follow the mandatory format may be eliminated from the competition during the CM's preliminary screening stage (see **Section 5** for more details on the Selection process).

*Note that the terms "Enhanced White Paper" and "Proposal" are used interchangeably throughout this RPP.

2.2. Funding Availability and Period of Performance

The U.S. Government (USG) currently has **up to \$442,000** for this effort. Award and funding from the Government is expected to be limited to the funding specified above and is contingent upon the availability of federal funds for this program. Dependent on the results and deliverables, additional dollars and time may be added to the period of performance for non-competitive follow-on tasks such as the year 2 efforts (see **Section 3.3 of this RPP** for more information).

Cost sharing, including cash and in kind (e.g., personnel or product) contributions are strongly encouraged, have no limit, and are in addition to the Government funding to be provided under the resultant award(s).

MTEC expects to make **one award** to a qualified Offeror(s) to accomplish the scope of work with a Period of Performance (PoP) **not to exceed 24 months**.

2.3. Acquisition Approach

This RPP will be conducted using the Enhanced White Paper approach. In Stage 1, Offerors are invited to submit Enhanced White Papers using the mandatory format contained in this RPP (see **Section 8 of this RPP**). The Government will evaluate Enhanced White Papers and will select those that represent the best value using the evaluation criteria in **Section 5 of this RPP**. Offerors whose proposed solution is selected for further consideration based on the Enhanced White Paper evaluation will be invited to submit a full cost proposal in Stage 2 (and may be required to submit additional documentation or supplemental information such as those examples listed under **Section 4.2**). Notification letters will contain specific Stage 2 proposal submission requirements.

The due date for Enhanced White Papers is found on the **cover page of this RPP**. Enhanced White Papers may not be considered under this RPP unless the Enhanced White Paper was received on or before the due date specified on the cover page.

Pending successful completion of the total effort, the Government may issue a non-competitive follow-on production contract or transaction pursuant to 10 U.S.C. § 4022 section f.

The Government-selected prototype project(s) awarded as a result of this solicitation will be funded under the Other Transaction Agreement for prototype projects (OTA) Number W81XWH-15-9-0001 with MTEC administered by the CM, ATI. The CM will negotiate and execute a Base Agreement with MTEC members (if not yet executed). The same provisions will govern this Base Agreement as the OTA for prototype projects between the Government and MTEC. Subsequently, any proposal that is selected for award will be funded through a Research Project Award issued under the member's Base Agreement. The MTEC Base Agreement

can be found on the MTEC website at www.mtec-sc.org/documents-library/.

At the time of the submission, if Offerors have not yet executed a Base Agreement, then Offerors must certify on the cover page of their White Paper that, if selected for award, they will abide by the terms and conditions of the latest version of the MTEC Base Agreement. If the Offeror already has executed an MTEC Base Agreement with the MTEC CM, then the Offeror must state on the cover page of its White Paper that, if selected for award, it anticipates the proposed effort will be funded under its executed MTEC Base Agreement.

2.4. Offeror Eligibility

Offerors must be MTEC Members in good standing to be eligible to submit a proposal. Offerors submitting Enhanced White Papers as **the prime performer must be MTEC members of good standing at least 3 days prior to submission of the White Paper**. Subcontractors (including all lower tier subawardees) do not need to be MTEC members. To join MTEC, please visit <http://mtec-sc.org/how-to-join/>.

At the time of the submission, if Offerors have not yet executed a Base Agreement, then Offerors must certify on the cover page of their Proposal that, if selected for an award, they will abide by the terms and conditions of the latest version of the MTEC Base Agreement. If the Offeror already has executed an MTEC Base Agreement with the MTEC CM, then the Offeror must state on the cover page of its Proposal that, if selected for an award, it anticipates the proposed effort will be funded under its executed MTEC Base Agreement.

2.5. Proposers Conference

MTEC intends to host a Proposers Conference that will be conducted via webinar within two (2) weeks of the release of the RPP. The intent of the Proposers Conference is to provide an administrative overview of this RPP and to present further insight into the technical requirements outlined in **Section 3 of this RPP**. Further instructions will be forthcoming via email. Offerors are advised to check the MTEC website periodically during the proposal preparation period for any clarifications found in Frequently Asked Questions (FAQ) responses.

2.6. Proprietary Information

The MTEC CM will oversee submission of Enhanced White Papers submitted in response to this RPP. The MTEC CM shall take the necessary steps to protect all proprietary information and shall not use such proprietary information for purposes other than the evaluation of an Offeror's Enhanced White Papers. **In accordance with the MTEC Proposal Preparation Guide (PPG), please mark all Confidential or Proprietary Information as such.** An Offeror's submission of a Proposal under this RPP indicates concurrence with the aforementioned CM responsibilities.

Also, as part of MTEC's mission to incorporate philanthropic donations, MTEC frequently makes contact with private entities (e.g., foundations, investor groups, organizations, individuals) that award grants or otherwise co-fund research, and/or operates in research areas that are aligned with those of MTEC. These private entities may be interested in reviewing certain proposals within their program areas, allowing for opportunities to attract supplemental funding sources. Therefore, on the Enhanced White Paper Cover Page, Offerors should indicate willingness to allow MTEC Officers and Directors access to your proposal for the

purposes of engaging in outreach activities with these private entities. MTEC Officers and Directors who are granted proposal access have signed Nondisclosure Agreements (NDAs) and Organizational Conflict of Interest (OCI) statements. Additionally, all Technical Evaluation Panel participants, which may include contractor support personnel serving as non-Governmental advisors, will agree to and sign a Federal Employee Participation Agreement or a Nondisclosure/Nonuse Agreement, as applicable.

