Request for Project Proposals



Solicitation Number: MTEC-18-01-MEDLOG

Model Use of Innovative MEDLOG Data Management Technologies and Industry Best Practices: Architecture, Data Transactions Model and Prototype for a Highly Scalable, Integrated, And Just in Time Defense Medical Logistics Enterprise to support Next Gen Theater/Operational Medicine

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for the
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White Papers Are Not Required

Table of Contents

1	Exe	cutive Summary	3
	1.1	The Medical Technology Enterprise Consortium	3
	1.2	1.2 Purpose	3
2	Ove	erview of the Defense Medical Logistics Enterprise Solution	5
3	Adr	ministrative Overview	8
	3.1	Request for Solution Brief	8
	3.2	Funding Availability and Type of Funding Instrument Issued	8
	3.3	Proprietary Information	9
	3.4	Offeror Eligibility	10
	3.5	Inclusion of Nontraditional Defense Contractors	10
	3.6	Nontraditional Defense Contractor Definition	. 10
	3.7	Nontraditional Defense Contractor Requirements	10
	3.8	Cost Sharing	11
	3.9	Intellectual Property	11
	3.10	Data Rights	11
	3.11	Expected Award Date	. 12
	3.12	Anticipated Solutions Brief Selection Notification	. 12
4	Sol	ution Brief	. 12
	4.1	Solution Brief	. 12
	4.2	Solution Brief Submission	13
	4.2	.1 Submission Format	13
5	Sol	ution Brief Preparation Instructions	13
	5.1	General Instructions	13
	5.2	Technical Requirements	. 13
	5.2	.1 Technology Objectives	
	5.2		
	5.3	Cost Proposal	
	5.3	.1 Solution Brief and Cost Proposal Preparation Costs	21
6		ection	
7	Poi	nts-of-Contact	. 22
8	Acr	onyms/Abbreviations	. 22
		ent A: Statement of Work (SOW)	
Αt	tachm	ent B: Rough Order of Magnitude (ROM) Pricing	28

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 U.S. Army Medical Research and Materiel Command (USAMRMC) 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 is a nonprofit corporation with the following principal objectives:

- (a) biomedical research and prototyping;
- (b) exploration of private sector technology opportunities;
- (c) technology transfer; and
- (d) deployment of intellectual property (IP) and follow-on production.

MTEC is openly recruiting members to join a broad and diverse biomedical consortium that includes representatives from large businesses, small businesses, contract research organizations, "nontraditional" government contractors, academic research institutions and not-for-profit organizations; for more information on the MTEC mission, see the Proposal Preparation Guide (PPG) and MTEC website.

1.2 Purpose

This solicitation, issued by the MTEC Consortium Manager (CM), represents a Request for Project Proposals (RPP) for MTEC's support of the USAMRMC Medical Simulation and Information Sciences (https://mtec-sc.org/technology-areas/) technology objective.

The Defense Medical Logistics Standard System (DMLSS) is currently undergoing a technical refresh activity in which it will move from a client server infrastructure to an open architecture, web based system. This transformation will signal the introduction of the new generation system called LogiCole. While this will take a couple of years to complete, the military would like to look beyond this immediate action and identify emerging technologies that could potentially improve the overall performance of the system to enable higher functionality to Defense Medical Logistics users. Therefore, the objective of this MTEC RPP is to perform an in-depth analysis of current industry/academic best practices, future trends and technical capabilities, and rapidly emerging technologies, such as blockchain, predictive modeling for logistics pre-positioning, data requirements for drone tracking/delivery, 3D printing and other innovative approaches, for evaluation and potential adoption. The end goal is to improve Defense Medical Logistics Information Technology (DMLIT) systems to support medical care to injured and ill warfighters and their families. The Joint medical logistics functional community requires a study of data management tools and methodologies in use within private industry and under development in academia that allows for cutting-edge, highly transactional data compilation, advanced data analytics, and global inventory management. This research effort will expedite the realization of

Department of Defense's (DoD's) ability to leverage information technologies and practices thereby significantly advancing the integration of cutting edge technologies with the modernization of Defense Medical Logistics Enterprise Solution (DML-ES). With this research, DML-ES modernization will have added opportunities to integrate higher functionality into the technologies and improved aptitude ultimately lending to DML-ES interaction with Joint Operational Medicine Information Systems (JOMIS) efforts for healthcare and readiness.

As a result of the analysis, the next objective of this RPP is to develop a prototype that provides conceptual architecture, a proof-of-concept demonstration of integrated technologies, and technical development documents that leverage industry best practices and solutions for integration to advance the planned LogiCole framework. This two phased approach includes identifying, demonstrating and developing a conceptual roadmap for the integration of technologies, exposing the next generation of medical logistics planning and supply chain management enhancements for LogiCole.

Elements of the prototype could include a model of a highly scalable, industry standards-based infrastructure, and new technology applications providing highly reliable, high-integrity transaction processing across all aspects of medical supply chain and asset lifecycle management. Support for the various end-user communities within segmented, authorized and authenticated communities of interest with specific subsets of business transaction processes within the overall logistics lifecycle would be highly desired. One embodiment of the reference model and implementation could include the concept of "flow-through" and proactive customer business intelligence and capacity planning/forecasting, ordering, provisioning, fulfillment, sustainment and asset tracking as well as auditing. These would be supported by a secure, zoned infrastructure within multiple federated Military Health System (MHS) internal and external trading domains, networks and partners. The solution could demonstrate feasibility and approach for business transformation across all aspects of Defense Medical Logistics as well as the underlying supporting architecture and model(s). These must encompass core functional and data management processes within conventional DML-ES functions including Enterprise Resource Planning (ERP), emerging medical asset tracking technologies Real Time Location Systems/Radio Frequency Identification (RTLS/RFID/ latest barcode technologies), Electronic Data interchange (EDI) for purchase order generation and fulfillment amongst healthcare trading partners within a trusted community, and other core back-end process enhancements including registration and ongoing configuration, data management and administration of the communities of interest with their business objects and logging/monitoring functions. Further, integration with the electronic health record system (in the case of DoD, the MHS-GENESIS/Joint Operational Medicine Information System (JOMIS) Theater Electronic Health record platform) will be considered an essential component of the reference model and prototype. Most notably, new elements of high interest and value (that also will need to interoperate seamlessly with existing infrastructure) could include use of predictive models for medical capacity planning and forecasting that, similar to high-reliability logistics in the e-commerce space, employ advanced analytics and algorithms as well as machine learning to predict and project inventory placement

requirements and other logistics-related resources on a just in time basis from source to destination. This must further support ongoing sustainment purposes medical asset lifecycle tracking and auditing.

