

Medical Technology Enterprise Consortium

PROPOSERS CONFERENCE

SOLICITATION NUMBER: MTEC-20-10-COVID-19_NETCCN_TATRC

"NATIONAL EMERGENCY TELECRITICAL CARE NETWORK (NETCCN)"

April 20, 2020



- Provide an overview of the requirement
- Identify funding expectations
- Understand the solicitation and selection process
- Understand proposal requirements
- Understand the submission process





- The MTEC-20-10-COVID-19_NETCCN_TATRC Request for Project Proposals (RPP) is the official source of information regarding the active solicitation.
- If you act on information from <u>any</u> source other than these official sources, it is at your risk.



MTEC REQUIREMENT OVERVIEW

- Requests for proposals will be in the <u>Enhanced White Paper</u> <u>format</u>.
- <u>Enhanced White Papers</u> submitted must be in accordance with the mandatory format provided in the MTEC-20-10-COVID-19_NETCCN_TATRC Request for Project Proposals.
- At the time of the submission, the Offeror must certify on the cover page of the Enhanced White Papers that if selected for award, the Offeror will abide by the terms and conditions of the latest version of the MTEC Base Agreement.



MTEC encourages organizations to team during the proposal preparation period (prior to proposal submission). We believe that this effort will result in three key advantages:

TEAMING

- Offerors will submit more targeted proposals that better address the full scope of technical requirements of an RPP.
- Offerors choose their own partners, rather than the Sponsor suggesting a teaming arrangement, so that appropriate teaming arrangements can be made that suit all parties involved.
- Timelines to award will be faster because additional time during the process will not be required for several Offerors to work on and submit a new teamed proposal.





- <u>Collaboration Database Tool</u> (Only available on the MTEC Members Website) Quick and easy tool to search the MTEC membership for Collaboration Interests, Capabilities and Technical Expertise of member organizations.
- <u>One-off Requests for Teaming</u> Points of contact are provided in every RPP. MTEC can propagate your company's capabilities to other interested parties.
- Partnering with DoD Laboratories MTEC members have the option to leverage DoD lab capabilities. Points of contact at Army laboratories can be found on the MTEC Members Website.



- It is expected that MTEC will make <u>up to 6 awards</u> to qualified teams to accomplish the statement of work.
- If a single Enhanced White Paper is unable to sufficiently address the entire scope of this RPP's technical requirements (outlined in Section 5 of the RPP), multiple Offerors may be asked to work together in a collaborative manner.



- The U.S. Government (USG) Department of Defense (DoD) currently has available up to \$7 Million (M) for Tasks 1,2, and 3.
- Any potential follow-on funding is subject to availability and is expected to be awarded non-competitively and negotiated based on outcomes, cost sharing, partner matching and estimates for additional study completion.
- The DoD reserves the right to negotiate available funding up or down based on the Proposed Statement of Work.



- The anticipated Period of Performance (POP) for Tasks 1, 2, and 3 is <u>up to 45 days</u>.
- Dependent on the results and deliverables, additional time may be added to the period of performance for follow-on tasks [e.g., up to 18 months total for Tasks 1 – 5].



MTEC-20-10-COVID-19_NETCCN_TATRC SCHEDULE

Request Issue Date:

Proposers Webinar:

Enhanced White Paper Due:

Anticipated Award Date:

April 16, 2020 April 20, 2020 April 27, 2020 (Noon Eastern Time) May 27, 2020 (subject to change)

NOTE: MTEC membership is <u>not required</u> for the submission of an Enhanced White Paper in response to this MTEC RPP. However, membership will be required for Offerors recommended for award. To join MTEC, please visit <u>http://mtec-sc.org/how-to-join/</u>



PROPOSAL GUIDANCE DOCUMENTS

- MTEC RPP (MTEC-20-10-COVID-19_NETCCN_TATRC)
 - Submission Deadlines
 - Evaluation Criteria
 - Enhanced White Paper Format
- MTEC Base Agreement (Sample)
 - Must agree to abide by Terms and Conditions
- <u>Offerors are advised to check the MTEC website</u> <u>periodically during the proposal preparation period for any</u> <u>changes as well as clarifications.</u>