2.7. MTEC Member Teaming

While teaming is not required for this effort, Offerors are encouraged to consider teaming during the proposal preparation period (prior to Enhanced White Paper submission) if they cannot address the full scope of technical requirements of the RPP or otherwise believe a team may be beneficial to the Government. The following resources may help Offerors form a more complete team for this requested scope of work.

- The MTEC M-Corps is a network of subject matter experts and service providers to help MTEC members address the business, technical, and regulatory challenges associated with medical product development. Please visit <https://www.mtec-sc.org/m-corps/> for details on current partners of the M-Corps.
- MTEC Database Collaboration Tool to help identify potential teaming partners among other MTEC members. Contact information for each organization is provided as part of the member profile in the collaboration database tool to foster follow-up conversations between members as needed. The Collaboration Database Tool can be accessed via the “MTEC Profiles Site” tab on the [MTEC members-only website](#).
- A dedicated Teaming Connect will be held to facilitate direct interaction amongst MTEC members in relation to this active funding opportunity. This will be a virtual “connect” session via ZOOM where MTEC members will be allowed to provide brief pitch presentations regarding to their ongoing work, organizational capabilities, and teaming preferences. More information on this event will be provided in the near future.

2.8. Intellectual Property

Baseline Intellectual Property (IP) and Data Rights for MTEC Research Project Awards are defined in the terms of an awardee’s Base Agreement and, if applicable, specifically negotiated terms are finalized in any resultant Research Project Award. MTEC reserves the right to assist in the negotiation of IP, royalties, licensing, future development, etc., between the Government and the individual performers prior to final award decision and during the entire award period.

The Offeror shall comply with the terms and conditions contained in their Base Agreement regarding IP and Data Rights, as modified by the specifically negotiated IP and Data rights terms herein. **It is anticipated that anything created, developed, or delivered under this proposed effort will be delivered to the Government with Government Purpose Rights or unlimited data rights unless otherwise asserted in the proposal and agreed to by the Government.** Rights in technical data in each Research Project Award shall be determined in accordance with the provisions of MTEC Base Agreement.

Note that as part of Stage 1 of the RPP process (submission of an Enhanced White Papers), Offerors shall complete and submit **Attachment 6 of the PPG** (Intellectual Property and Data Rights) with the Signature of the responsible party for the proposing Prime Offeror. For more information, the CM has published a

resource for Offerors entitled, “Understanding Intellectual Property and Data Rights” on the MTEC members-only website.

2.9. Expected Award Date

Offerors should plan on the period of performance beginning approximately June 2024 (subject to change). The Government reserves the right to change the proposed period of performance start date through negotiations via the CM and prior to issuing a Research Project Award.

2.10. Anticipated Proposal Selection Notification

As the basis of selections is completed, the Government will forward its selections to the MTEC CM to notify Offerors. All Proposers will be notified by email from the MTEC CM of the results of the evaluation. Those successful will move forward to the next stage of the process.

Offerors are hereby notified that once an Enhanced White Paper has been submitted, neither the Government nor the MTEC CM will discuss evaluation/status until after the Offeror receives the formal notification with the results of this evaluation.

3 Technical Requirements

3.1. Background

The Military Health System (MHS) lacks a robust, accurate, and reliable methodology to collect, store, and track Tactical Combat Casualty Care (TCCC) data. Establishing a prehospital environment data set (e.g., TCCC, prolonged casualty care [PCC], and/or en route casualty care [ERCC]) is an essential, foundational step to modernizing Military TCCC medical care. Without a means to collect data reliably and passively from the point of injury (POI) through higher echelons of care, the MHS will continue to lack the essential data to develop a trustworthy artificial intelligence (AI) to support future concepts that will sustain medical operations in the various environments of Multi-Domain Operations (MDO).

Military medics and combat lifesavers often find that pausing care delivery to generate medical documentation is challenging, if not impossible, in many instances. Being able to capture the medical care being delivered in these venues may be secondary to saving lives in that moment; however, the need for timely, accurate medical documentation remains. To enhance TCCC and improve medical documentation in the MHS, a passive (e.g., with minimal human effort) documentation solution of medical care in operational environments is an essential requirement to establishing these critical TCCC data sets. Furthermore, it is vital that the processes in collecting this data does not distract the medic/caregiver’s capability and capacity to deliver care.

To address this need, the USA TATRC has recently initiated the Autonomous Casualty Care (AC2) Research Portfolio. This research portfolio seeks to develop systems of sensor suites that passively collect accurate and reliable data about casualty status, caregiver (e.g., medic and/or combat lifesaver) actions, and real time resource usage. USA TATRC will collect data during TCCC to develop a data set that describes casualty care. One use of this data (and associated algorithms) is to automate documentation of TCCC (e.g., DD Form 1380).

