7. Solution Paper Responses

7.1 Nontraditional Status

The vendor shall provide its nontraditional (see paragraph below for definition) business status or its ability to meet the eligibility requirements of 10 U.S.C. §2371b. The vendor shall check one of the following boxes – with appropriate justification if needed.

☐ There is at least one nontraditional defense contractor or nonprofit research institution participation to a significant extent in the project.

☐ All significant participants in the transaction other than the Federal Government are small businesses or nontraditional defense contractors.

☐ At least one third of the total cost of the project is to be provided by sources other than the Federal Government.

If the vendor is not a nontraditional defense contractor (NDC) additional information is needed. Vendor shall provide the name and CAGE code information for the NDC. Additionally, the vendor shall provide what portion of the work the NDC is performing and an explanation of how the prototype would not succeed based on the portion of work performed by the NDC.

Definition of Nontraditional – an entity that is not currently performing and has not performed, for at least one-year period preceding the solicitation of sources by the Department of Defense (DoD) for the procurement or transaction, any contract or subcontract for the DoD that is subject to full coverage under the cost accounting standards prescribed pursuant to 41 U.S.C §1502 and the regulations implementing such section.

7.2 Foreign Ownership, Control, or Interest (FOCI) Status

In accordance with RFS Attachment 4, Security Process for Vetting Contractors, the vendor must include certification that the vendor (and subcontractor(s)) are not Foreign Owned or under USA FOCI status (and are not in merger or purchasing discussions for a Foreign company or USA FOCI Company). Should a prospective vendor be unable to so certify, they will be ineligible for award unless the mitigating circumstances in Attachment 4 Security Process for Vetting Contractors are met. In such a case, these mitigating circumstances shall be detailed in an appendix to the General Volume.

7.3 Organizational Conflicts of Interest and Mitigation Plan
Vendors will submit an Organizational Conflict of Interest (OCI) Mitigation Plan via an appendix to the General Volume. In the event there are no real or perceived OCIs, simply state so and annotate what actions would be taken in the event that one is realized.

7.4 General Submittal Instructions for Each Phase

Each submittal shall use no smaller than industry standard 12-point font utilizing Times New Roman or Arial font. If both sides of sheets of paper are used, each sheet will be counted as two pages. Volumes shall be printed on 8.5-inch x 11-inch paper. Foldout sheets will be counted as one page and shall not exceed 11 inches x 17 inches. Font size for tables and figures shall be no smaller than 8-point. If solution volumes/sections exceed the limitations set forth herein, excess text will be removed from the back of that volume/section and not evaluated. Use at least 1-inch margins on the top, bottom, left, and right-side margins.

7.4.1 Cover Page

Each submittal phase shall include a cover page with the vendor's name, CAGE code (if available), NAICS Code, Business Size, address, primary point of contact, and status of U.S. ownership. NAICS code for this effort is 541512.

7.4.2 Sub-Vendor List

At each submittal phase, vendors shall provide a list of all sub-vendors involved and their role within the performance of your submission as an appendix (which will not count towards the page count). The list shall include FOCI status and OCI.

7.5 Instructions for Demonstration Plan Submittal

The Demonstration Plan shall include a description of the prospective vendor’s planned demonstration that clearly addresses all areas listed in this section. It is desired that vendors demonstrate the maximum breadth and depth of TSS and TMT capability that currently meets or can be adapted to meet TSMT RFS requirements. The demonstration plan shall include background information on the vendor’s software solution, IP/Data Rights considerations and any associated licensing information and anticipated costs as described below:

A. A schematic block diagram of the planned demonstration layout depicting all anticipated compute, network and storage nodes or devices and their connectivity.

B. A diagram of the planned demonstration network(s) abstracted to a level of detail appropriate for a technical audience, but not to the level of detail intended for a network engineer.

C. An anticipated set of technical specifications for each compute, network and storage node or device planned for use in the demonstration. This
does not have to be fully detailed for the demonstration plan and can be refined for a briefing of the demonstration setup to be provided at the demonstration itself.

D. A list of major TSS and TMT software and infrastructure applications, components, services, and utilities planned for demonstration with a brief description of the capabilities of each and a mapping to relevant to the TSMT requirement areas. TMT capabilities shall be decomposed down to at least the Plan, Prepare, Execute and Assess level.