- There is a statutory requirement for 1/3 cost share on projects that do not include significant participation of a Nontraditional Defense Contractor (NDC) or Nonprofit Research Institution (NRI)
- A NDC and/or NRI can be at the prime level, team members, subcontractors, lower tier vendors, or "intra-company" business units
- Examples of significant contribution include:
 - Supplying new key technology or products
 - Accomplishing a significant amount of the effort
 - Use of unique skilled personnel, facilities and/or equipment
 - Causing a material reduction in the cost or schedule or increase in the performance
 - Improvement in performance
- Must have a DUNS #
- Warranties and Representations required with the submission of the Enhanced White Paper (Appendix 4.3 of Enhanced White Paper, see Section 10 of RPP).



The term Nontraditional Defense Contractor is a business unit that has not, for a period of <u>at least one-year prior to the</u> <u>issue date of the MTEC Request for Project Proposals</u>, entered into or performed on any contract or subcontract that is subject to <u>full coverage</u> under the cost accounting standards (CAS) prescribed pursuant to section 26 of the Office of Federal Procurement Policy Act (41 U.S.C. 422) and the regulations implementing such action.



A Nonprofit Research Institution means an entity whose primary purpose is conducting research and that is (1) described in section 501(c) of the IRS code of 1986, **AND** (2) exempt from tax under section 501(a) of that code.



- It is anticipated that anything delivered under a Research Project Award would be delivered to the Government with Government purpose data rights or unlimited data rights.
- If this is not the intent, then the Enhanced White Paper should discuss data rights associated with each item (Appendix 4.2 of Enhanced White Paper, see Section 10 of RPP).
- Rights in technical data in each Research Project Award shall be determined in accordance with the provisions of MTEC Base Agreement.



- 10 U.S.C. §2371(i), as amended, provides that disclosure of the information listed below is *not required*, and *may not* be compelled, under FOIA for a period of five years if a party submits the information in a competitive or noncompetitive process having the potential for an award of an Other Transaction Agreement:
 - (i) a proposal, proposal abstract, and supporting documents;
 - (ii) a business plan submitted on a confidential basis; or
 - (iii) technical information submitted on a confidential basis.
- To request protection from FOIA disclosure as allowed by statute, Offerors shall mark business plans and technical information with a legend identifying the documents as being submitted on a confidential basis.



Research Project Award Assessment/Royalty Payment Agreement

- Each recipient of a research project award under the OTA shall pay MTEC an Assessment Fee equal to 1% of the total funded value. Such deposits will be due within 90 days after the research project award, per section 3.4 of the Consortium Member Agreement (CMA).
- MTEC members receiving MTEC funding agreement for research projects will be required to execute a MTEC Royalty Payment Agreement or pay an additional 2% assessment fee on the award.
- The CMA is available on the MTEC website.
 - https://mtec-sc.org/how-to-join-2/

See Section 3.4 of the Consortium Member Agreement for additional details



- MTEC will use an accelerated approach to award the Enhanced White Paper format.
- Because of the nature and urgency of the requirements set forth in this RPP, this streamlined approach is anticipated to be a better means to highlight company methodologies and skills required to address the technical requirements described herein.
- The Enhanced White Paper process requires extremely quick turnaround times by Offerors.
- The following sections describe the formats and requirements of the Enhanced White Paper.



Step 1: Submission of Enhanced White Paper

- The Offeror will submit an Enhanced White Paper using the template provided in Section 10 of the RPP.
- Page Limitation: The Enhanced White Paper is limited to thirteen (13) pages (including cover page). The following Appendices are excluded from the page limitation: (4.1) Statement of Work, (4.2) Data Rights, and (4.3) Warranties and Representations
- Required Format: 12 point font (or larger), single-spaced, singlesided, 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.