MTEC will host a Proposers Conference tentatively scheduled for the morning of the November 13, 2017 that will be conducted by webinar. There will be a set of briefing slides made available through signature of a Non-Disclosure Agreement (NDA) prior to the webinar. After the webinar, there will be a chance to have 15 minute private Q&A sessions with MTEC and the DoD) concerning this RPP. Further instructions and points of contact will be forthcoming to allow you to enroll, receive the briefing, and sign up for a private session.

2 Overview of the Defense Medical Logistics Enterprise Solution

The DMLSS program was created in 1993 in order to define and implement an efficient medical logistics support environment for healthcare operations in the DoD Military Health System (MHS). Originally, the dual aims of the DMLSS program were 1) creation of an Automated Information System (AIS) to enable the business processes of DoD medical logistics, and 2) identification and implementation of business process improvements for the Defense Medical Logistics Enterprise (DMLE). In order to bring together the expert medical logistics analysts and information technology (IT) experts required to support the objectives of the DMLSS program, the Joint Medical Logistics Functional Development Center (JMLFDC) was created at Fort Detrick, Maryland, home of the medical logistics agencies for all of the Services (Army, Navy, and Air Force). The DMLSS application underwent numerous improvements and, in 2016, JMLFDC launched a major technical refresh of DMLSS that will morph both the programmatic and technical components of all existing Defense Medical Logistics applications (DMLSS, TEWLS and JMAR) into a single program known as the Defense Medical Logistics – Enterprise Solution (DML-ES) and a single application branded as LogiCole.

The DoD operates one of the nation's largest healthcare systems with over 10 million beneficiaries served by almost 900 treatment facilities worldwide. The day-to-day delivery of health in this complex network is managed largely autonomously by the individual Military Services and the Defense Health Agency (DHA). The medical logistics functions, however, are performed as an Enterprise – from deployed forces in theater to medical and dental treatment facilities – using common business processes enabled by the suite of medical logistics IT applications including Enterprise Resource Planning (ERP) managed by JMLFDC. The DML-ES integrates supply and pharmaceutical management, biomedical maintenance, capital equipment management, facilities management, assemblage production and management, and business warehousing/intelligence into a single, technically, and financially-compliant platform. Currently, the integrated suite of medical logistics applications supports over 24,000 users around the world, from all Military Services, and processes over 940,000 daily transactions, while supporting the unique business needs of a diverse and complex healthcare network. Daily, this equates to 19,600 supply requisitions, 3,682 work orders on \$8.1B worth of biomedical equipment, and 3,169 work orders for over 4,100 medical and dental facilities and buildings.

DML-ES delivers an automated and integrated information system with a comprehensive range of medical materiel, equipment management and maintenance, war reserve materiel and facilities management with the following features and benefits:

- Allows customers to select and order medical supplies for the best value,
- Implements just-in-time logistics, eliminating large stocks of inventory,
- Helps hospitals and clinics manage facilities and maintain medical equipment,
- Reduces the time health care providers and professionals spend on logistics planning and management,
- Improves the effectiveness, efficiency and quality of health care delivery, and
- Permits the Defense Health Agency (DHA) to be compliant with federal standards established by the Federal Drug Administration, Federal Information Security Management Act, Federal Financial Management Improvement Act, and The Joint Commission (TJC).

DML-ES is comprised of automated information systems (AIS) for theater level III hospitalization units, including Army combat support hospitals, Air Force Expeditionary Medical Systems (EMEDS), Navy hospital ships and Navy Expeditionary Medical Force (EMF) hospitals. DML-ES delivers with a comprehensive range of medical material, equipment management and maintenance, war reserve material and facilities management functions for the MHS.

2.1 Attributes for Consideration:

The following are examples of attributes of improvements. However, this is not an exhaustive list, and MTEC encourages submissions from Offerors that include other strategies on how to improve the current system

Given the accelerated pace of clinical automation changes, it is critical that medical supply chain agility and logistics processes also keep pace. No better example exists than the successful LogiCole integration with the DoD's electronic health record, MHS GENESIS. With this integration, medical logistics can more clearly demonstrate its direct contribution to lowering the total cost of delivered healthcare, while also highlighting positive contributions to patient outcomes through greater reliability, safety, and standardization. A challenge for Defense Medical Logistics community is in its ability to identify, expose, and apply available data that is being more-widely utilized in private industry to increase business intelligence, support decision-making, and to increase support and readiness capability throughout the entire length of the medical supply chain.

Defense Medical Logistics community must *identify technologies that improve master data management*, providing the ability to acquire, store, synchronize, sustain and distribute medical logistics product data from the industrial base to the end user at the business management level, down to the tactical (user) level in a Joint environment, with the purpose of meeting care needs at the point of use.

Defense Medical Logistics community must *seek advances in business intelligence & decision support*, providing the ability to gather, store, synchronize, analyze, report, and provide tiered access to medical logistics data and information in order to have a more comprehensive knowledge while enabling the decision making in support of medical operations.

At the Medical Treatment Facility (MTF) operational level, the community must understand where innovative opportunities exist to leverage technologies, using data to; provide the ability to expose customer-driven needs, resolve problems and manage expectations through inquiries, and to afford reporting and data analysis to promote added efficiencies.

The Defense Medical Logistics community must become more innovative in the standardization of medical materiel and equipment to meet future mission readiness requirements. Mission readiness provides higher quality and patient safety assurance. *Innovative ways to store, standardize, and classify medical materiel identification from multiple sources* should afford opportunities for the Defense Medical Logistics community to increase operational visibility, improve responsiveness while reducing redundancy and duplication of medical materiel, and to streamline subsequent equipment training based on clinical guidelines and requirements.