E. A List of anticipated partner and/or vendors planned to provide each application, component, service, or utility.

F. A description of the interfaces between major components and infrastructure elements (e.g. RESTful API, DIS, GRPC, etc.) planned for demonstration. The interface descriptions shall also provide an explanation or rationale for the interface types chosen as well as whether the interfaces planned for demonstration will be the same interfaces that will be in vendor's STE TSS/TMT proposed solution.

G. A description of any ongoing development or integration work, to include any 3rd party dependencies and licenses (with anticipated costs) currently being executed on any applications, components, or infrastructure enablers planned for demonstration or that will not be demonstrated but are planned to be included in the vendor’s subsequent STE TSMT whitepaper solution.

H. A list of any software applications, components, or infrastructure enablers for which the Government would not be anticipated to receive Government Purpose Rights (GPR) or Unlimited Rights, should the vendor be awarded the TSMT OTA. Please include a description of each anticipated vendor license required with corresponding version and IP/Data Rights posture for each item in the list.

I. A list of Commercial Off-the-shelf (COTS) and Government Off-the-shelf (GOTS) software products and licensing concept or structure and corresponding Rough Order of Magnitude (ROM) cost estimate for which the Government would be required to purchase licenses should the vendor be awarded the TSMT OTA.

Demonstrations will be conducted at a facility chosen by the prospective vendor. The Government team plans to send TBD visitors as part of the demonstration observation and evaluation team.

Demonstration Plans shall include the following:

1. POC with contact information
2. Timeline of events for the demonstration day with focus areas being discussed and demonstrated not to exceed one day from 0800 to 1700
3. Location of proposed demonstration
4. Demonstration Description (see below)
5. Security POC and Visit Request information
6. COVID-19 Restrictions for visitors

Following the guidelines under Section 7, the submitted demonstration plan shall be no more than 10 pages in length and may include up to 3 foldouts.

7.6 Instructions for Conducting Demonstrations

If selected by the Government to provide a TSMT OTA demonstration, the prospective vendor will be contacted to schedule a one-day demonstration to be held between the hours of 0800 and 1700.

The demonstration should identify the technical and operational merit of the vendor’s approach. Listed below are some examples of technical and operational areas that can be used to convey the merit of the vendor’s capabilities. It is at the vendor’s discretion as to whether to demonstrate capabilities in all areas identified below, a subset of the areas identified below, or additional areas.

1. Technical Areas

   a. Application – breadth and depth of capability and maturity of the following applications:

      i. RVCT-A software
      ii. RVCT-G software
      iii. RVCT-Soldier Software
      iv. Bde level Constructive Software
      v. TMT Plan Software
      vi. TMT Prepare Software
      vii. TMT Execute Software
      viii. TMT Assess Software

   b. Architecture and Infrastructure Elements

      i. Game engine (to include rendering engine / Image Generator)
      ii. Scalability and simulation internal and external data interchange infrastructure
      iii. MCIS interface
      iv. Authoritative Data Source interface
      v. Terrain Server with Streaming capability
      vi. Data Management and data storage solution
      vii. Ability to process glTF / 3D Tiles data
viii. Ability to render Base Globe capability
ix. Ability to stitch high resolution terrain packs onto base globe
x. Modularity

c. Integration of Architecture and Infrastructure Elements

d. Other Capability

i. Simulation Models and Behaviors
ii. Ability to train to the Army Combined Arms Training Strategy
iii. Depiction of the Operational Environment

2. Operational Areas

a. Point of Need
b. Ease of Use

i. Intuitive Mission Planning Capability
ii. Troubleshooting
iii. Ease of Setup

c. Reliability & Maintainability

7.7 White Paper and Technical Discussions

Vendors selected for this phase shall provide a white paper describing their technical approach and include a description of their company’s recent and relevant previous experiences, within the past 5 years, developing and deploying systems and capabilities similar to those required of this prototype project. Vendors selected at this stage will also be invited to participate in TIMs. Shortly after notifications have been sent to selected vendors, the Government anticipates holding a technical overview of the Performance Work Statement (PWS) (Attachment 1) along with 1-on-1s with each selected vendor.