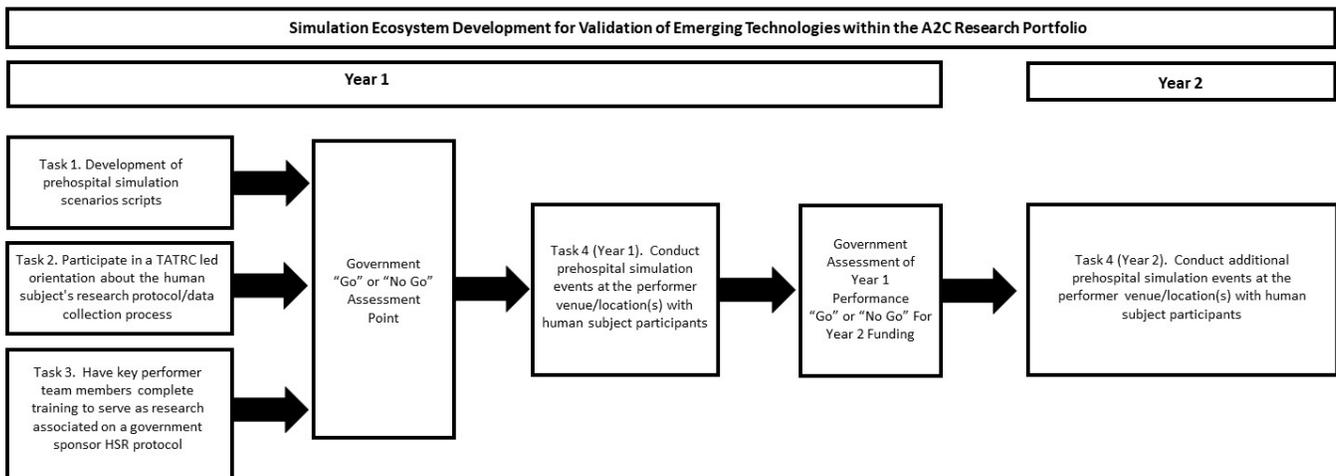
Please note that this RPP is one piece that all contributes to the USA TATRC’s AC2 Research Portfolio, in this instance, to collect data from prolonged casualty care simulation events that will be leveraged to drive algorithms for autonomous documentation in a future phase of the overarching effort.

3.2. Technical Objective

A key aim of the AC) research portfolio is to build a repository of data collected through combat medics/care givers wearing multimodal passive sensing technologies while performing TCCC tasks in laboratory, training, and hyper-realistic battlefield settings. To accomplish this will require access to an array of venues where medics, other caregivers and simulated patients agree to participate in TCCC training while wearing suites of sensing technologies. This prototype is specifically for providing a controlled venue to conduct these training events that is hyper realistic with respect to battlefield conditions.

The overarching A2C research portfolio objective is to complete 100,000 TCCC encounters/scenarios (e.g., TCCC tasks in prioritized care contexts) that generate data elements (DD Form 1380 et al.) which are aggregated and stored by 31 March 2025. The use of a collaborator/partner data collection site/training facility will allow the Government to achieve this overarching research data collection goal. The only follow on action with this OTA is the funding of the optional year 2 efforts (see **Figure 1**).

Figure 1. Project Plan and Performance Assessment Points



3.3. Desired Solution Characteristics

The Government requires the following specific tasks from a qualified Offeror:

- Task 1. Development of novel, realistic prehospital (e.g., TCCC, PCC, PFC, ERCC, et al) simulation scenarios scripts that meet the objectives of the AC2 Research Portfolio.
- Task 2. Participate in a USA TATRC (Government) led orientation about the human subject research protocol/data collection process.
- Task 3. Provide training or recertification of performer team members to serve as research associates on a human subject research (HSR) protocol(s)
- Task 4. Conduct novel prehospital simulation events at the performer venue/location(s) with human subject participants in accordance with approved HSR protocol(s) for the AC2 research portfolio. This includes collecting data outcomes and specific measures and providing that data to the Government team. Discrete data collection events, at a minimum should include 50 participants and occur monthly for a minimum of 21 months throughout the period of performance.

To accomplish these aforementioned critical tasks, the Government must work directly with an experienced performer capable of:

Request for Project Proposals MTEC-24-06-SimulationEcosystem
Number W81XWH-15-9-0001

