

Request for Solutions
US Army Space and Missile Defense Command's (SMDC) Integrated
Environment Control and Power Integrated Environment Control and
Power (IECP) Prototype
09 June 2020

1. Purpose and Authority.

This Request for Solutions (RFS) is seeking vendors for an Other Transaction Authority (OTA) agreement, for the (IECP) prototype project, in accordance with the authority of 10 USC §2371b. The Government will evaluate the solutions with the intent to competitively award one or multiple Other Transaction (OT) Agreements for prototype projects through the Training and Readiness Accelerator (TReX) Consortium.

2. Summary and Background.

The IECP prototype project seeks to develop novel integrated thermal and power management systems that will adapt and expand the application of dual-use and defense specific thermal appliance technologies and capabilities with a focus in technology enhancements that will mitigate and address numerous operational issues and requirements. First, IECP seeks to improve the operations of operational control shelters by reducing fuel supply needs and increasing reliability through the integration of prototype generator capabilities and electronic control unit (ECU) components. This includes, but is not limited to, Forward Operating Bases (FOBs), Tactical Operation Camps (TOCs), and Mobile Tactical Platforms (MTACPs). Second, IECP seeks to improve the operation of Directed Energy Weapon (DEW) and High Energy (HE) systems by reducing Size, Weight, and Power (SWaP) requirements that will result in improved duty cycle times and increased operational endurance and reliability. Third, IECP seeks to improve the operation of critical electronics that support high speed supersonic and hypersonic missile systems by providing active cooling that will extend controlled flight times thereby improving the precision and lethality of the systems. To accomplish this, the IECP prototype project will design, Model & Simulate (M/S), test, and assess prototype technologies and capabilities that will address each of these operational requirements, along with the design and development of containment technologies suitable for military environments; some of which require hardware or munitions to be protected from ballistic or thermal impact.

3. General Information.

3.1 Training and Readiness Accelerator (TReX)

Vendors interested in responding to this RFS must be members of TReX or teamed with a TReX member. Information about membership can be found at the following webpage: <https://nstxl.org/membership/>.

All Government participants and advisors in the evaluation process will be required to sign non-disclosure agreements (NDAs).

3.2 Allowable Costs and Teaming

An individual vendor may not submit more than one comprehensive response to this RFS as a Prime. A vendor may participate as a sub-vendor to multiple responses. The cost of preparing and submitting a response is not considered an allowable direct charge to any Government contract or agreement. Non-compliance with the submission instructions provided herein may preclude the vendor from being considered for award.

4. Government Provided Information, Property and Equipment

The Government will provide existing documentation, source code, and other system artifacts, to include Government Furnished Property (GFP), as necessary to complete the prototype development effort. The Government will also provide access to fielded systems (such as FOBs, TOCs, MTACPs, and DEW and HE systems), and Subject Matter Experts (SMEs) on a non-interference basis to support the design, development, and testing efforts. In addition, the Government will provide Government Furnished Equipment (GFE) after award to include one (1) or more of the seven (7) proof of principle prototypes. The vendor shall populate the Attachment 6, GFI_GFP_GFE Request List with any additional items necessary for the completion of the prototype development effort, with their prototype solution. The vendor will update this list after award. The Government will make all attempts to provide the items from the updated GFI_GFP_GFE Request List with a minimum 90 days' notice prior to need. The Vendor shall have a system of internal controls to manage (control, use, preserve, protect, repair, and maintain) Government property in its possession. The Vendor shall create and maintain records of all Government property accountable to the agreement. The Vendor shall investigate and report to the Government all incidents of property loss as soon as the facts become known. The Government shall have access to the Vendor's premises and all GFP, at reasonable times, for the purposes of reviewing, inspecting, and evaluating the Vendor's property management plan(s), systems, procedures, records, and supporting documentation that pertains to GFP. The Vendor shall include the requirements of this paragraph in all sub agreements under which GFP is acquired or furnished for sub vendor performance. The Government shall retain title to all GFE/P. The Vendor shall promptly disclose and report GFP in its possession that is excess to agreement performance. The Vendor assumes the risk of, and shall be responsible for, any loss of Government property upon its delivery to the Vendor as GFE. However, the Vendor is not responsible for reasonable wear and tear to Government property or for Government property properly consumed in performing this agreement. The GFI/GFE/GFP will be provided as is.