- Cover Page (1 page limit)
- Section 1: Initial Screening Summary (2 page limit)
- Sections 2 & 3 (10 page limit combined)
 - Section 2: Technical (Tasks 1-5)
 - Section 3: Cost Estimate (by Task)
- Section 4: Appendices (no page limit)
 - Appendix 4.1: Statement of Work (template provided)
 - Appendix 4.2: Data Rights Assertions (template provided)
 - Appendix 4.3: Warranties and Representations (template provided)

*NOTE: The intent of this RPP is to initially award Tasks 1, 2, and 3. Information regarding Tasks 4 and 5 is intended to provide context so the Offeror is aware of potential work that could follow-on after the completion of Tasks 1, 2, and 3.

The Offeror <u>does</u> need to price and provide details on how they would complete this follow-on work in Tasks 4 and 5.

See Section 10 of RPP for templates and details



- The CM will conduct a preliminary screening of submitted Enhanced White Papers to ensure compliance with the RPP requirements.
- Enhanced White Papers that do not meet these requirements may be eliminated from the competition or additional information may be requested.
- One of the primary reasons for non-compliance or elimination during the initial screening is the lack of significant nontraditional defense contractor participation, nonprofit research institution participation, small business participation or cost share (see RPP Section 2.11).



COST SHARING/NONTRADITIONAL

• The Cost Sharing/Nontraditional Contractor determination will be made as shown in Table 1:

TABLE 1- COST SHARING/NONTRADITIONAL CONTRACTOR ASSESSMENTS					
RATING	DESCRIPTION				
PASS	 Offeror proposing an MTEC research project meets at least ONE of the following: Offeror is a Nontraditional Defense Contractor or Nonprofit Research Institution Offeror's Solution Brief has at least one Nontraditional Defense Contractor or Nonprofit Research Institute participating to a significant extent All significant participants in the transaction other than the Federal Government are small businesses, nonprofit research institutions, or nontraditional defense contractors.; or Offeror provides at least one third of the total project cost as acceptable cost share 				
FAIL	 Offeror proposing an MTEC research project does NOT meet any of the following: Offeror is a Nontraditional Defense Contractor or Nonprofit Research Institution Offeror's Solution Brief has at least one Nontraditional Defense Contractor or Nonprofit Research Institution participating to a significant extent All significant participants in the transaction other than the Federal Government are small businesses, nonprofit research institutions, or nontraditional defense contractors.; or Offeror provides at least one third of the total project cost as acceptable cost share 				



- 1) The CM will distribute all Enhanced White Papers to the Government for evaluation.
- 2) Initial Screening:
 - The Government will perform an initial screening of the submissions based on the content of <u>Section 1 ONLY of the Enhanced White Paper</u>. The remaining sections of the Enhanced White Paper <u>will not</u> be reviewed at this stage of the evaluation process.
 - Any Enhanced White Papers found **not** to meet the minimum acceptable qualifications as detailed below may be removed from consideration, no further evaluation will be performed, and <u>feedback</u> <u>will not be provided to these Offerors</u>.
 - Initial screening criteria:
 - > Programmatic Relevance/Responsiveness
 - > Feasibility/Timeliness
 - > Team Capabilities and Expertise

See Section 6.2 of RPP for more detail on screening criteria



3) Full evaluation

- Any Enhanced White Papers found to meet the minimum acceptable qualifications outlined in the initial screening will receive a full evaluation.
- Offerors will receive feedback on the full evaluation.
- Full evaluation criteria (evaluation factors are of equal importance):
 - > Factor 1 Programmatic Relevance:
 - > Factor 2 Team Capabilities and Expertise
 - > Factor 3 Scientific/Development Plan
 - > Factor 4 Scalability and Sustainment

Upon review of the Enhanced White Papers, Offerors who are favorably evaluated may be invited for informal discussions with the Government.

See Section 6.2 of RPP for more detail on evaluation criteria



Step 2: Cost Proposal (for Only Those Offerors Recommended for Funding)

- Notification letters from MTEC will serve as the formal request for a full • Cost Proposal (and may contain a request for Enhanced White Papers revisions 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.
- The Cost Proposal shall be submitted in two separate sections
 - Section I: Cost Proposal Narrative
 - Section II: Cost Proposal Formats
- Each Offeror invited to Step 2 will select either the MTEC Additional • **Research Project Award Assessment Fee or the Royalty Payment** Agreement (available on the MTEC members only website), not both and submit a signed copy with the full proposal. Please see RPP Section 2.10 for additional information.