Following the guidelines under Section 7, white papers shall be no more than 50 pages in length and may include up to 5 foldouts.

7.8 Final Solution Submittal

The final solution submittal shall clearly address planned documentation deliverables (including format and content) and any planned demonstrations, design reviews, soldier touchpoints, and management reviews. The vendor’s proposed technical solution shall describe their approach to provide a comprehensive solution to meet all of the major capabilities outlined in the RFS
and accompanying attachments. The final solution submittal shall address Government feedback and clarification provided in conjunction with vendor demonstrations and TIMs. The vendor’s final solution submittal shall describe how the vendor plans to provide all of the major capabilities outlined in the RFS and accompanying attachments to include the TSMT PWS Attachment 2 TDP.

The final solution submittal shall contain an incremental plan or Capability Roadmap that depicts the build-up and adaption of existing capability, over time, to meet the full breadth and depth of TSMT requirements. The capability roadmap shall describe the content and timing of a series of Minimum Viable Product (MVP) builds with a list of capabilities planned in each TSMT application, infrastructure and operational area, for each MVP. Capabilities listed in the Roadmap shall include, for each MVP, both those that are in a state suitable for Government and/or soldier feedback and those that are technical enablers or building blocks to support user-facing functionality scheduled for future MVP(s). The Capability Roadmap shall identify those MVPs that the vendor believes will be capable of facilitating soldier and/or leader training in the field. These MVPs would then become the MVCR or a subsequent Annual Release, pending successful completion of Operational Testing and Verification, Validation and Accreditation (VV&A).

For MVPs that are planned to become either the MVCR or a subsequent Annual Release, the capability roadmap shall identify the applicable trainable capability within and corresponding target training audience. For example, MVP number “x” may be indicated as providing integrated RVCT-A capability to support training of an AH-64E Recon/Attack Platoon, RVCT-Solider capability to train an Infantry Company and Constructive Command and Staff capability to train at the Battalion level. In earlier MVPs it is generally expected that fewer training capabilities would be available at lower echelons but vendors are encouraged to deliver the maximum breadth of fully trainable capability, at the highest echelon, as early as possible. The final MVP and associated Annual Release shall contain the full range of required training capabilities.

Individual responses will be evaluated with consideration given to the demonstrated expertise and overall technical merit of the response, feasibility of implementation, and total project risk. The proposed price, delivery schedule, technical data rights, and FOCI status of the vendor’s team will be considered as aspects of the entire response when weighing risk and determining the response representing the best value to the Government. Vendors shall describe their company’s methodologies, organizational structure, quality assurance processes, and staffing they intend to use to manage this prototype project. Vendors shall include anticipated development and delivery risks as well as a proposed timeline, tied to milestone activities including anticipated delivery dates and
completion dates for all tasks and stages. Furthermore, the Government will evaluate the degree to which the proposed concept provides a realistic and sustainable solution to meeting the TSMT technical objectives.

Responses shall be submitted in an executable (not scanned) Adobe PDF format and limited to no more than 50 pages and a total of 5 foldouts are allowed. Vendors are not permitted to use this exception to “fit” a large amount of technical data in a small table or figure to stay under the page count limit. The Cover Page, Table of Contents Sub-Vendor List, Government Desired Rights in Technical Data and Computer Software, FOCI documentation, List of Figures, IMS, CWBS, Delivery Schedule, Cost and Pricing Breakdown, Acronym Definitions, and Traceability Matrices do not count towards the page count limit.

7.8.1 Anticipated Delivery Schedule
The vendor shall include the anticipated delivery dates with their solution that includes all Prototype capabilities and completion dates for all tasks and task stages as described in the RFS.

7.8.2 IMS
An IMS shall be provided, using Microsoft Project. The IMS should be resource loaded with each task including a predecessor (if applicable), and correlate to the Basis of Estimates (BOE). The IMS may be attached as an appendix file. The IMS is not included in the total page count and page count is unlimited.