The Attachment 7, Distribution Agreement, will provide further guidance regarding the handling of GFI_GFP_GFE after OTA award. The Government will provide

additional GFI_GFP_GFE for the effort with a minimum 90 days' notice prior to need.

5. Solutions Responses.

Solution submissions should clearly address planned documentation deliverables (including format and content) and any planned demonstrations, design reviews, and management reviews. A proposed Integrated Master Schedule (IMS) shall be provided in a Microsoft (MS) Project format. If the vendor fails to meet the requirements identified in the General and Technical and Pricing Volumes, the solution may be denied from further evaluation, at the Governments discretion.

Responses shall be submitted in an editable/executable (not scanned) MS Word/Adobe PDF format and limited to no more than 17 standard size (8 ½" X 11") pages total count (see table below), using standard 12-point Arial font. Charts or figures are not bound by the 12-point Arial font requirement but shall be clearly legible. If the solution exceeds the page limitation, the Government may choose not to read any information exceeding the page limit and the information may not be included in the evaluation of the solution.

| Volume | Section | Format* | Counted towards page limit | | Page Limit |
|-----------------------|---|----------------|----------------------------|----|------------|
| | | | Yes | No | |
| General | Cover Page | MS Word/PDF | | X | 5 pages |
| | Nontraditional Status | | X | | |
| | FOCI Status | | X | | |
| | OCI & Mitigation Plan | | | X | |
| | Company Information | | X | | |
| Technical And Pricing | Cover Page | MS Word/PDF | | X | 12 pages |
| | Sub-Vendor List | MS Word/PDF | | X | |
| | Solution Submission | MS Word/PDF | X | | |
| | Technical Approach | MS Word/PDF | X | | |
| | Facility and Management Plans | MS Word/PDF | X | | |
| | Government Desired Rights in Technical Data and Computer Software | MS Word/PDF | | X | |
| | Anticipated Delivery Schedule | MS Word/PDF | | X | |
| | Integrated Master Schedule (IMS) | MS Project | | X | |
| | Pricing Breakdown for Phases 1, 2 and 3 | Excel | | X | |
| | Basis of Estimate (BOE) | Excel/Word/PDF | | | |
| | Follow-On ROM** | Excel | | X | |

Table 1- Page Limits

The Cover Pages, OCI & Mitigation Plan, Data Rights Assertion, IMS, Cost & Price Breakdown, ROM, and technical supplements with tracked changes are not included in the 17-page total.

*ALL PDF's will be editable (not locked).

**Follow-On ROM is not part of the evaluation and is only being used for future planning purposes.

Any additional information the vendor deems pertinent may be incorporated into the solution, but the total submission shall not exceed the 17-page limitation identified in Table 1 above.

5.1 General Volume

The General Volume shall include:

- Cover Page
- Nontraditional Status
- Foreign Owned, Controlled or Influenced (FOCI) status
- Organizational Conflicts of Interest (OCI) and Mitigation Plans
- Company Information

5.1.1 Cover Page

The cover page shall include the vendor's name, Commercial and Government Entity (CAGE) Code (if available), Data Universal Numbering System (DUNS) number, Business Size, address, primary point of contact, and status of U.S. ownership. The North American Industry Classification System (NAICS) Code for this effort is 541715, Research and Development in Physical, Engineering, and Life Sciences (except Nanotechnology and Biotechnology)

5.1.2 Nontraditional Status

The vendor shall provide its nontraditional (see paragraph 5.1.2.1 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), and the first two check boxes are not checked, additional information is needed to support the 10 U.S.C. §2371b eligibility requirements. 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.