- (1) Developing novel, realistic prehospital (TCCC/PCC/ERCC) simulation/scenario scripts to include measures of effectiveness and clinical outcome measures.
- (2) Integration of the novel prehospital simulation scenario/scripts into data collection events at the performer location.
- (3) Participate in a Government led orientation session on human subject research protocol requirements and research data collection requirements.
- (4) Serve as qualified, trained research associates for data collection in accordance with Government approved HSR protocol(s).
- (5) Provide a performer venue/location(s) with high fidelity, hyper realistic battlefield environments where the novel prehospital simulation/scripts can be integrated and executed to provide data collection opportunities in accordance with approved HSR protocol(s). This includes, but is not limited to video recordings, audio recordings and collection of physiological data elements.
- (6) Provide for a total of 21 months of data collection opportunities at the performer venue/location(s) in accordance with (IAW) USA TATRC HSR inclusion and exclusion criteria. This data collection will include participants, specifically, military operations (special forces operations personnel). A minimum of 50 eligible human subjects per month is required. Specifically, as care team members human subjects must be:
 - a. Between the ages of 18 and 65;
 - b. Have no preexisting conditions that would negatively impact their ability to provide care in a simulated trauma care scenario or work outside for prolonged periods of time (e.g., extreme allergies, extreme reactions to sun exposure, etc.);
 - c. Be willing to have video and audio recordings and physiological monitors used to record their actions during the simulated data collection events;
 - d. Have one or more of the following credentials:
 - i. An active TCCC certification (e.g., All Service Members [ASM] Tier 1 course);
 - ii. A working knowledge of combat casualty care skills and curriculum through medical-related curriculum (i.e., combat medic or equivalent training); or
 - iii. Deployment with medical experience in the last 36 months.
- (7) Collect, compile, and return data collection from human subject research simulation events to a Government data repository IAW USA TATRC approved human subject research protocols. This includes but is not limited to having appropriate hardware and software resources to conduct the required data collection activities.
- (8) Provide a point of contact (POC) to serve as a hand receipt holder for Government equipment, as required.

3.4. Potential Follow-on Tasks

Under awards resulting from this RPP, there is the potential for award of one or more noncompetitive follow-on tasks based on the success of the project (subject to change depending upon Government review of completed work and successful progression of milestones). Potential follow-on work may be awarded based on the advancement in prototype maturity during the PoP.

Offerors are encouraged, as appropriate, to discuss potential follow-on work in the Enhanced White Paper submission to demonstrate the ability to further advance the project maturity beyond the proposed PoP. This will also allow the Offeror to highlight the potential capabilities that can be explored/achieved through short term and/or long-term advancement of the project in a way that is beneficial to the Government.

4 Proposal Preparation and Process

4.1. General Instructions

Enhanced White Papers shall be submitted by the date and time specified on the cover page using BIDS: <https://ati2.acqcenter.com/ATI2/Portal.nsf/Start?ReadForm>. Include the **MTEC-24-06-SimulationEcosystem** on each Enhanced White Paper submitted. See **Attachment 7 of the PPG** for further information regarding BIDS registration and submission.

An automated BIDS receipt confirmation will be provided by email. Offerors may submit in advance of the deadline. **Neither MTEC nor ATI will make allowances/exceptions for submission problems encountered by the Offeror using system-to-system interfaces. If the Offeror receives errors and fails to upload the full submission prior to the submission deadline, the submission may not be accepted. It is the Offeror's responsibility to ensure a timely and complete submission.**

All eligible Offerors may submit proposals for evaluation according to the criteria set forth herein. Offerors are encouraged to contact the Points-of-Contact (POCs) identified herein until the Proposal due date/time to clarify requirements (both administrative and technical in nature).

4.2. Instructions for the Preparation & Submission of the Enhanced White Paper

Offerors submitting an Enhanced White Paper in response to this RPP should prepare all documents in accordance with the following instructions:

Offerors should submit files in Microsoft Office formats or Adobe Acrobat (PDF – portable document format) as indicated below. ZIP files and other application formats are not acceptable. All files must be print-capable and without a password required. Filenames must contain the appropriate filename extension (.docx, .doc, .pptx, .ppt, .xlsx, .xls or .pdf). Filenames should not contain special characters. Apple users must ensure the entire filename and path are free of spaces and special characters.

Required Submission Documents (5): Submitted via BIDS

- **Enhanced White Paper:** One Word or PDF document 5MB or lower (Required template is provided in **Section 8 of this RPP**)
- **Warranties and Representations:** one Word or PDF document 5MB or lower (**Attachment 3 of the**

PPG)

- **Statement of Work (SOW)/Milestone Payment Schedule (MPS):** one Word or PDF document 5MB or lower (**Attachment 4 of the PPG**)
- **Current and Pending Support:** one Word or PDF document 5MB or lower (**Attachment 5 of the PPG**) summarizing other sponsored research for each person who will contribute significantly to the proposed prototype project. The information for previous support should include the past five (5) years, unless otherwise specified in the request. Additionally, information pertaining to this proposal submission in regards to foreign involvement should be addressed.
- **Intellectual Property and Data Rights Assertions:** one signed Word or PDF document 5MB or lower (**Attachment 6 of the PPG**)

Enhanced White Papers must be prepared **according to the mandatory format provided in Section 8** of this RPP. The Enhanced White Paper is **limited to nine pages (plus a cover page for a total of ten pages)**. References may be included in the Enhanced White Paper and are **excluded** from the page limitation. The following appendices are also **excluded** from the page limitation: (1) *Warranties and Representations*, (2) *Statement of Work*, (3) *Current and Pending Support*, and (4) *Intellectual Property and Data Rights Assertions*. Formatting requirements include 11-point font (or larger), single-spaced, single-sided, 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. **Enhanced White Papers exceeding the page limit may not be accepted.**

FOR INFORMATION ONLY: Additional attachments/appendices (henceforth referred to as supplemental information) to the White Paper submission may be requested after completion of the Stage 1 White Paper evaluation. The exact requirements of any such attachment/appendix are subject to change and will be provided at the time (or immediately following) the Stage 1 evaluation summary is provided.