The Defense Medical Logistics community is challenged to seek opportunities to reduce cost while increasing customer support capability. As the DHA looks to private sector IT solutions to military healthcare to support the delivery of care, the medical logistics community recognizes that, similar to what can be observed in everyday business in industry, there are greater opportunities to exchange and utilize data with a variety of trading partners. The community understands that improved data utilization can vastly improve logistics user experience, impacting clinical outcomes. By enabling greater data utilization and integrating advanced tools, DML-ES can produce intuitive business intelligence and decision support at all levels of care in medical and dental treatment facilities and in theater. The Defense Medical Logistics community has reviewed numerous Klas research documents and discussed industry research with Gartner team with no tangible results that would inform the Defense Medical Logistics with answers to the proposed research questions. In order to identify and plan integration of innovative technology, the current DML-ES refresh is the perfect time for a research opportunity to determine what medical logistics data from clinical systems, manufacturers, and business Command & Control (C2) is not only available, but also how that information may be integrated into DML-ES to improve customer support, decision-making, and analytics.

2.2 AIMS:

The MHS seeks to leverage emerging technologies/trends and the resulting best practices by partnering with a broad array of already-engaged and leading edge industry and academic experts in the global medical logistics and supply chain information technology.

The goal of this effort is to enable LogiCole to advance the identification and utilization of data and tools that are available to industry that will:

- increase agility in delivering current and future capabilities to the military user community
- employ private industry tools and best practice to create agility in LogiCole
- capitalize upon best practices and lessons learned by Government/industry/academia collaboration
- attract and engage experts in a team approach to improve Defense Medical Logistics IT system(s) and practices
- maximize and apply innovation to the Defense Medical Logistics IT system(s)
- demonstrate opportunities for enhanced support and greater reliability and efficiency at every stage of medical material management

The above description provides an overall view of some of the intended attributes of the system that needs to be supported; however; that system does not currently exist in its entirety as described. Rather, portions of the system exist and serve as the starting point toward the development of a next generation, integrated system with additional capabilities. It is required that the Offeror consider the overall view of the intended system when the operational architectures/models are proposed and developed. Therefore, MTEC is seeking to support operational modeling and architectures that not only incorporate present day capabilities, but also provide placeholders for future capabilities and interfaces (backward and forward compatibility) that will meet the full description provided above.

3 Administrative Overview

3.1 Request for Solution Brief

The Government reserves the right to award Solution Briefs received from this RPP on a followon prototype Other Transaction Agreement (pOTA) or other stand-alone OTAs as necessary to meet mission requirements.

3.2 Funding Availability and Type of Funding Instrument Issued

The U.S. Government (USG) currently has available approximately \$2.4 million (M) for Fiscal Year (FY) 2017 and 2018 and has planned additional funds as necessary for the continuation of this project through later implementation phases.

As of the release date of this RPP, FY17 funds are available but future year Defense Appropriations Bills in FY18 have not been passed and there is no guarantee that any additional funds will be made available to support this program. The funding estimated for this RPP is approximate and subject to realignment. Funding of Solutions Briefs received in response to this RPP is contingent upon the availability of federal funds for this program.

Award funding will be structured incrementally and based upon completion of milestones. MTEC anticipates that a single award will be made to a qualified team composed of one or multiple institutions responsible for working with the USG to accomplish all tasks. However, if an optimal team is not identified, then MTEC may make multiple, individual awards to Offeror(s) to accomplish subset(s) of the key tasks, or may ask companies to team in order to provide synergistic capabilities.

The Government-selected Research Project Awards will be funded under the Other Transaction Agreement (pOTA) Number W81XWH-15-9-0001 (or subsequent OTAs in support of MTEC) with MTEC administered by the CM, ATI. Strategic oversight for the award(s) supported by this RPP will be provided by the Joint Program Committee – 1 (JPC-1) of the Defense Health Agency. The CM will negotiate and execute a Base Agreement with MTEC members. This Base Agreement will be governed by the same provisions as the pOTA between the USG and MTEC. Subsequently, any Solution Brief that is selected for award will be funded through a Research Project Award issued under the Base Agreement. A sample of the MTEC Base Agreement can be found on the MTEC Members-Only website at www.mtec-sc.org.

At the time of the submission, if Offerors have not yet executed a MTEC Base Agreement, then Offerors must certify on the cover page of their Solution Brief and Cost Proposal 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 Solutions Brief and Cost Proposal that, if selected for award, it anticipates the proposed effort will be funded under its executed MTEC Base Agreement.

Offerors are advised to check the MTEC website periodically during the Solutions Brief and Cost Proposal preparation period for any changes to the MTEC Base Agreement terms and conditions as well as clarifications found in Frequently Asked Questions (FAQ) responses.

3.3 Proprietary Information

The MTEC CM will oversee submission of Solution Briefs and Cost Proposals and analyze Cost Proposals 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 Solution Brief and Cost Proposal and the subsequent agreement administration if the Solution Brief and Cost Proposal are selected for award. An Offeror's submission of a Solution Brief and Cost 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, 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 (e.g., Bill and Melinda Gates Foundation) may be interested in reviewing certain Solutions Briefs within their program areas, allowing opportunities to attract supplemental funding sources. On your Solution Brief and Cost Proposal Cover Page, please indicate your willingness to allow MTEC Officers and

Directors access to your Solutions Brief for the purposes of engaging in outreach activities with these private foundations. MTEC Officers and Director's granted Solution Brief access have signed Nondisclosure Agreements (NDAs) and Organizational Conflict of Interest (OCI) statements. Additionally, these MTEC Officers and Directors represent organizations that currently are not MTEC members, and therefore their parent organizations are not eligible to submit Solution Briefs or receive any research project funding through MTEC. Additionally, all Technical Evaluation Panel participants will agree to, and sign a nonproprietary information and conflict of interest document.

3.4 Offeror Eligibility

Offerors must be MTEC Members in good standing.

3.5 Inclusion of Nontraditional Defense Contractors

Solutions Brief and Cost Proposals that do not include Nontraditional Defense Contractor participation to a significant extent, or do not propose at least one third acceptable cost sharing, will not be eligible for award.

This requirement is a statutory element of the Other Transaction Authority and will be regarded as a pass/fail criterion during the Compliance Screening. Please see the MTEC PPG (Section 3.3.2) and RPP (Section 4), for additional details.

3.6 Nontraditional Defense Contractor Definition

A nontraditional defense contractor is a business unit that has not, for a period of <u>at least one</u> <u>year prior to the issue date of the Request for Project Proposals</u>, entered into or performed on any contract or subcontract that is subject to full coverage 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 section.