- Enhanced White Papers shall be submitted by April 27, 2020 (Noon Eastern Time).
- Submission will be submitted using the BIDS Platform. <u>https://ati2.acqcenter.com/</u>
- In order to respond to an RPP on BIDS you first must register for a MTEC BIDS account, if you have not already.
 - After registering you will then be able to submit responses to an open RPP.
- Refer to Section 11 of the RPP for further instruction regarding BIDS.

BIDS NEW REGISTRATION

Navigate to the MTEC BIDS website and select "New Registration"





BIDS NEW REGISTRATION

Select "Submitter"

	Welcome, Anonymous	Help Request		
ADVANCED TECHNOLOGY INTERNATIONAL 8 Portal	Select "Submitt	er".		
Please select the type of account you are registering for:				
Government Requirement Submitter/Evaluator/AOR – Select this in order to submit requirements, evaluate whitepapers and proposals, and/or make an award. Please note you must be approved before you will be able to access the system.				
Submitter -Select this in order to submit responses to solicitations	r.			

SECURITY NOTICE: Unauthorized attempts to deny service, upload information, change information, or attempt to access a non-public site from this service are strictly prohibited and may be punishable under Title 18 of the U.S. Code to include the Computer Fraud and Abuse Act of 1986 and the National Information Infrastructure Protection Act.





Complete the registration form. Be sure to select how you want to receive the dual factor verification code (SMS text message is recommended).

Extn. Fax Number:		How to receive dual factor authentication.
* Email Confirmation:		
* Contractor Status: Cell Number:	Enter a cell number in order to be able to receive passcodes via SMS. Enter exac	tly 10 digits without any punctuation.
Preferred Code Delivery Method:	Select your preferred method for receiving two-factor passcodes. If you select SM selecting either when logging m.	IS, you must enter a cell number. You will still have the
Website: * Programs Requested:	E-Mail http:// What area do you belong to? Please select all that apply:]
	I MTEC	

ubmit Registration	Select "Submit Registration" to	
	complete BIDS registration.	
SECURITY NOTICE: Unauthorized attempts to deput service, unload in	formation, change information, or attempt to access a non-nublic site from this service are	strictly prohibited and may b

SECURITY NOTICE: Unauthorized attempts to deny service, upload information, change information, or attempt to access a non-public site from this service are strictly prohibited and may be p under Title 18 of the U.S. Code to include the Computer Fraud and Abuse Act of 1986 and the National Information Infrastructure Protection Act.



BIDS registration is instantaneous. It does not require any verification by the MTEC team. After successfully registering, you can submit proposals to any open MTEC RPP.

- MTEC Membership is not required for submission of an enhanced white paper in response to this RPP.
- Updates to submitted documents can be made anytime prior to the due date and time.



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



service are strictly prohibited and may be punishable under Title 18 of the U.S. Code to include the Computer Fraud and Abuse Act of 1986 and the National Information Infrastructure Protection Act.



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





Select which RPP you will be responding to.

Welcome, MTEC	FAQs Help Request
Portal MTEC Home Submissions Search Logout	
Cancel	
Submission Checklist	
Please check your submittal for the following requirements to ensure compliance with the RPP	
Select the appropriate RPP:	Select which RPP to respond
MTEC-20-04-Test	to If multiple PPPs are open
Continue	to. If finduliple KPPS are open,
	they will be listed here.
SECURITY NOTICE: Unauthorized attempts to deny service, upload information, change information, or attempt to acce	ess a non-public site from this service are strictly prohibited and may be punishable under Title 18 of National Information Infrastructure Protection Act.



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Complete the submission form.