4.3. Stage 2: Cost Proposal (for Only Those Offerors Recommended for Funding)

Offerors that are recommended for funding will receive notification letters which will serve as the formal request for a full Cost Proposal (and may contain a request for Enhanced White Paper revisions and/or supplemental information, such as those examples listed in the section above, based on the results of the technical evaluation). These letters will contain specific submission requirements if there are any changes to those contained in this RPP. However, it is anticipated that the following will be required:

Required Submission Documents (2): Submit to mtec-contracts@ati.org

- Section I: Cost Proposal Narrative: one Word or PDF document
- Section II: Cost Proposal Formats: one Excel or PDF document

See below for additional instructions. Also refer to Addendum 1 of this RPP for details on how the full Cost Proposals will be evaluated:

The Cost Proposal shall be submitted in two separate sections. One Word (.docx or .doc) or PDF file for Section I: Cost Proposal Narrative and one Excel (.xlsx or .xls) or PDF file for Section II: Cost Proposal Formats is required.

Offerors are encouraged to use their own cost formats such that the necessary detail is provided. MTEC will make cost proposal formats available on the Members-Only MTEC website. The Cost Proposal formats provided in the MTEC website and within the PPG are **NOT** mandatory.

Each cost proposal should include direct costs and other necessary components as applicable, for example, fringe, General & Administrative Expense (G&A), Facilities & Administrative (F&A), Other Direct Costs (ODC), etc. Offerors shall provide a breakdown of material and ODC costs as applicable. Refer to the MTEC PPG for additional details.

Those Offerors invited to submit a Cost Proposal are encouraged to contact the MTEC CM and/or Government with any questions so that all aspects of the Stage 2 requirements are clearly understood by both parties.

4.4. Enhanced White Paper and Cost Proposal Preparation

The cost of preparing Enhanced White Papers and Cost Proposals in response to this RPP is not considered a direct charge to any resulting award or any other contract.

5 Selection

5.1. General Information

Evaluations at all stages of the Enhanced White Papers acquisition process shall be based on an independent, comprehensive review and assessment of the work proposed against stated evaluation factors. A rating consistent with these evaluation factors will be derived from the ability of the Offeror to perform the work in accordance with all aspects of requirements outlined in this RPP. The Offeror shall clearly state how it intends to meet the RPP requirements. Mere acknowledgement or restatement of a RPP requirement is not acceptable.

5.2. Enhanced White Paper Evaluation

The CM will distribute all Proposals that pass the preliminary screening (described above) to the Government for evaluation. The Government will then conduct the source selection and determine which Offerors will be invited to submit a Stage 2 (Full Cost Proposals) based on the following Stage 1 criteria. In some cases, to ensure scientific excellence, the Government may utilize an additional evaluation process to include an external peer review for the evaluation of Proposals against established criteria to determine technical merit. Regardless of whether or not the evaluation includes a peer review, all Enhanced White Papers will be evaluated based on the following factors. The adjectival merit ratings that will be used for all evaluation factors are shown in Table 3. Feedback will be provided to the Offerors.

Stage 1 - Enhanced White Paper Evaluation Factors (of equal importance):

- 1. Programmatic and Technical Relevance**
- 2. Personnel and Team**

Evaluation Factor 1 – Programmatic and Technical Relevance: The Offeror’s proposal will be assessed for

Request for Project Proposals MTEC-24-06-SimulationEcosystem
Number W81XWH-15-9-0001

the degree to which the Offeror demonstrates a strong solution to the defined unmet military medical need consistent with Section 3 of the RPP.

Additionally, the Offeror’s proposal will be assessed for relevancy, thoroughness, and completeness of the proposed approach (e.g., the technical merit). The Government’s evaluation of this factor may include the degree to which the following are addressed and demonstrated:

- Clear and appropriate objectives that describe a feasible solution;
- Focused and detailed methodologies to address the requirements outlined in Section 3.3; and,
- Thorough and complete SOW and ROM Cost Estimate.

Evaluation Factor 2 – Personnel and Team: This factor will evaluate the strength of the organization/team, including the Offeror’s resources, expertise, and experience of proposed personnel. As part of this evaluation factor, the Government will also consider the project management plan and the ability for the technical and management team to execute the proposed SOW in an efficient and effective manner. The Government will also consider whether the proposal includes a realistic, achievable performance schedule with a plan to address potential risks that could delay or otherwise impact performance.

TABLE 3- GENERAL MERIT RATING ASSESSMENTS	
RATING	DESCRIPTION
OUTSTANDING	Proposal meets requirements and indicates an exceptional approach and understanding of the requirements. Strengths far outweigh any weaknesses. Risk of unsuccessful performance is very low.
GOOD	Proposal meets requirements and indicates a thorough approach and understanding of the requirements. Proposal contains strengths which outweigh any weaknesses. Risk of unsuccessful performance is low.
ACCEPTABLE	Proposal meets requirements and indicates an adequate approach and understanding of the requirements. Strengths and weaknesses are offsetting or will have little or no impact on contract performance. Risk of unsuccessful performance is no worse than moderate.
MARGINAL	Proposal does not clearly meet requirements and has not demonstrated an adequate approach and understanding of the requirements. The proposal has one or more weaknesses which are not offset by strengths. Risk of unsuccessful performance is high.
UNACCEPTABLE	Proposal does not meet requirements and contains one or more deficiencies.