3.7 Nontraditional Defense Contractor Requirements

If the Offeror asserts either (1) it is a nontraditional defense contractor or (2) proposes a nontraditional defense contractor as a team member/subcontractor, the Offeror shall submit Warranties and Representations (Attachment 2) specifying the critical technologies being offered and/or the significant extent of participation of the nontraditional defense contractor. The nontraditional defense contractor can be an individual so long as he/she has a Data Universal Numbering System (DUNS) Number and meets the requirements in the Warranties and Representations. The significance of the nontraditional defense contractor's participation must be explained in detail in the signed Warranties and Representations. Inadequate detail can cause delay in award.

Per the DoD OT Guide, rationale to justify a *significant contribution* includes:

- 1. Supplying a key technology or products
- 2. Accomplishing a significant amount of the effort
- 3. Use of unique skilled personnel, facilities and/or equipment
- 4. Causing a material reduction in cost or schedule, and/or Improvement in performance

3.8 Cost Sharing

Cost sharing is defined as the resources expended by the award recipients on the proposed statement of work (SOW). The extent of cost sharing is a Factor in the evaluation of Solution Briefs. If cost sharing is proposed, then the Offeror shall state the amount that is being proposed and whether the cost sharing is a cash contribution or in-kind contribution; provide a description of each cost share item proposed; the proposed dollar amount for each cost share item proposed; and the valuation technique used (e.g., vendor quote, historical cost, labor hours and labor rates, number of trips, etc.).

3.9 Intellectual Property

Intellectual Property (IP) rights for MTEC Research Project Awards will be defined in the terms of an awardee's Base Agreement and resultant Task Orders. MTEC reserves the right to assist in the negotiation of IP, royalties, licensing, future development, etc., between the government and the individual performers during the entire award period.

Each Offeror will select either the MTEC Additional Assessment Fee <u>or</u> the Royalty Agreement (available on the MTEC members only website), **not both**, and submit a signed copy with the Solution Brief. Summary explanations of each are provided below.

Consortium Member Agreement (CMA)

 MTEC members receiving MTEC funding agreements for research projects will be required to execute either a MTEC Royalty Agreement, or pay an additional 2% assessment fee on the award. (Per Section 3.5 Additional Research Project Award Assessment).

Royalty Payment

• The awardee will be subject to a 10% royalty on all Net Revenues received from licensing/commercialization of the technology developed under the Research Project Award, capped at 200% of funding provided (Per Section 3.5.1 of the CMA).

Additional Research Project Award Assessment

• Member agrees to pay an additional research project award assessment of 2% to satisfy its obligations under Section 3.5.2 of the CMA. This is in addition to the 1% assessment fee for all Research Project Awards. Per Section 3.4 of the CMA, each recipient of a research project award under the MTEC pOTA shall pay MTEC an amount equal to 1% of the total funded value of each research project award. Such deposits shall be due no later than 90 days after the research project award is executed. Awardees are not allowed to use MTEC funding to pay for their assessment fees.

3.10 Data Rights

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 Government purpose data rights or unlimited data rights. If this is not the intent, then the Solution Brief should discuss data rights associated with each item, and possible approaches for the Government to gain Government purpose data rights or

unlimited data rights as referenced in the Base Agreement. Rights in technical data in each Research Project Award shall be determined in accordance with the provisions of MTEC Base Agreement.

If applicable, complete the below table for any items to be furnished to the Government with restrictions. An example is provided.

Technical Data or Computer Software to be Furnished with Restrictions	Basis for Assertion	Asserted Rights Category	Name of Organization Asserting Restrictions	Milestone # Affected
Software XYZ	Previously developed software funded exclusively at private expense	Restricted	Organization XYZ	Milestones 1, 3, and 6
Technical Data Description	Previously developed exclusively at private expense	Limited	Organization XYZ	Milestone 2
Technical Data Description	Previously developed with mixed funding	Government Purpose Rights	Organization XYZ	Milestone 2

3.11 Expected Award Date

Offeror should plan on the period of performance beginning May 1, 2018 (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.

3.12 Anticipated Solutions Brief Selection Notification

As selections are completed, the Government will forward selections to MTEC CM to notify Offerors. Proposers will be notified by letter from the MTEC of the results of the evaluation. Those successful will move forward to the next phase of solution brief pitch while those rejected will gain evaluation rational for non-selection.

4 Solution Brief

4.1 Solution Brief

The MTEC will use a streamlined, interactive approach for this RPP. Because of the nature of the requirements set forth in this RPP, this streamlined, interactive approach is anticipated to be a better means to highlight company methodologies and skills that should allow the Government to gain a fuller appreciation of the work required to be completed. It provides more freedom

and initiative to the Offeror to describe how the Offeror would approach and solve such an action. The following sections describe the formats and requirements of the Solutions Brief.

Offerors who submit Solution Briefs in response to this RPP must submit by the date on the cover page of this RPP. Solution Briefs received after the time and date specified will not be evaluated.

4.2 Solution Brief Submission

Found on the MTEC Members Only Site.

4.2.1 Submission Format

Found on the MTEC Members Only Site.

5 Solution Brief Preparation Instructions

5.1 General Instructions

The Solution Brief and Cost Proposal format provided in this MTEC RPP are mandatory and shall reference this RPP number (MTEC-18-01-MEDLOG). Offerors are encouraged to contact the Point-of-Contact (POC) identified herein up until the Solution Brief submission date/time to clarify requirements.

All eligible Offerors may submit Solution Briefs for evaluation according to the criteria set forth herein. Offerors are advised that only ATI as the MTEC's CM, with the approval of the Government Agreements Officer, is legally authorized to contractually bind or otherwise commit funding for selected Research Project Awards as a result of this RPP.

5.2 Technical Requirements

5.2.1 Technology Objectives

The Solution Brief will provide a written description of the means and methods that will be used to develop a prototype model for the integration of innovative logistics data management technologies best practices within Defense Medical Logistics Enterprise Solution (DML-ES). The prototype would provide the architecture, a proof-of-concept demonstration, and technical development documents that leverage industry best practices and solutions for integration within the existing DML-ES framework to improve precision by system analysts and end users. Deliverables will include, but are not limited to prototype user interfaces, modified Data and Information Viewpoints (DIV-1, DIV-2, DIV-3), modified All Viewpoints (AV-1), (AV-2), modified DML-ES Capability Viewpoints, modified DML-ES System Viewpoints, and modified DML-ES Operational Viewpoints. The Department of Defense Architecture Framework (DoDAF)-described Models will demonstrate utilization of explored industry technologies and best practices,

integrated within DML-ES to deliver the ability to identify, expose, and utilize available data, logistics algorithms, data structures, and analytics tools to improve business intelligence, support procurement decision-making, to increase support and readiness capability throughout the entire length of the medical supply chain. The model should be focused on the integration of available and emerging technologies including architecture changes, logistics algorithms, data structures, and analytics tools within DML-ES. Proposed solutions should be structured for future compliance with DoD Security Policy, procedures and standards and Health Insurance Portability and Accountability Act (HIPAA) provisions. Solutions should support DoD approved encryption techniques (i.e. AES 128/FIPS-140 crypto modules) and ensure provision of security across the lifecycle of the solution as per DoD Risk Management Framework (DoD Instruction 8510.01).