Portal MTEC Cancel	Welcome, MTEC NOLOGY ONSORTIUM Home Submissions Search Logout	FAQs He	elp Request
	Time remaining before submission dead	line: 03:31:59	
PLEASE	NOTE: Your web session will expire automatical	ly if you are idle for more than 60	minutes.
*Denotes Required Field. Submission Information RPP Number:	MTEC-3-9-2020		
Submitter Contact Info: Submission Deadline: Submission Date: * Submission Title:	MTEC Evan Kellinger Project Manager, ATI (843) 760-4354 Evan.Kellinger@ati.org 03/09/2020 01:00 PM EDT		Shows remaining time before submission close.
Project Identifier. * Requirement:	NOTE: The Project Identifier is a unique identifier that wi Select a Requirement ▼	II be assigned to your submission when i	t is submitted.
Contact Information			
* Tech POC First Name: * Tech POC Last Name: * Tech POC Address: * Tech POC Phone: Tech POC Extension:		Select area y as ide	t the technical your submitting to entified in the RPP.



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

File Attachments						
Required Files:	White Paper	No file uploaded	Upload White Paper	(Allowed file typ	bes: pdf, doc, docx; Size l	Limit: 5mb)
Agreements			•			
*Classified Information:	I certify no cla:	ssified information	is contained in the info	rmation being su	ıbmitted.	
*Submitter Agreement:	I understand The Government intends to use the Consortium Management Firm, ATI, to assist in the processing of Submitter's proposals to this RPP as indicated in the MTEC Base Agreement. The Consortium Management Firm shall take the necessary steps to protect all proprietary proposal information and shall not use such proprietary information for purposes other than the evaluation of a Submitter's proposal and the subsequent contract administration if the proposal is selected for award. A Subri indicates concurrence with the aforementioned CMF responsibilities. Additionally, the Government (CSP) to assist in the submitted proposals' evaluation. The CSP will be required to submit to the reflecting the effort they will supply to support this RPP. The Submitter's submission of a proposal with the aforementioned Consortium Management Firm responsibilities and the use of CSP. Finally, the Consortium leadership may be provided, at their request, top-level data and metrics of the effectiveness of submission processes and the level of participation by members in the RPP. Government approval. A Submitter's submission under this RPP indicated concurrence with the the Consortium leadership.					
	Agree					
Submit SECURITY NOTICE: Unauthorized attempts to deny service, upload punishable under Title 18 of the U.S. Code to includ BIDS Copyright © 2020.		onc Lupload to Trislud con © 2020. Sub	ce the mission fo npleted se mit.	rm is lect	a non-public site from this service are strictly prohibited and may be National Information Infrastructure Protection Act. AcqCenter and is part of the BIDS family.	



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

ALL ENHANCED WHITE PAPERS MUST BE SUBMITTED BEFORE THE SUBMISSION DUE DATE AND TIME. LATE SUBMISSIONS MAY NOT BE ACCEPTED.



TECHNICAL SECTION

A NATIONAL EMERGENCY TELE CRITICAL CARE NETWORK

A Federal-Civilian Partnership

- Lead by the SCCM Task Force on Technology in Disasters and the Telemedicine and Advanced Technology Research Center
- Endorsed by the Society of Critical Care Medicine
- Supported by Universities, Tele-ICU Services, and Industry Partners across the United States







WAR OUT THERE

Soldiers Medics Casualties







The War Here

Citizens Healthcare Professionals Patients





Priorities:

- 1) Mission Success
- 2) Personal Safety
- 3) Societal Safety (compliance)

A BIG Problem: Where there are no ICU beds, there are no critical care trained clinicians!

More than half of counties have no hospital ICU beds, a growing concern as the novel coronavirus spreads throughout the nation. This map shows counties with no hospitals, counties with hospitals but no ICU beds, and counties that do have ICU beds.



Hospitals without ICU beds

No Hospitals



Map by Lydia Zuraw/Kaiser Health News

Source: Kaiser Health News analysis of hospital cost reports filed to the Centers for Medicare & Medicaid Services

Locations without ICU beds do not have clinicians who know how to use ventilators – even if they become available. Necessary is a simple, consistent means to reliably and effectively support people who *deliver critical care*. As long as network resources are available, Tele-Critical Care is a solution.

https://khn.org/news/as-coronavirus-spreads-widely-millions-of-older-americans-live-in-counties-with-no-icu-beds/

NATIONAL EMERGENCY TELECRITICAL CARE NETWORK



*APPs (Advanced Practice Providers: PAs, NPs, CRNAs etc.) - some are CC Trained and some are Non-CC Trained.