7.8.3 Cost and Pricing Breakdown
The Government will utilize Firm Fixed Price for Labor, while Other Direct Costs (to include licensing, hardware, etc.) will be Cost Plus Fixed Fee, and Government directed Travel will be cost (no fee). Vendors shall provide the pricing for its solution IAW Appendix XX Contract Line Item Number (CLIN) Pricing Structure, which is divided into severable milestones. The CLIN Structure is separated by clearly definable, detailed milestones and capability deliverables in each phase in such a way that allows the Government to determine whether to move forward to the next milestone. It should be clear, with sufficient detail, what is being delivered at each milestone. Milestones have been established and priced in a manner that prohibits milestone efforts from being worked concurrently. Each CLIN price should reflect the anticipated value the Government will receive toward accomplishment of the OTA goals and objectives at the time the milestone is completed. The price volume has no page number limitation.

7.8.4 Government Desired Rights in Technical Data and Computer Software
For the purposes of this RFS and final award document, the Government will use the data rights and computer software related terms defined in Attachment 9, Data Rights License Terms Definitions.

Vendor shall complete the Data Rights Assertions Tables using the format provided in Attachment 8, Data Rights Assertions Tables. The vendor’s assertions, including any assertions of its subcontractors or suppliers must be submitted as an attachment to its Solution Paper. The tables must be completed in the format set forth in the attachment, dated and signed by an official authorized to contractually obligate the vendor. If additional space is necessary, additional pages may be included. There is no page limit for the Data Rights Assertions Tables, and they do not count against the proposed technical solution page limitation.

The vendor shall deliver the technologies developed under this effort with Government Purpose Rights to the Government. This includes the following:

(a) Data pertaining to an item, component, or process which has been or will be developed exclusively with Government funds;

(b) Studies, analyses, test data, or similar data produced for this contract, when the study, analysis, test, or similar work was specified as an element of performance;

(c) Created exclusively with Government funds in the performance of a contract that does not require the development, manufacture, construction, or production of items, components, or processes;

(d) Form, fit, and function data;

(e) Necessary for installation, operation, maintenance, or training purposes (other than detailed manufacturing or process data);

(f) Corrections or changes to technical data furnished to the Vendor by the Government;

(g) Otherwise publicly available or have been released or disclosed by the Vendor or Vendor partners without restrictions on further use, release or disclosure, other than a release or disclosure resulting from the sale, transfer, or other assignment of interest in the technical data to another party or the sale or transfer of some or all of a business entity or its assets to another party;
(h) Data in which the Government has obtained unlimited rights under another Government contract or as a result of negotiations; or

(i) Data furnished to the Government, under this or any other Government contract or Vendor partner contract thereunder, with—

1. Government purpose license rights or limited rights and the restrictive condition(s) has/have expired; or

2. Government purpose rights and the Vendor’s exclusive right to use such data for commercial purposes has expired

Commercial Computer Software

If the Government has a need for rights not conveyed under the license customarily provided to the public, the Government must negotiate with the third-party software vendor(s) to determine if there are acceptable terms for transferring such rights. The specific rights granted to the Government shall be enumerated in the license agreement or an addendum thereto.

The Government shall only have the rights specified in the license for the commercial computer software and its related commercial computer software documentation for the software listed in the tables below. The terms of any End User License Agreements apply only to the extent they are consistent with law and Attachment 10, Terms and Conditions and EULA

Rights in Noncommercial Computer Software and Documentation

The vendor(s) grants or shall obtain for the Government the following royalty free, world-wide, nonexclusive, irrevocable license rights in noncommercial computer software or computer software documentation. All rights not granted to the Government are retained by the vendor. All rights in Technical Data and Computer Software are negotiable based on the vendor’s proposed solution. The Government seeks Unlimited Rights to all development and deliverables of technical data and computer software funded under the transaction agreement.

The vendor shall describe the intellectual property rights being provided to the Government in terms of technical data, both in software and hardware, clearly outlining any rights restrictions. If the proposed solution includes commercial software, copies of any applicable End User License Agreements (EULAs) must be submitted with the response. It is the Government’s intent to plan for the concurrency, maintenance, and modification of the hardware and/or software using Government personnel and third-party contractors. The EULA submissions
have no page limit and do not count against the proposed technical solution page limitation.

The vendor shall make a willful attempt to analyze feasible non-proprietary solutions and incorporate them when applicable to the effort. This includes, but is not limited to, software rights, data, source code, drawings, manuals, warranties, and integration efforts. The vendor shall clearly state all assumptions made during development of responses.