The intent of this solicitation is to evaluate and award Phases 1 and 2, therefore all offers submitted under this RPP must propose Phases 1 and 2. The follow-on potential implementation phases will be brought forth within a separate RPP after the results of the Phase 1 and 2 are completed, assessed, and approved.

<u>Phase 1:</u> The specific aim of Phase 1 is to conduct a comparative study of DML-ES capabilities and industry/academia logistics data management tools and capabilities.

The Phase 1 research will include the investigation of private industry organizations with similar operational baselines, to determine how private industry collaborates with multiple trading partners. Similarly, innovative trends and methods being developed in industry and academia will also be investigated. This work should explore how industry leaders utilize a highly-transactional e-commerce business model with diverse trading partners and multiple financial interfaces to deliver more seamless capability to the user. Expert partners will be asked to examine Defense Medical Logistics capabilities enabled with DML-ES architecture and logistics algorithms. The comparative study will benchmark DML-ES against industry leading IT capabilities for medical logistics solutions.

Research questions for Phase 1 include, but are not limited to:

- a) As compared to DML-ES, what are industry best practices for structuring authoritative data from multiple sources to support improved decision-making at all levels of management and care? How do these approaches compare to current DML-ES architecture and functionality?
- b) As compared to DML-ES, is industry enabling higher functioning reporting capabilities? How do the reporting capabilities increase patient safety and reduce time for operational readiness? What automation exists in industry logistics solutions that enable maturity reporting that may not exist in DML-ES?
- c) How well does DML-ES technology compare to industry for the delivery of a simplified enterprise dashboard that allows senior leaders to view standardized metrics in realtime? (Defense Medical Logistics community requires a drill down from the highest level, to Military Services, regions, then, individual medical facilities.)

- d) As compared to DML-ES utilization of Business Objects reporting, what data analytics and reporting tools exist that can promote a proactive, informed user response to procurement decisions? That is, medical device compatibility reporting that can be leveraged to support procurements?
- e) What are the different data elements and item attributes that are utilized in industry to build and maintain catalogs and thesauruses that enable rapid procurement decisions? (DML-ES uses 121 item attributes).
- f) What are the system interfaces that enable industry to exchange device manufacturer information so that information, i.e., device descriptions, are intuitive to clinicians and logisticians at any experience level? What tools are available to industry that enables the integration of manufacturer descriptions including newer health systems, services and software (such as exempt category Medical Device Data Systems or MDDS) that may transcend Food and Drug Administration (FDA) classifications standards?
- g) What Medical Logistics technology solutions and best practices are being successfully employed by other large medical enterprises in combination with the Cerner Electronic Health Record (EHR)? What other novel EHR integration models and approaches should be considered? What are the differences in the industry solution(s) and/or technology stack(s) that enable the potential for higher functionality with Cerner EHR?

<u>Phase 2:</u> The specific aim of Phase 2 is to develop a conceptual system model of DML-ES, utilizing DoD Architecture Framework Version 2.02 that is inclusive of Data and Information Viewpoint (DIV-1, DIV-2, DIV-3), All Viewpoint (AV-1), (AV-2), modified DML-ES Capability Viewpoints, modified DML-ES System Viewpoints, and modified DML-ES Operational Viewpoints. The DoDAF-described Models will demonstrate utilization of explored industry technologies and best practices, integrated within DML-ES to deliver the ability to identify, expose, and utilize available data, logistics algorithms, data structures, and analytics tools to improve business intelligence, support procurement decision-making, to increase support and readiness capability throughout the entire length of the medical supply chain. The model should be focused on the integration of available technologies including architecture changes, logistics algorithms, data structures, and analytics tools within the DML-ES framework using open, standards-based interactions, software development kits and/or application programmatic interfaces (APIs) or other novel methods to augment existing capabilities.

Phase 2 should apply the findings of Phase 1, i.e., best industry practices, tools and strategies to the DML business model and produce a proposed, improved model, caveating operational differences; placing attention on solutions to reconcile varying information (product, service, customer, facility, etc.) from disparate sources into one environment that can be presented to a user (customer, logistician, planner, management, etc.) at home station or at any contingency location.

Research questions for Phase 2 include, but are not limited to:

- a) What is the optimal strategy (or strategies) to implement the new capabilities, technical infrastructure upgrades and enhancements to be incorporated within the DML-ES? If proposed within a phased roll-out, what is the realistic release roadmap and prioritization scheme? Is it balanced by the constant imperative to address existing demands for shorter-term medical logistics functionality?
- b) What are the future data modeling, migration, management and sustainment requirements for the new enhanced capabilities? Do next generation capabilities require fundamental adjustments to models, dictionaries, policies and procedures in support of new types of medical materiel elements and processes (e.g. tracking precision medicine/genomics entities within inventory/supply chain functionality, delivery of capabilities via autonomous or unmanned systems in the future, next generation autonomous closed loop systems and medical devices for triage and treatment, etc.)?
- c) How do new trading partner relationships change to support next generation secure medical logistics, supply chain management and transaction processing? What are the configuration, change management and sustainment requirements for validating/authenticating, creating/configuring, updating and de-activating new types of trading partners, systems and service provider networks in the new DML-ES enhanced system?
- d) What are the medical planning and human resource requirements in the new proposed environment?
- e) What is the integration strategy when combined with phasing in of Military Health System (MHS) GENESIS in theater and in garrison settings?
- f) Does the model enable a higher functional relationship with MHS GENESIS?

In the Solution Brief, it is important to emphasize the processes that will be used to meet the above requirements, the technologies that will be involved, the team and its capabilities to perform the work, the team's military operational knowledge, and team's relevant experience with work similar in scope. Additionally, technology enablers for later stage Phases should be identified if they would play an instrumental role for the approach. Together, the Solution Brief should demonstrate that the team has a suitable plan and the capabilities to reach the targeted outcomes of each Phase.