5.1.2.1 Definition 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.

5.1.3 Foreign Owned, Controlled or Influenced (FOCI) Status

In accordance with RFS Attachment 1, 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 1, Security Process for Vetting Contractors, are met. In such a case, these mitigating circumstances shall be detailed in an appendix.

5.1.4 Organizational Conflicts of Interest (OCI) and Mitigation Plan

Vendors will submit an OCI Mitigation Plan via an appendix. 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.

5.1.5 Company Information

Within this section, the Vendor may include relevant or other miscellaneous information the company wishes to express to the Government (e.g. previous work, partnerships, awards, company structure, etc.).

5.2 Technical and Pricing Volume

Charts or figures are not bound by the 12-point font requirement but shall be clearly legible. Page size of 11”X17” are allowed for charts or figures only and each page will be counted towards the 12 pages limit. A total of five fold-outs 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, IMS, Delivery Schedule, Cost and Pricing Breakdown, and Acronym Definitions, do not count towards the page count limit.

The Technical and Pricing Volume shall include:

- Cover Page
- Sub-Vendor List
- Solutions Submission
- Technical Approach
- Government Desired Rights in Technical Data and Computer Software
- Delivery Schedule
- Integrated Master Schedule (IMS)

- Pricing Breakdown for Phases 1, 2 and 3
- Rough Order of Magnitude (ROM)

5.2.1 Cover Page

The cover page shall include the title, vendor's name, CAGE Code (if available), DUNS number, Business Size, address, primary point of contact (phone number & email), and status of U.S. ownership.

5.2.2 Sub-Vendor List

Vendor shall provide a list of all sub-vendors involved and their role within the performance of your submission as an appendix to Technical Volume (which will not count towards the page count). The list shall include FOCI status and OCI.

5.2.3 Solution Submission

Vendor's proposed technical solution shall describe its approach to providing the solution based on the technical objectives identified in Section 5.2.4, including all subparagraphs, with the system characteristics described in the Attachments 8-10 as well as in Links 1-3.

5.2.4 Technical Approach

The overarching technical objective for this effort is to adapt and expand the application of dual-use and defense specific thermal appliance technologies and capabilities by incorporating additional technology enhancements that will address fuel reduction considerations, SWAP improvements and enhancements, and the operation of critical electronics considerations related to the application of integrated power generation capabilities in support of operational control shelters (to include, but not limited to FOBs, TOCs and MTACPs), DEW and HE systems, and high speed supersonic and hypersonic missiles. The IECF prototype project will be conducted in phases. A description of each phase follows to include the technical objectives and expected outcomes. Each technical objective will be accomplished through the design, development, demonstration, and assessment of IECF prototype capabilities based on the following milestones.

5.2.4.1 Phase One (Modeling & Simulation)

- **Phase One Description:** During the first phase of the prototype project, a first generation of prototypes addressing specific integrated thermal and power needs for operational control shelters (to include, but not limited to FOBs, TOCs and MTACPs), DEW and HE systems, and high speed supersonic and hypersonic missiles will be designed and developed via M/S and virtual prototyping. Prototyping will address and incorporate fuel reduction considerations, SWAP improvements and enhancements, and the operation of critical electronics.

- **Phase One Technical Objectives:**
 - Design and development of first generation scalable (tactical power to prime power) prototypes that address cooling, Warfighter thermal conditioning, refrigeration, and heating for operational control shelters (to include, but not limited to FOBs, TOCs and MTACPs), DEW and HE systems, and high speed supersonic and hypersonic missiles.
 - Design and development of enhancements and improvements that address fuel reduction considerations, SWAP improvements and enhancements, and the operation of critical electronics.
 - Design and development of containment technologies suitable for military environments; some of which require hardware or munitions to be protected from ballistic or thermal impact.
- **Phase One Outcomes:**
 - Scalable virtual prototypes, based on M&S, that address specific integrated thermal and power needs for operational control shelters (to include, but not limited to FOBs, TOCs and MTACPs), DEW and HE systems, and high speed supersonic and hypersonic missiles to include associated analysis and reports.
 - Verification and validation, via M&S, of the first generation prototypes to include associated analysis and reports.
- **Phase One Decision Point:** Phase One DP may be used for entry into Phase Two. Phase One DP may occur after successful completion and demonstration of all Phase One objectives and may be prior to the Government acceptance of all Phase One deliverable outcomes. Early entry into Phase Two activities may be determined by the early outcomes of Phase One and does not constitute completion of Phase One.
- **Phase One Estimated Timeline:** The Government does not anticipate that this phase will exceed twelve (12) months. At the Government's discretion, Phase Two may begin prior to the completion of Phase One.