5.3. Definition of General Terms Used in Evaluations

Significant Strength - An aspect of an Offeror's proposal that has appreciable merit or appreciably exceeds specified performance or capability requirements in a way that will be appreciably advantageous during the demonstration.

Strength - An aspect of an Offeror's proposal that has merit or exceeds specified performance or capability requirements in a way that will be advantageous during the demonstration.

Weakness - A flaw in the proposal that increases the risk of unsuccessful demonstration.

Significant Weakness - A flaw that appreciably increases the risk of unsuccessful demonstration.

Deficiency - A material failure of a proposal to meet the requirement or a combination of weaknesses in a proposal that increases the risk of unsuccessful demonstration to an unacceptable level.

6 Points-of-Contact

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

- Questions concerning contractual, cost or pricing related to this RPP should be directed to the MTEC Contracts Administrator, mtec-contracts@ati.org
- Technical and membership questions should be directed to the MTEC Biomedical Research Associate, Dr. Chuck Hutti, Ph.D., chuck.hutti@ati.org
- All other questions should be directed to the MTEC Program Manager, Mr. Evan Kellinger, mtec-sc@ati.org

7 Acronyms/Abbreviations

AC2	Autonomous Casualty Care
AI	Artificial Intelligence
ASM	All Service Members
ATI	Advanced Technology International
BIDS	System for Submission of the Solution
CAGE	Commercial and Government Entity Program
CM	Consortium Manager
DoD	Department of Defense
ERCC	En Route Casualty Care
FAQ	Frequently Asked Questions
FDA	U.S. Food and Drug Administration
Government	U.S. Government, specifically the DoD
HSR	Human Subject Research
IAW	In Accordance With
IP	Intellectual Property (e.g., patents, copyrights, licensing, etc.)
IT	Information Technology
MDO	Multi-Domain Operations
MHS	Military Health System
MPS	Milestone Payment Schedule
MTEC	Medical Technology Enterprise Consortium

Request for Project Proposals MTEC-24-06-SimulationEcosystem
Number W81XWH-15-9-0001

NDA	Non-disclosure Agreement
OCI	Organizational Conflict of Interest
ODC	Other Direct Costs
OTA	Other Transaction Agreement
PCC	Prolonged Casualty Care
PDF	Portable Document Format
POC	Point of Contact
POI	Point of Injury
POP	Period of Performance
PPG	Proposal Preparation Guide
ROM	Rough Order Magnitude
RPP	Request for Project Proposals
SME	Subject Matter Expert
SOW	Statement of Work
TATRC	Telemedicine and Advanced Technology Research Center
TCCC	Tactical Combat Casualty Care
UEI	Unique Entity Identifier
USAMRDC	U.S. Army Medical Research and Development Command
USC	U.S. Code

8 Enhanced White Paper Template

Cover Page

[Name of Offeror]

[Address of Offeror]

[Phone Number and Email Address of Offeror]

Unique Entity Identifier (UEI) #: [UEI #]

CAGE code: [CAGE code]

[Title of Enhanced White Paper]

[Offeror] certifies that, if selected for an Award, the Offeror will abide by the terms and conditions of the MTEC Base Agreement.

[Offeror] certifies that this Enhanced White Paper is valid for 3 years from the close of the applicable RPP, unless otherwise stated.

[A proprietary data disclosure statement if proprietary data is included. Sample: **This Enhanced White Paper includes data that shall not be disclosed outside the MTEC Consortium Management Firm and the Government and shall not be duplicated, used, or disclosed, in whole or in part, for any purpose other than to evaluate this Enhanced White Paper and negotiate any subsequent award. If, however, an award agreement is a result of, or in connection with, the submission of this data, the MTEC Consortium Management Firm and the Government shall have the right to duplicate, use, or disclose these data to the extent provided in the resulting agreement. This restriction does not limit the MTEC Consortium Management Firm and the Government's right to use the information contained in these data if they are obtained from another source without restriction. The data subject to this restriction is (clearly identify) and contained on pages (insert page numbers).**]

[Willingness to allow MTEC Officers access to your White Paper for the purposes of engaging in outreach activities with private sector entities: **Indicate YES or NO** As part of MTEC's mission to incorporate philanthropic donations, MTEC frequently makes contact with private sector entities (e.g., foundations, organizations, individuals) that award grants or otherwise co-fund research, and/or operate in research areas that are aligned with those of MTEC. Additional private entities may be interested in reviewing certain White Papers within their program areas, allowing opportunities to attract supplemental funding sources. Please indicate your willingness to allow MTEC access to your White Paper for the purposes of engaging in outreach activities with these private sector entities. MTEC staff has signed Nondisclosure Agreements (NDAs) and Organizational Conflict of Interest statements.]

[Title of Enhanced White Paper]

Programmatic Relevance

- Provide the background and the Offeror's understanding of the problem and/or technology gap/process deficiency.
- Provide a description of how the proposed technology meets the overall objective specified in this RPP.

Scope Statement

- Define the scope of the effort and clearly state the objectives of the project.

Scientific Rationale / Preliminary Data

- Demonstrate how your proposed solution meets all of the Desired Solution Characteristics described in Section 3.3.
- Include previous studies or preliminary data [non-clinical and/or clinical] that support the feasibility of the proposed passive technology solution set.
- Describe your demonstration of the manufacturing feasibility of the prototype.