The expected period of performance for both phases is estimated to be 24 months.

5.2.2 Preparation of the Solution Brief

Offerors submitting Solution Briefs in response to this RPP will be required to submit using the following steps outlined below:

Step 1: Solution Brief

The Offeror will submit a Solution Brief, which describes the overall technical concept and approach along with the viability toward the Offeror's specific effort. The following sections must be included in the Solution Brief:

- **Title Page** which references the RPP, and includes the Offeror's contact information (such as name of the organization, point of contact's name, email address, phone number, mailing address, etc.), date of submission, and title of proposed project. The title page is excluded from the page limit.
- **Executive Summary** that provides a brief description of the methodology and technology the Offeror will employ, why it is relevant to the proposed objectives, and how the Offeror has completed similar work in the past. The Executive Summary is limited to one page.
- Methodology/Technology Approach that outlines the proposed methodology in sufficient detail to show a clear course of action as it relates to the topic area of interest. This section should identify any pilot or existing commercial methodology/technology or the development of such during the course of the work. If novel technology or methods are to be employed, then identify the path to maturation. This section should highlight the approach, support technology, personnel, and operational knowledge. Please indicate any aspects that might be proprietary.
- Relevant Experience that identifies any work of a similar nature that could be used to gauge the effectiveness and worthiness of the technical or methodological approach. This section should not highlight the contractual details of relevant experience, but should emphasize past work that is relevant and similar in nature (complexity, size, requirements) to this request and how that work's outcome relates to the expectations set forth in this RPP. Offeror may choose format and method of conveying this. If a novel approach is proposed, describe how this approach differs and why it may be more feasible than current commercial standards.
- Company Viability which provides a quick overview of the company or entity. This should
 include a summary of current financial viability, any fundraising or form of revenue, and
 any go-to-market strategy or current commercial sales of the methodology/technology

to be suggested. The purpose is to assess whether the Offeror can support the effort throughout the lifetime of the work.

• Estimated Price/Cost and Schedule: The Offeror will provide a rough order of magnitude (ROM) for its cost, provide a basis for that cost, and a schedule of how this work will be completed. Interim milestone actions and associated costs should be presented. This is for Phase 1 & 2 only. The ROM must be submitted in accordance with the table described in Attachment B.

The Solution Brief is limited to ten (10) pages (including cover page), 12 point font (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. Solution Briefs exceeding the 10 page limit will not be accepted.

MTEC will email receipt confirmations to Offerors upon submission of Solution Briefs. Offerors may submit Solutions Briefs in advance of the deadline.

Solution Brief Evaluation:

The CM will distribute all Solution Briefs to the Government for evaluation. Solution Briefs will be evaluated based on the following criteria:

- Feasibility of the proposed solution and its alignment with the RPP's topic area. This includes such factors as (1) ability to execute the research access to and knowledge of IT systems of leading edge, global, logistics industry experts and companies within and outside of the medical arena 2) technical ability understanding of technical aspects of logistics systems, as well as global medical needs. Ability to understand and work with, develop and iterate technical diagrams/OV's and systems architectures 3) knowledge of emerging technologies relationships with academia, emerging technology, future tools.
- Relevancy of the proposed methodology/technology/solution to the topic area (the technical and managerial soundness of the methodological approach to satisfy the documented needs) with special interest toward any innovation or previously underutilized capabilities.
- Strength of the organization/team proposed to complete the work and its financial stability to potentially continue the maturation of the system beyond the scope of this RPP.
- Estimated ROM costs represent reasonable value for proposed solution offered.
- Inclusion of nontraditional or small business participation, or a 1/3 cost share.

Upon review of the Solution Briefs, Offerors may be invited into Step 2 of the Solution Brief process. Offerors who are not invited to proceed into Step 2 will be provided feedback.

Step 2: Solution Brief Pitch:

In Step 2, the Offeror(s) will provide a virtual or in-person "pitch" of the proposed project along with a Statement of Work (SOW)/Milestone Payment Schedule (MPS) and ROM Pricing (see Attachment A) during a meeting with the Government sponsors for the research. The pitch should provide more details about the technical and business viability of the proposed work outlined in Phase 1. Specifically, the pitch should include the following:

- **Description:** The Offeror will provide a more robust description of their approach and emphasize why this approach is expected to result in a successful outcome. This approach should follow the SOW/MPS provided with the pitch.
- Progress: The Offeror will describe the milestones provided with objective, quantifiable, and measurable metrics that will be used to measure progress during the period of performance and describe the oversight managerial methods that will be employed to maintain a quality and timely performance.
- Relevant Experience: The Offeror will convey details related to past performance(s) that
 demonstrate relevance to the scope of the proposed work and build confidence in the
 team's capabilities.
- Effectiveness (Opportunity and Risk): The Offeror will identify, assess, evaluate and clearly convey items (for known-knowns; known-unknowns and potential unknown-unknowns) for opportunities (e.g., reduction in cost or schedule, and/or improvement in performance) and risks within each appropriate project Cost, Schedule, Performance measure of effectiveness. The Offeror will identify objective measures and metrics used to assess each item, the triggering event(s), the expected result of Opportunities and Risk (if risk is unmitigated) item, and the mitigation plan for each identified risk item.
- **Defense Utility:** The end utility or outcome of the project should be identified and clearly explained how this will support the further maturation and deployment of the overarching DML-ES system.
- Prototype: This effort will eventually lead to the development of the prototype technical
 architecture that will support integrated upgrades to the DML-ES. A description of how
 this work effort will facilitate such a prototype must be described. Further, in keeping
 with the pOTA framework, the Offeror must describe how a nontraditional defense
 contractor will have a significant contribution in the work or a one-third cost share
 enactment will be identified.
- Data Rights Assertions: The Solution Brief will identify any and all proprietary and/or
 intellectual property involved in the efforts and any associated restrictions that may

possibly affect the Government's use of the property in any way whatsoever. Offeror must describe pathway to developing this into a product that can be used by the DoD and other potential customers (if applicable). Include relevant information about existing royalty agreements.

Statement of Work and Milestone Payment Schedule submission: one Word (.docx or .doc) or PDF file. Separately, a Word (.docx or .doc) version of the SOW and Milestone Payment Schedule (Appendix A of the proposal) and a Word (.docx or .doc) are required. See Attachment A for additional information.