5.2.4.2 Phase Two (Design and Development)

- **Phase Two Description:** During the second phase of the prototype project, systems, subsystems, and components will be developed based on the assessed outcomes of the Phase One and subject to developmental testing as appropriate. Test articles will be developed to address operational control shelters (to include, but not limited to FOBs, TOCs and MTACPs), DEW and HE systems, and high speed supersonic and hypersonic missiles.

- **Phase Two Technical Objectives:**

- Develop test articles, as designed and established in Phase One, that addresses the scalable power generation needs for operational control shelters (to include, but not limited to FOBs, TOCs and MTACPs), DEW and HE systems, and high speed supersonic and hypersonic missiles to include those elements that address fuel reduction considerations, SWAP improvements and enhancements, and the operation of critical electronics. Specifically, develop test articles that address:
 - One (1) first generation and two (2) second generation prototypes [a total of three (3) prototypes] for integrated thermal and power management of operational control shelters (to include, but not limited to FOBs, TOCs and MTACPs).
 - One (1) first generation and two (2) second generation prototype [a total of three (3) prototypes] for DEW and HE systems.
 - One (1) first generation and two (2) second generation prototypes [a total of three (3) prototypes] for integrated thermal and power management for high speed supersonic and hypersonic missile electronics.
- Develop containment technologies suitable for military environments; some of which require hardware or munitions to be protected from ballistic or thermal impact.

- **Phase Two Outcomes:**

- Development of first generation and second generation scalable prototypes for operational control shelters (to include, but not limited to FOBs, TOCs and MTACPs), DEW and HE systems, and high speed supersonic and hypersonic missiles.
- Development of containment technologies suitable for military environments; some of which require hardware or munitions to be protected from ballistic or thermal impact.
- Developmental testing of the first generation and second generation scalable prototypes to evaluate the technical feasibility and manufacturability of the prototypes to address operational control shelters (to include, but not limited to FOBs, TOCs and MTACPs), DEW and HE systems, and high speed supersonic and hypersonic missiles
- Development testing to evaluate enhancements and improvements that address fuel reduction considerations, SWAP improvements and enhancements, and the operation of critical electronics.

- Developmental testing to evaluate containment technologies suitable for military environments; some of which require hardware or munitions to be protected from ballistic or thermal impact.
- Prototype development reports and documentation.
- Prototype developmental testing analysis, reports, and documentation.
- **Phase Two Decision Point:** Phase Two DP may be used for entry into Phase Three. Phase Two DP may occur after successful completion and demonstration of all Phase Two objectives and may be prior to the Government acceptance of all Phase Two deliverable outcomes. Early entry into Phase Three activities may be determined by the early outcomes of Phase Two and does not constitute completion of Phase Two.
- **Phase Two Estimated Timeline:** The Government does not anticipate this phase will exceed twelve (12) months from the entry date into Phase Two. At the Government's discretion, Phase Three may begin prior to completion of Phase Two.

5.2.4.3 Phase Three (Demonstration and Assessment)

- **Phase Three Description:** During Phase Three of the project, the IECP prototype systems, subsystems, and components will be integrated with one or more operational control shelters (to include, but not limited to FOBs, TOCs and MTACPs), DEW and HE systems, and high speed supersonic and hypersonic missiles (as determined by the US Army) and operationally demonstrated and assessed in a realistic environment (as determined by the US Army) against MIL-STD-810G requirements (as appropriate) to determine military utility, and if successful, transition of the test articles (the IECP prototypes) to gain initial operational capabilities (IOC).
- **Phase Three Technical Objectives:**
 - Demonstrate and assess test articles (IECP systems, subsystems, and components) against MIL-STD requirements (as appropriate) to determine military utility.
 - Initial sustainment and maintenance of the prototype(s) to support operational demonstration and assessment.
 - Transition the prototypes to gain IOC.
- **Phase Three Outcomes:**
 - Demonstration and assessment of test articles in an operationally realistic environment (as determined by the US Army).