Technical Approach

- Describe the experimental design, methods, and materials required to accomplish the proposed approach. Describe the proposed methodology in sufficient detail to show a clear course of action to address the solution requirements and required tasks outlined in **Section 3 of this RPP**.

Anticipated Outcomes/Impact

- Provide a description of the anticipated outcomes from the proposed work. List milestones and deliverables from the proposed work.
- Describe the impact that the proposed project would have, if successful.

Technical and Management Team

- Describe the qualifications and expertise of the key personnel and organizations that will perform the proposed work.
- Describe the overall project management plan that clearly defines roles and responsibilities. This plan should include a communication and conflict resolution plan if the proposal involves more than one company/institution/organization.
- Describe the ability of the management team to advance the technology beyond the scope of the proposed work described in the Enhanced White Paper.

Resources

- Identify any key facilities, equipment and other resources proposed for the effort. Identified facilities, equipment and resources should be available and relevant for the technical solution being proposed.
- Describe any current or potential partnerships or collaborations that may be of use when developing this product, especially in regards to algorithm development.
- Note: collaboration with Government laboratories may be required.

Market and Business Model

- Clearly articulate the value proposition, competitive position, market opportunity and business model for getting to revenue through commercial use, including a description of the market (civilian and military) and sustainability.

Request for Project Proposals MTEC-24-06-SimulationEcosystem
Number W81XWH-15-9-0001

Schedule

- PoP: Indicate the proposed PoP in months from award.
- Proposed Schedule: Provide a schedule (e.g., Gantt chart) that clearly shows the plans to perform the program tasks in an orderly, timely manner. Provide each major task (to include regulatory-specific tasks) as a separate line. Do not duplicate the level of detail presented in the Statement of Work.

Risk Identification and Mitigation

- Identify key technical, schedule, and cost risks. Discuss the potential impact of the risks, as well as potential mitigations.

Rough Order Magnitude (ROM) Pricing

- The Offeror must provide an estimate based on the technical approach proposed in the Enhanced White Paper. The following ROM pricing example format shall be included in the Enhanced White Paper (the number of columns should reflect the proposed PoP, i.e., add or delete the yearly budget columns as needed). **[NOTE: If invited to Stage 2, the total cost to the Government must not significantly increase from the estimate provided in the ROM (unless otherwise directed by the Government) as award recommendations may be based upon proposed costs within the Enhanced White Paper.] Use the example table format and template below to provide the ROM pricing.** The labor, travel, material costs, other direct costs, and indirect costs, information should be entered for Offeror (project prime) only. Subcontractors and/or consultants should be included only in the “Subcontractor” section of the table. If selected for award, a full cost proposal will be requested.

	<i>Year 1</i>	<i>Year 2</i>	<i>Year 3</i>	<i>TOTAL</i>
Labor	\$ 100,000.00	\$ 100,000.00	\$ 100,000.00	\$ 300,000.00
Labor Hours	1,000.0 hrs	1,000.0 hrs	1,000.0 hrs	3,000.0 hrs
Subcontractors	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 150,000.00
Subcontractors Hours	500.0 hrs	500.0 hrs	500.0 hrs	1,500.0 hrs
Government/Military Partner(s)/Subcontractor(s) (subKTR)*	\$0.00	\$0.00	\$0.00	\$0.00
Gov't/Military Prtnrs / subKTR Hours	0.0 hrs	0.0 hrs	0.0 hrs	0.0 hrs
Consultants	\$ 10,000.00	\$ 10,000.00	\$ 10,000.00	\$ 30,000.00
Consultants Hours	100.0 hrs	100.0 hrs	100.0 hrs	300.0 hrs
Material/Equipment	\$ 75,000.00	\$ 75,000.00	\$ 75,000.00	\$ 225,000.00
Other Direct Costs	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00	\$ 3,000.00
Travel	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 15,000.00
Indirect costs	\$ 48,200.00	\$ 48,200.00	\$ 48,200.00	\$ 144,600.00
Total Cost	\$ 289,200.00	\$ 289,200.00	\$ 289,200.00	\$ 867,600.00
Fee (Not applicable if cost share is proposed)	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
Total Cost (plus Fee)	\$ 289,200.00	\$ 289,200.00	\$ 289,200.00	\$ 867,600.00
Cost Share	\$ 290,000.00	\$ 290,000.00	\$ 290,000.00	\$ 870,000.00

Request for Project Proposals MTEC-24-06-SimulationEcosystem
Number W81XWH-15-9-0001

(if cost share is proposed then fee is unallowable)				
Total Project Cost	\$ 579,200.00	\$ 579,200.00	\$ 579,200.00	\$ 1,737,600.00

*Use the rows above for “Government/Military Partner(s)/Subcontractor(s)” if the project involves one or more Government/Military Facilities (MHS facility, research laboratory, treatment facility, dental treatment facility, or a DoD activity embedded with a civilian medical center) performing as a collaborator in performance of the project.

Estimate Rationale

- The Offeror must provide a **brief** rationale describing how the estimate was calculated and is appropriate for the proposed scope or approach.