If desired, the Government can request additional information related to specific areas of interest to be included in the pitch. The request for such information will be provided at the end of Step 1 and at the time of invitation to advance into Step 2.

The information discussed during the pitch provides a means for the Government to engage in a discussion with the Offeror to gain a greater understanding of the proposal and the Offeror's capabilities. The pitch should be restricted to **a maximum of 1 hour** with a total time of 2 hours to include questions from the Government and discussion. Any materials that will be presented during the pitch or included as supplementary material must be provided at least 72 hours prior to the meeting date. If an in-person meeting cannot be accommodated by the Offeror, then a minimum of a telephonic discussion accompanied by written support material will be required. Briefing slides or documents or a combination thereof can be used to support this effort.

Evaluation of Step 2: The Government will evaluate the information provided in each Offeror's Solution Brief (Step 1) and the Solution Brief Pitch (Step 2) to determine which proposal(s) provide(s) the greatest value to the Government. Such a determination will be based on the following criteria:

- Most Important (of equal importance)
- Performance: Overall technical approach and how well Offeror's solution enhances the DoD mission described in the RPP.
- Schedule: Suitability of the notional schedule, including processes described to identify and manage risks/opportunities.
- Cost: The parity of the relationship between the Offeror's solution and ROM costs, and whether a superior technical approach is warranted at a higher estimated cost.
 - Risk-Opportunity: Identification of risks (with supportable mitigations) and opportunities with the Offeror's approach with objective measurable metrics.
 - Inclusion of nontraditional or small business participation or a 1/3 cost share.
- Less Important (of equal importance)
 - Relevant Experience.
 - Assessment of the potential impact of data rights assertions.

At the conclusion of the Step 2 evaluation, Offerors who are favorably evaluated will be invited to submit a final solution brief (which may be amended from the initial brief to incorporate discussion points from the government interaction) and a cost proposal.

Step 3: Cost Proposal

The Offerors invited to submit a Cost Proposal are encouraged to contact the MTEC and/or Government with any questions so that all aspects are clearly understood by both parties. The full proposal should include the following and be completed in accordance with Section 3 of this RPP and the PPG.

- Cost Proposal submission: one Word (.docx or .doc) or PDF file for Section I: Cost Proposal Narrative (Appendix B) required. Separately, Section II: Cost Proposal Formats either in Excel (.xlsx or .xls) or PDF format is required.
- Warranties and Representations: If Nontraditional Defense Contractor participation is proposed, Warranties and Representations are required. One Word (.docx or .doc) or PDF file that contains all Warranties and Representations is required.
- Royalty or Additional Research Project Award Assessment: Each Offeror will select either the MTEC Additional Assessment Fee or the Royalty Agreement (available on the MTEC members only website), not both, and submit a signed copy with the proposal.

5.3 Cost Proposal

MTEC will make cost proposal formats available on the Members-Only MTEC website. **The Cost Proposal formats provided in the MTEC PPG are mandatory.** Refer to the MTEC PPG for additional details.

Each cost 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.

5.3.1 Solution Brief and Cost Proposal Preparation Costs

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

6 Selection

Based on the results of the evaluation of the Solution Brief, the Solution Brief Pitch and Cost Proposal, Offerors may be selected for funding or not selected.

The RPP review and award process may involve the use of contractors as subject-matter-experts or reviewers; where appropriate, the USG will employ non-disclosure-agreements to protect information contained in the RPP as outlined in Section 1.4.

7 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 Manager, Ms. Lisa Fisher, lisa.fisher@ati.org
- Technical related questions should be directed to the MTEC Director of Research, Dr. Lauren Palestrini, Ph.D., lauren.palestrini@officer.mtec-sc.org
- Questions concerning membership should be directed to Ms. Stacey Lindbergh, MTEC Executive Director., <a href="mailto:executive-execut
- All other questions should be directed to Ms. Kathy Zolman, MTEC Program Manager, kathy.zolman@ati.org

Once an Offeror has submitted a Solution Brief and/or Cost Proposal the Government and the MTEC CM will not discuss evaluation/status until the source selection process is complete.

8 Acronyms/Abbreviations

AIS	Automated Information System
ATI	Advanced Technology International

AV Architecture View CM Consortium Manager

CMA Consortium Member Agreement

C2 Command and Control

DIV Data and information Viewpoints

DHA Defense Health Agency

DML-ES Defense Medical Logistics – Enterprise Solution

DMLE Defense Medical Logistics Enterprise

DMLIT Defense Medical Logistics Information Technology

DMLSS Defense Medical Logistics Standard Support

DoD Department of Defense

DoDAF Department of Defense Architecture Framework

DUNS Data Universal Numbering System

EDI Electronic Data Interchange
EHR Electronic Health Record

EMEDS Expeditionary Medical Systems
EMF Expeditionary Medical Force

ERP Enterprise Resource Planning
FAQ Frequently Asked Questions
F&A Facilities and Administrative Costs

FY Fiscal Year

G&A General and Administrative Expenses

IP Intellectual Property (e.g., patents, copyrights, licensing, etc.)

IT Information Technology

JMLFDC Joint Medical Logistics Functional Development Center

JOMIS Joint Operational Medical Information System

JPC-1 Joint Program Committee
JTC The Joint Commission

M Million

MHS Military Health System

MTEC Medical Technology Enterprise Consortium

MTF Medical Treatment Facility
NDA Nondisclosure Agreement

OCI Organizational Conflict of Interest

ODC Other Direct Costs

pOTA Prototype Other Transaction Agreement

POC Point-of-Contact

PPG Proposal Preparation Guide
ROM Rough Order of Magnitude
RPP Request for Project Proposals

RTLS/RFID Real Time Location System/Radio Frequency Identification

SOW Statement of Work

TEWLS Theater Enterprise Wide Logistics System

USAMRMC U.S. Army Medical Research and Materiel Command

USG U.S. Government

Attachment A: Statement of Work (SOW)

The SOW developed by the Lead MTEC member organization is intended to be incorporated into a binding agreement if the Solutions Brief is selected for award. If no SOW is submitted, there will be no award. The proposed SOW shall contain a summary description of the technical methodology as well as the task description, but not in so much detail as to make the contract inflexible. DO NOT INCLUDE ANY PROPRIETARY INFORMATION OR COMPANY-SENSITIVE INFORMATION IN THE SOW TEXT. The following is the required format for the SOW.