NETCCN MINIMUM VIABLE PRODUCT 💓



- The minimum capabilities of this software system include:
 - Capability for basic documentation in real-time as well as data collection and reporting.
 - A patient registration and cohorting system
 - A team organization and management tool including handoff features for change of shifts
 - Cloud-based information storage including ability for later offloading to EHRs, HIEs and other systems.
 - A well-described clinical and staffing model that incorporates the technology in a simple, reliable manner for scaling during a disaster.
 - Enables population and "resource" monitoring (where resources are at least the local caregivers and remote experts)
- Addition benefits
 - Increases the capability and capacity of critical care delivery at the point of need
 - Improves situational awareness at the local, regional and national levels using near-real-time acquisition of data from the point of need to general tools that help leaders make decisions.

TIMELINE







TEAM EFFORT!

*OPTIMAL APPLICANT TEAMS:

IT IS PREFERRED THAT ENHANCED WHITE PAPERS PROPOSE PROJECTS THAT ADDRESS THE ENTIRE SCOPE OF WORK (TASKS 1-5).

AN OPTIMAL TEAM RESPONDING TO THIS RPP WOULD CONSIST OF CLINICAL EXPERTS, TECHNOLOGY EXPERTS AND ENTITIES WITH EXPERIENCE IN CHANGE MANAGEMENT AND RAPID CYCLE INNOVATION.

HOWEVER, ENHANCED WHITE PAPER SUBMISSIONS THAT ONLY PARTIALLY ADDRESS THE REQUIREMENT ARE ALSO ENCOURAGED, WITH THE UNDERSTANDING THAT THESE OFFERORS MAY BE TEAMED WITH OTHER OFFERORS WITH COMPLEMENTARY EXPERTISE TO CONSTRUCT A COMPLETE TEAM THAT CAN ADDRESS THE FULL SCOPE OF WORK.



TASK 1: INITIAL SYSTEM CONFIGURATION AND TESTING – 15 DAYS

Offerors are expected to bring forth systems which they have currently developed that would facilitate the capture, exchange and archive of medical clinical information as described in the RFP.

- This task is largely based on the validation and initial outfitting of systems that would support generic consultation services from the virtual hospital wards to a central hub of specialists. Actions within this task would include:
 - Alpha testing to determine capabilities of proposed systems.
 - Early user feedback and direct observation will be collected to determine performance in providing a deliverable with Task 1.
 - It is recommended that **high fidelity simulation and/or real-world use** guides agile development in this phase.

Go/No-go Decision Point: As determined necessary by the government, at the conclusion of Task 1, the Government may conduct a review of the work completed and down-select Awardees based on an evaluation of the approach's viability and system capabilities to meet the program's technical requirements. 46



Task 2 focuses on the second phase of development and testing. The actions expected in this task include:

- Potential rapid prototyping of software to support operations based upon user feedback.
- Beta testing by selected national tele-critical care (TCC) partners using real patients and experienced providers.
- Scalability, reliability, interface, and user environment testing to assess ability to field the system at scale (multiple state coverage) in support of less austere and trained personnel. This should be cloud based, ideally hosted on a HITRUST, FEDRAMP compliant server.
- Just-in-time training plan for clinical, technical and administrative end-users tested and ready.

<u>Go/No-go Decision Point</u>: If appropriate, at the conclusion of Task 2, the Government may conduct a review of the work completed and down-select Awardees again to a smaller set of systems for deployment based on the evaluation of a combination of the system performance metrics and the availability of funds to test multiple systems.