APPENDICES excluded from the page limit, and must be uploaded to BIDS as separate documents)

The Proposal Preparation Guide (PPG) contains several templates required for this RPP. The PPG can be found on the MTEC members only site, <https://private.mtec-sc.org/>. For information on how to join MTEC, please visit <http://mtec-sc.org/how-to-join/>.

Appendix 1: Warranties and Representations: (template provided in Attachment 3 of the PPG)

- Warranties and Representations are required. One Word (.docx or .doc) or PDF file that contains all Warranties and Representations is required.

Appendix 2: Statement of Work (template provided in Attachment 4 of the PPG)

- Provide a draft Statement of Work as a separate Word document to outline the proposed technical solution and demonstrate how the contractor proposes to meet the Government objectives. Submitted information is subject to change through negotiation if the Government selects the Enhanced White Paper for award. The format of the proposed Statement of Work shall be completed in accordance with the template provided below.
- The Government reserves the right to negotiate and revise any or all parts of SOW/Milestone Payment Schedule. Offerors will have the opportunity to concur with revised SOW/Milestone Payment Schedule as necessary.

Appendix 3: Current and Pending Support (template provided in Attachment 5 of the PPG)

- One Word or PDF document summarizing other sponsored research for each person who will contribute significantly to the proposed prototype project. The information for previous support should include the past five (5) years, unless otherwise specified in the request. Additionally, information pertaining to this proposal submission in regards to foreign involvement should be addressed.

Appendix 4: Intellectual Property and Data Rights Assertions (template provided in Attachment 6 of the PPG)

- The Offeror shall comply with the terms and conditions defined in the Base Agreement regarding Data Rights. It is anticipated that anything delivered under this proposed effort would be delivered to

the Government with unlimited data rights.

- If this is not the intent, then you should discuss any restricted data rights associated with any proposed deliverables. If applicable, complete the below table for any items to be furnished to the Government with restrictions. An example is provided.

Addendum 1 – Stage 2 Evaluation Criteria

For Information Only - Stage 2 Requirement (subject to change)

Stage 2

The MTEC Consortium Manager (CM) will evaluate the cost proposed together with all supporting information for realism (as applicable, dependent upon contract type, i.e., Firm Fixed Price, Cost Reimbursable), reasonableness, and completeness as outlined below. The MTEC CM will then provide a formal assessment to the Government, at which time the Government will make the final determination that the negotiated project cost is fair and reasonable.

a) **Realism.** Proposals will be evaluated to determine if Costs are realistic for the work to be performed, reflect a clear understanding of the requirements, and are consistent with the various elements of the Offeror's technical approach and Statement of Work.

Estimates are “realistic” when they are neither excessive nor insufficient for the effort to be accomplished. Estimates must also be realistic for each task of the proposed project when compared to the total proposed cost. For more information on cost realism, please refer to the MTEC PPG.

The MTEC CM will make a determination by directly comparing proposed costs with comparable current and historical data, evaluator experience, available estimates, etc. Proposed estimates will be compared with the corresponding technical proposals (Enhanced White Papers) for consistency.

b) **Fairness and Reasonableness.** The Offeror’s cost proposal will be evaluated to determine if it is fair and reasonable. For a price to be reasonable, it must represent a price to the Government that a prudent person would pay in the conduct of competitive business. Normally, price reasonableness is established through cost and price analysis.

To be considered reasonable, the Offeror’s cost estimate should be developed from applicable historic cost data. The Offeror should show that sound, rational judgment was used in deriving and applying cost methodologies. Appropriate narrative explanation and justification should be provided for critical cost elements. The overall estimate should be presented in a coherent, organized and systematic manner.

Costs provided shall be clearly attributable to activities or materials as described by the Offeror. Costs should be broken down using the Cost Proposal Formats that are located on the Members-Only MTEC website. If the MTEC template is not used, the Offeror should submit a format providing for a similar level of detail.

c) **Completeness.** The MTEC CM will evaluate whether the proposal clearly and thoroughly documents the rationale supporting the proposed cost and is compliant with the requirements of the solicitation.

The proposal should clearly and thoroughly document the cost/price information supporting the proposed cost in sufficient detail and depth. The MTEC CM will evaluate whether the Offeror’s cost proposal is complete with respect to the work proposed. The MTEC CM will consider substantiation of proposed cost (i.e., supporting data and estimating rationale) for all elements.

Rate and pricing information is required to properly perform the cost analysis of the proposal. If the Offeror is unwilling to provide this information in a timely manner, its proposal will be lacking information that is required to properly evaluate the proposal and the proposal cannot be selected for award.

Government Access to Information

After receipt of the cost proposal and after the CM's completion of the cost analysis summarized above, the Government may perform a supplemental cost and/or price analysis of the submitted cost proposal. For purposes of this analysis, the Agreement Officer and/or a representative of the Agreement Officer (e.g., DCAA, DCMA, etc.) shall have the right to examine the supporting records and/or request additional information, as needed.

Best Value

The overall award decision will be based upon the Government's Best Value determination and the final award selection(s) will be made to the most advantageous offer(s) by considering and comparing factors in addition to cost or price. The Government anticipates entering into negotiations with all Offerors recommended for funding with the MTEC CM acting on the Government's behalf and/or serving as a liaison. The Government reserves the right to negotiate and request changes to any or all parts of the proposal, to include the SOW.