Statement of Work

Submitted under Request for Project Proposal (Insert current Request No.)

(Proposed Project Title)

Introduction/Background (To be provided initially by the Offeror at the time of submission. Submitted information is subject to change through negotiation if the Government selects for funding.)

Scope/Project Objective (To be provided initially by the Offeror at the time of submission. Submitted information is subject to change through negotiation if the Government selects for funding.)

This section includes a statement of what the project covers. This should include the technology area to be investigated, the objectives/goals, and major milestones for the effort.

Applicable Documents (To be determined by the Government based on negotiation of Scope/ Project Objective)

In the event only specific requirements of these documents must be included in the SOW then only these excerpts should be used and should be made into either a clear task statement (if required) or a clear reference statement (if for guidance only and not for contract compliance).

Requirements (To be provided initially by the Offeror at the time of submission to be finalized by the Government based on negotiation of Scope/Project Objective).

State the technology objective in the first paragraph and follow with delineated tasks required to meet the overall project goals. The work effort should be segregated into major phases, then tasks and identified in separately numbered paragraphs (similar to the numbered breakdown of these paragraphs). Early phases in which the performance definition is known shall be detailed by subtask with defined work to be performed. Planned incrementally funded phases will require broader, more flexible tasks that are

priced up front, and adjusted as required during execution and/or requested by the Government to obtain a technical solution. Tasks will need to track with established adjustable cost or fixed price milestones for payment schedule. Each major task included in the SOW should be priced separately in the Cost Proposal. Subtasks need not be priced separately in the Cost Proposal.

Deliverables (To be provided initially by the Offeror at the time of submission. Submitted information is subject to change through negotiation if the Government selects for funding.)

Results of the technical effort are contractually binding and shall be identified herein. Offerors are advised to read the Base Agreement carefully. Any and all hardware/software to be provided to the Government as a result of this project shall be identified. Deliverables should be submitted in PDF or MS Office format. It must be clear what information will be included in a deliverable either through a descriptive title or elaborating text.

The following information is required:

- Monthly written progress reports (covering cost, schedule, performance, risk & opportunity) project metrics
- A comparative study/analysis report with recommendations and a modified Phase 2 plan based on Phase 1 results will be submitted at the end of Phase 1.
- The DML-ES Model/Architecture Documents and DODAF artifacts will be delivered at the end of Phase 2. Deliverables will include, but are not limited to prototype user interfaces, modified Data and Information Viewpoints (DIV-1, DIV-2, DIV-3), modified All Viewpoints (AV-1), (AV-2), modified DML-ES Capability Viewpoints, modified DML-ES System Viewpoints, and modified DML-ES Operational Viewpoints.

Milestone Payment Schedule (To be provided initially by the Offeror at the time of submission. Submitted information is subject to change through negotiation if the Government selects for funding. The milestone schedule included should be in editable format (i.e., not a picture))

The Milestone Payment Schedule should include all milestone deliverables that are intended to be delivered as part of the project, a planned submission date, the monetary value for that deliverable and any cost share, if applicable. For fixed price agreements, when each milestone is submitted, the MTEC member will submit an invoice for the exact amount listed on the milestone payment schedule. For cost reimbursable agreements, the MTEC member is required to assign a monetary value to each milestone. In this case, however, invoice totals are based on cost incurred and will not have to match exactly to the amounts listed on the milestone payment schedule.

The milestones and associated deliverables proposed should, in general:

- be commensurate in number to the size and duration of the project (i.e., a \$5M multi-year project may have 20, while a \$700K shorter term project may have only 6);
- not be structured such that multiple deliverables that might be submitted separately are included under a single milestone;
- be of sufficient monetary value to warrant generation of a deliverable and any associated invoices;
- include at a minimum Quarterly Reports which include both Technical Status and Business Status Reports (due the 20th of Mar, Jun, Sep, Dec), Annual Technical Report, Final Technical Report, and Final Business Status Report. Reports shall have no funding associated with them.

Milestone No.	Significant Event/Accomplishments Description of Deliverables	Due Date	Total Program Funds	Total Share	Cost
1					
2					
3					
Total					

Shipping Provisions (The following information, if applicable to the negotiated SOW, will be finalized by the Government and the MTEC Consortium Manager based on negotiations)

The shipping address is:

Classified Shipments: Outer Packaging Inner Packaging

Reporting (The following information, if applicable to the negotiated SOW, will be provided by the Government based on negotiation)

- Quarterly Reports The MTEC research project awardee shall submit a Quarterly Report which will include a Technical Status Report and a Business Status Report in accordance with the terms and conditions of the Base Agreement. (Required)
- Annual Technical Report The project awardee shall submit an Annual Technical Report for projects whose periods of performances are greater than one year in accordance with the terms and conditions of the Base Agreement. (Required)

- Final Technical Report At the completion of the Research Project Award, the awardee will submit a Final Technical Report, which will provide a comprehensive, cumulative, and substantive summary of the progress and significant accomplishments achieved during the total period of the Project effort in accordance with the terms and conditions of the Base Agreement. (Required)
- Final Business Status Report At the completion of the Research Project Award, the awardee will submit a Final Business Status Report, which will provide summarized details of the resource status of the Research Project Award, in accordance with the terms and conditions of the Base Agreement. (Required)

Attachment B: Rough Order of Magnitude (ROM) Pricing

Sufficient cost information to substantiate the proposed cost as realistic and reasonable for the proposed effort must be provided to ensure that a complete and fair evaluation of the cost or price can be conducted. **Use the example table format and template below to provide an initial ROM.** 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.

Labor	\$ 100,000.00		
Labor Hours	1,000.0 hrs		
Subcontractors	\$ 50,000.00		
Subcontractors Hours	500.0 hrs		
Consultants	\$ 10,000.00		
Consultants Hours	100.0 hrs		
Material/Equipment	\$ 75,000.00		
Other Direct Costs	\$ 1,000.00		
Travel	\$ 5,000.00		
Indirect costs	\$ 48,200.00		
Total Cost	\$ 289,200.00		
Fee (Not applicable if cost share is proposed)	\$ 0.00		
Total Cost (plus Fee)	\$ 289,200.00		
Cost Share	\$ 290,000.00		
(if cost share is proposed then fee is unallowable)			
Total Project Cost	\$ 579,200.00		