TASK 3: DEPLOYMENT AND ENHANCEMENT (45 DAYS)

- During this task, the systems will be fielded to actual users and experience **real world use at scale**. Simultaneously, new adaptations can be made to fit the specifics of the COVID-19 pandemic, so movement from generic data transmission to more specific formats and clinical practices that represent COVID-19 support.
- Deploy system to multiple sites (dozens of sites are anticipated) with **full implementation support services**.
- Training should be self-contained within the application and not require in-person training for both consumers and TCC service teams; customer support (for consumers and service experts) may be offered through the application (e.g., chat function) or by phone call. The application should offer a simple method to collect user feedback/feature requests.
- Institute sustainment operations to maintain a high level of reliability, security and availability of the system.
- Work with user teams to develop COVID-19 specific formats and practices that can be used to improve data capture and clinical flow.

<u>Go/No-go Decision Point</u>: If appropriate, at the conclusion of Task 3, the Government may conduct a review of the work completed and down-select Awardees again to a smaller set of systems for deployment based on the evaluation of a combination of the system performance metrics and the availability of funds to test multiple systems.



OPTIONAL FOLLOW-ON TASK 4: AUTOMATED IMPROVEMENTS (3-6 MONTHS)

- This task aims to **incorporate automated improvements** that can enhance the care as well as reduce time with consultation personnel so that they can extend their care to a larger patient population. Examples of possible actions include:
- Incorporation of continuous monitoring devices and associated data beyond medical devices (e.g., wearables), access to ventilator settings and waveforms and access to IV pump settings.
- Remote control of medical equipment including IV pumps, ventilators, hospital beds and other priority devices/equipment most associated with the mission.
- Incorporation of autonomous systems (e.g. ventilators, sedation) into the workflow.
- Application of AI and machine learning to clinical deterioration prediction, resource allocation, and outbreak forecasting.
- Note: During Task 4 the Government will be able to make a U.S. Food and Drug Administration (FDA) SME available to the Awardees to advise on any FDA clearance concerns, if required.

<u>Go/No-go Decision Point</u>: If appropriate, at the conclusion of Task 4, the Government may conduct a review of the work completed and down-select Awardees again to a smaller set of systems for deployment based on the evaluation of a combination of the system performance metrics and the availability of funds to test multiple systems.



- This task expands the system to incorporate the greater network and systems of the DoD and civilian workplaces.
- Drop-in mobile network capabilities in the event of loss of critical communications infrastructure.
- Interoperability with most/all medical devices.
- Interoperability and communication with major existing electronic medical record systems.
- Increased ability to perform procedures remotely including ultrasound, vascular access and intubation.



- Extremely compressed timeline: This is an ambitious timeline but represents a high priority for the tele-critical care community and the nation.
- Device interoperability concerns: The ideal solution will be **operating-system and device-agnostic to ensure the broadest possible interoperability**. Necessary in the future is a "*plug-and-play*" concept for medical devices into the NETCCN system (e.g., any heart rate monitoring device – wearable, ECG, telemetry, etc. – should populate the HR data of the monitoring software. In the short term, this will need to be achieved through the use of APIs.
- Task Summary/Lessons Learned: the Government intends to share valuable lessons learned among Awardees at the conclusion of each task to ensure the most rapid progress of the NETCCN development and avoid duplication or redundancies. Awardees will prepare evaluation reports and presentations at the conclusion of each task to summarize activities, highlight successes, identify barriers and anticipated issues, emphasize lessons learned, and highlight any other key items from the project. The ability to use the prototype in real-time for these evaluations will be expected. An emphasis on simplicity for the end-user is expected given the context that these tools will be expected to be used in (i.e., crisis and disasters).



- How does the systems identify and validate user types (patient vs. caregiver vs. local healthcare professional [and type] vs. remote healthcare professional [and type])?
- Simplicity, especially of training, is paramount for scaling and accessibility.
- Research and the EULA anticipate statement about collecting user data for process improvement/system monitoring, not PII.
- Network access and reliability: social distancing, working from home, selfquarantine and shelter-in-place requirements have the potential to place significant stress on existing wireless networks and other internet service providers. One solution to this problem would be for prioritization of NETCCN traffic (identified by application use) over other resource intensive but less crucial communications.
- A plan for **provider licensing/credentialing** for local, regional and national responses using the NETCCN is being developed by the Government.
- All Awardees will be expected to collaborate and work together to identify and resolve key issues that could prevent or slow local, regional and national implementation of NETCCN capabilities. Such areas of collaboration across teams might include agreement on standards, data models workflows, measures and evaluation criteria and clinical models.