- Demonstration and assessment analysis, reports, and documentation.
 - Plans and capabilities to continue sustainment and maintenance of the prototype, as/if required, beyond Phase Three.
 - Acceptance of successfully completed deliverable outcome to the Government to support IOC and address urgent Warfighter needs and requirements.
- **Phase Three Decision Point:** Phase Three may be ready for a DP upon successful completion of all Phase Three requirements. Phase Three DP may occur after successful completion and demonstration of the Phase Three objectives and may be made prior to the Government acceptance of all Phase Three outcomes. Successful completion of Phase Three may also serve as the end point of the IECF prototype project and transfer of the prototype(s) to the US Army, USASMDC, or another Government activity to support IOC and follow-on activities.
 - **Phase Three Estimated Timeline:** The Government does not anticipate this phase will exceed twelve (12) months from the entry date into Phase Three.

Vendors must clearly state assumptions made within their response. Vendors are encouraged to challenge any Government assumptions or restrictive requirements in its individual solution and should articulate any major discrepancies between the RFS and its technical solution. Should a vendor's solution require a change in policy and/or statute, the vendor shall outline within their technical volume, and describe why the change is needed to realize the benefit of the vendor's prototype (and potential production).

5.2.5 Facility and Management Plans

Vendors must clearly state the company's plan to manage the project to include team composition, description of sub-vendor involvement and tasks, and quality assurance processes as well as a description of manufacturing capabilities and facilities outlining the vendor's ability to ramp up production at the end of the prototype. This should also include the vendor's quality assurance process.

5.2.6 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 7, Data Rights and Computer Software License Terms and Definitions

The Government requires Government purpose rights to all development and deliverables of technical data and computer software developed exclusively with Government funds under the transaction agreement, for at least a five-year period which shall commence upon execution of this transaction agreement. Upon

expiration of the five-year term, unlimited rights shall transfer to the Government. This includes but is not limited to the following:

- (a) 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;
 - (b) Form, fit, and function data;
 - (c) Data necessary for installation, operation, maintenance, or training purposes (other than detailed manufacturing or process data);
 - (d) Corrections or changes to technical data furnished to the Vendor by the Government;
 - (e) Data otherwise publicly available or which has 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;
- Commercial Computer Software

All technical data, intellectual property, and non-commercial off the shelf (COTS) software are desired to be provided with a minimum of Government Purpose Rights (GPR). If any non-COTS software cannot be provided with GPR, vendors will be requested to provide the pricing to acquire any portion of their solution which is delivered with limited or restricted rights to technical data and computer software, developed exclusively at private expense. The Government may choose to license or purchase the rights to these proprietary data upon successful delivery of the prototype. The Government is ultimately seeking a perpetual enterprise license agreement that allows unlimited distribution, modification, and full use of the software without additional fees beyond the cost contracted for the original license agreement.

If the proposed solution includes commercial software, copies of any applicable End User License Agreements (EULAs) must be submitted with the response.

Any commercial or COTS software shall be provided with a transferable license that allows distribution of the software and license to any Government agency or DoD vendor/contractor for any USASMD C IECP prototype project related purpose.

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 in Attachment 3, Data Rights Assertions Tables. The terms of any End User License Agreements apply only to

the extent they are consistent with Federal law and Attachment 4, Data Rights Information.

The vendor shall analyze feasible non-proprietary solutions and incorporate them when applicable to the effort. This includes, but is not limited to, software rights, technical data, source code, drawings, and other product definition data, manuals, warranties, and integration efforts.

All technical data and information developed under this effort shall be marked with the appropriate marking in accordance with DoDI5230.24, Distribution Statements on Technical Documents.

5.2.7 Anticipated Delivery Schedule

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

5.2.8 Integrated Master Schedule (IMS)

An IMS is to be created 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.

5.2.9 Pricing Breakdown for Phases 1, 2 and 3

Vendors shall submit a firm fixed price amount price for its solution, further divided into severable milestones defined within each phase. The Government is not dictating a specific price mechanism. However, proposed payments should be linked to clearly definable, detailed delivery based milestones in each phase. It should be clear, with sufficient detail, what is being delivered at each milestone. The vendor's pricing milestones may vary from the defined decision points, depending on the proposed solution. Labor Hours and labor category by Technical Objective (TO) should be included in the pricing breakdown. Pricing submission shall be submitted in Excel format with all Excel formula's and pricing information (to include buildup of direct labor rate) used during calculation. Milestones should be established and priced in a manner that prohibits milestone efforts from being worked concurrently. Each milestone 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.

5.2.10 Basis of Estimate

Vendors shall include a basis of estimates which covers manpower allocation for the entire scope of this effort, validates the labor hours & Pricing Breakdown and is correlated to the vendors proposed IMS. The Government requires the vendor to show calculations of direct labor rates, which shall include indirect rates and

fee. Indirect rates for Other Direct Costs applied to subcontractor cost should also be shown. The BOE shall include a detailed Bill of Materials (BOM)

5.2.11 Follow-On Rough Order of Magnitude (ROM)

Vendors shall provide a ROM pricing for potential follow-on production activities. Please note, the Follow-On ROM will assist in future planning efforts for potential follow-on efforts. The Follow-On ROM is not part of the evaluation and is only being used for future planning purposes.

It is important to note, the prototype project has an estimated ceiling budget of \$48,000,000.00. This budget is established for the successfully completed, delivery and acceptance of a total of 9 prototypes, as defined in Section 5.2.4.2.

6. RFS Response Instructions.

6.1 There will be an open period for the submission of questions related to the RFS. All questions related to this RFS shall be submitted utilizing the Vendor Questions Form provided in Attachment 6. Questions must be submitted via email to initiatives@nstxl.org, with "IECP Prototype" in the subject line. All questions must be submitted with company name and POC information.

6.2 Questions must be submitted no later than 11:00 AM EDT on **16 June 2020**. Questions received after the deadline may not be answered. Questions shall not include proprietary data as the Government reserves the right to post submitted questions and answers, as necessary (and appropriate) to facilitate vendor solution responses.

6.3 The Government will make every attempt to answer all submitted questions as soon as possible, but no later than **30 June 2020** after the deadline for question submittal. The Government reserves the right to post submitted questions and answers, as necessary (and appropriate) to facilitate vendor Solution Paper responses. Submitted questions will be posted without identifying company names.

6.4 Solution Responses shall be submitted no later than 11:00 AM EDT on **10 July 2020**, via the "Submit a Solution" button on the NSTXL website. Any submissions received after this time on this date may be rejected as late and not considered.

6.5 Vendor's solutions shall be valid for at least 180 days after submission.

7. Evaluation and Selection Process.

7.1 Evaluation

The evaluation will consist of evaluation of the written solution response. If further information is required after the completion of the evaluations of the

written solution responses, the Government may request presentations and/or demonstrations or enter into communications with vendors.

The Government will evaluate the degree to which the submission provides a thorough, flexible, and sound approach to fulfill the requirements.

In performing the initial review of the Technical Volume, the Government evaluators will only review the enclosures and other proposal information if the response describes a technical approach that the Government evaluators find viable and effective based on the Focus Areas described below.

If the other supporting documents are reviewed, the Government evaluators will consider the extent to which the supporting documents are consistent with the technical response. If the supporting documents are not consistent, the overall evaluation of the vendor's solution may be negatively affected.

The Government recognizes the need for flexibility in its evaluation process. The following represents the Government's planned approach to evaluating submissions in response to this RFS.