DATA TO DECISIONS





UNCLASSIFIED

TECHNOLOGY IN DISASTERS PROPOSAL FOR COVID-19 & MILITARY MEDICAL SUPPORT



* VH – Virtual Health, TCC – Tele Critical Care, PFC – Prolonged Field Care, AR – Augmented Reality

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- The Government will perform an initial screening of the submissions. This initial screening will be based on the content of <u>Section 1 of the</u> <u>Enhanced White Paper</u> (see Section 10 of the RPP for the Enhanced White Paper Template). The remaining sections of the Enhanced White Paper will not be reviewed at this stage of the evaluation process – ONLY SECTION 1 of the Enhanced White Paper will be reviewed by the Government at this stage.
- The following criteria in order to determine if the submitted Enhanced White Paper meets the qualifications to receive a full evaluation:
 - Programmatic Relevance/Responsiveness: Does the proposed project reflect an *understanding of the problems to be solved* and the clinical and technical challenges and opportunities in addressing them? Does the proposed project support rapid development of all the capabilities described in the RPP?
 - Feasibility/Timeliness: Does the proposed project support rapid development of all the capabilities described in the RPP, and does it seem reasonable and realistic to accomplish the project tasks on time as outlined in Section 5 of the RPP and with high quality?
 - Team Capabilities and Expertise: Does the Offeror's team provide expertise and demonstrate experience in the key set of technical and clinical domains necessary to support success in this effort?



Full Evaluation: Any Enhanced White Papers found to meet the minimum acceptable qualifications outlined in the initial screening will receive a full evaluation. Offerors will receive feedback on the full evaluation. The full evaluation of the complete Enhanced White Paper submissions will be conducted based on the following criteria (evaluation factors are of equal importance):

- Factor 1 Programmatic Relevance: Feasibility of the proposed solution and its alignment with the RPP's topic area and the program objective described in Section 5. How well the proposed methodology aligns with the specific focus area(s) and the overall intent of the announcement.
- Factor 2 Team Capabilities and Expertise: Ability of the Offeror's team to meet the technical requirements described in Section 5. The Government may consider the project management plan and experience as an aspect of this factor.
- Factor 3 Scientific/Development Plan: Relevancy, thoroughness, and completeness of the proposed approach (e.g., the technical merit). This includes such factors as 1) hypothesis /objectives; 2) scientific/development rationale with supporting preliminary use cases, experience, and/or data; 3) scientific study/development design feasibility. The Government may consider SOW and estimated budget as an aspect of overall scientific feasibility.
- Factor 4 Scalability and Sustainment. <u>Feasibility of the Offeror's overarching</u> strategy to enable scalability and sustainment of the NETCCN.

SUMMARY

- Create 2-3 competitive prototypes of a medical intelligent system that
 - Allows remote experts to remotely monitor a patient/patient cohort anywhere
 - Allows remote experts to connect to patients and local care teams wherever they are
 - Allows remote experts to document outside the standard electronic medical record
 - Manages patient cohorts and remote expert teams
 - A database that collects information about the system and patient population
 - A functioning prototype of the system and a description of clinical/staffing model (includes training within system)





- Q&A submitted prior to and during the call, will be reviewed now (to the maximum extent practical).
- Q&A will be posted to the MTEC website on the solicitations page: <u>https://www.mtec-sc.org/solicitations/</u>
- Submit any other questions to:
 - Questions concerning contractual, cost or pricing related to this RPP should be directed to the MTEC Contracts Administrator, Randall Fernanders <u>mtec-contracts@ati.org</u>
 - Technical related questions should be directed to the MTEC Director of Research, Dr. Lauren Palestrini, Ph.D., <u>Lauren.Palestrini@tunnellgov.com</u>
 - Questions concerning membership and all other questions should be directed to Ms. Kathy Zolman, MTEC Director of Program Operations, <u>kathy.zolman@ati.org</u>