Written solution responses will be evaluated with consideration given to the vendor's ability to provide a clear description of the proposed solution, the overall technical merit of the response and the total project risk with consideration aimed at the Technical and Price Volumes and Section 7.1.1, below. The proposed schedule, IMS, Intellectual property and data rights will be considered as aspects of the entire response when weighing risk and reward. The Government evaluators will consider the written solution response when selecting the preferred approach to achieving the Government's objectives.

After the evaluation of written solution responses, it is anticipated that the Government will begin Statement of Work (SOW) collaboration with the selected vendor(s).

7.1.1 Interested parties are requested to provide proposed solutions outlining:

- Technical Merit - The thoroughness, innovation, clarity, and soundness of the proposed approaches in meeting the requirements for all technical objectives as described in Section 5.
- Demonstrated Experience - with performing similar work within the past 3 years. Vendor must clearly communicate experience in designing, developing, producing, and fielding similar capabilities and products as outlined in this RFS.
- Facility and Management Capabilities to include team composition/personnel and sub-vendor involvement and tasks, including description of sub-vendor involvement and tasks, manufacturing capabilities and facilities to include the vendor's quality assurance process.

- Solution Price - Clear pricing & cost data which accurately reflects level of effort derived from proposed Technical Volume, and IMS. Rational price breakdown for each major milestone activity and phase. Detailed man-hours by month for each labor category, and detailed bill of material.

7.2 Selection Process

The Government intends to make a single OT award as a result of this RFS. However, more than one award may be made if determined to be in the Governments best interest.

The Government will review each vendor's submittal against the Technical and Price Volumes requirements and Section 7.1.1, and make award to the vendor(s) whose solution is/are determined to be the most advantageous to the Government. The proposed project schedule, IMS, Intellectual property and data rights will also be considered as aspects of the entire response when weighing risk and reward. Further, the Government will evaluate the degree to which the proposed concept provides an innovative, or other than military technical solutions – yet realistic and sustainable - approach to meeting the IECF Prototype technical objectives and outcomes.

7.2.1 Assessment of risk is subjective. If the risk is obvious or the schedule seems overly aggressive, the Government will consider that in the total risk assessment. Vendors are responsible for identifying risks within their submissions, as well as providing specific mitigation solutions.

7.2.2 Unsupported assertions will be discounted by the evaluators.

7.2.3 The Government anticipates awarding to the vendor or vendors that propose a solution that best satisfies the Government's objectives when considered in light of the comparison to the evaluation criteria. The evaluations will be conducted utilizing a Qualitative Workbook which addresses the Technical Objectives and topics presented in Section 7.1.1. Evaluations will be conducted by Government personnel (no contractor personnel will participate in the evaluation process).

7.2.4 In making the final decision it may become necessary to compare the proposals of each vendor against the other, but the Government anticipates that its decision is more likely to be made based on each vendor's submittal as evaluated against the criteria described and a determination of which proposal(s) is/are deemed most promising to satisfy the Government's need.

8. Additional Information.

The proposed solution will be used to collaboratively negotiate a Statement of Work (SOW) after selection for award. The SOW will be incorporated into the OTA agreement as part of the award.

8.1 Export Controls. Research findings and technology developments arising from the resulting proposed solution may constitute a significant enhancement to the national defense and to the economic vitality of the United States. As such, in the conduct of all work related to this effort, the recipient will comply strictly with the International Traffic in Arms Regulation (22 C.F.R. §§ 120-130), the National Industrial Security Program Operating Manual (DoD 5220.22-M) and the Department of Commerce Export Regulation (15 C.F.R. §§ 730-774).

8.2 Interaction and/or Disclosure with Foreign Country/Foreign National Personnel. The Vendor should comply with foreign disclosure processes described in US Army Regulation (AR) 380-10, Foreign Disclosure and Contacts with Foreign Representatives; Department of Defense Directive (DoDD) 5230.11, Disclosure of Classified Military Information to Foreign Governments and International Organizations; and DoDD 5230.20, Visits and Assignments of Foreign Nationals.

8.3 All submissions will be unclassified. Submissions containing data that is not to be disclosed to the public for any purpose or used by the Government except for evaluation purposes will include the following sentences on the cover page:

“This submission includes data that will not be disclosed outside the Government, except to non-Government personnel for evaluation purposes, and will not be duplicated, used, or disclosed -- in whole or in part -- for any purpose other than to evaluate this submission. If, however, an agreement is awarded to this Company as a result of -- or in connection with -- the submission of this data, the Government will have the right to duplicate, use, or disclose the data to the extent agreed upon by both parties in the resulting agreement. This restriction does not limit the Government's right to use information contained in this data if it is obtained from another source without restriction. The data subject to this restriction are contained in sheets [insert numbers or other identification of sheets]”

8.4 Each restricted data sheet should be marked as follows: *“Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this submission.”*

9. Follow-On Production.

If the IECF prototype project is successfully completed [feasibility and utility of the prototype(s) are demonstrated and assessed, and IOC is gained], the Government anticipates conducting a low rate initial production (LRIP) of the IECF prototype capabilities that were successfully validated to determine IOC. LRIP will be used to produce a small quantity set of test articles to provide for representation at Initial Operational Test and Evaluation (IOT&E). LRIP will also be used to establish an initial production base and set the stage for a gradual increase in production rate to allow for Full-Rate Production (FRP) upon completion of Operational Test and Evaluation (OT&E).

Pursuant to 10 U.S.C. 2371b(f), if competitively procedures were used for the selection of parties for participation in the transaction for a prototype pilot and the participants in the transaction successfully completed the prototype project, production OTs are authorized and offer a streamlined method for transitioning into follow-on production without competition. Potential follow-on production contracts may be either sole source, based on successful completion of the prototype project within the scope of this document, or competed at the discretion of the Government. Follow-on activities could include system and software updates to address obsolescence, concurrency, and technology insertion. The follow-on agreement for the IECF production phase could take many forms, including a new OT for Production agreement.

Solution offerors will provide a Follow-On ROM in their solution response that outlines how their solution can be utilized in follow-on activities. For Follow-On ROM purposes, assume two-hundred and fifty (250) units will be produced of each of the three types of prototypes being developed for a total of seven-hundred and fifty (750) units over the course of three (3) years.

Further, the Government reserves the right to determine part or all of the prototype project is successfully completed if the vendor shows a particularly favorable or unexpected result justifying the transition to production.

10. Attachments.

Attachment 1, Security Process for Vetting Contractors

Attachment 2, Questions Form

Attachment 3, Data Rights Assertions Tables

Attachment 4, Data Rights Information

Attachment 5, Data Rights and Computer Software License Terms and Definitions

Attachment 6, GFI_GFP_GFE Request List

Attachment 7, Vendor GFI_GFP_GFE Distribution Agreement

Attachment 8, atp3-34-45, Electric Power Generation & Distribution, July 2018

Attachment 9, MIL-STD-810G, DoD Test Method Standard, Environmental Engineering Considerations & Laboratory Tests, 31 January 2008

Attachment 10, MIL-STD-461F, DoD Interface Standard, Requirements for the Control of Electromagnetic Interference Characteristics of Subsystems and Equipment, 10 December 2007,

11. Links.

- Link 1, ATP 3-34.45, Electric Power Generation and Distribution, July 2018,
<https://fas.org/irp/doddir/army/atp3-34-45.pdf>
- Link 2, MIL-STD-810G, DoD Test and Method Standard, Environmental Engineering Considerations and Laboratory Tests, October 2008,
<https://www.atec.army.mil/publications/Mil-Std-810G/Mil-Std-810G.pdf>
- Link 3, MIL-STD-461F, Requirements for the Control of Electromagnetic Interference Characteristics of Subsystems and Equipment, December 2007,
<https://www.dau.edu/cop/e3/layouts/15/WopiFrame.aspx?sourcedoc=/cop/e3/DAU%20Sponsored%20Documents/MIL-STD-461F.pdf&action=default>