

## I. GENERAL INFORMATION

**Agency Name:** The Bureau of Engraving and Printing (BEP)  
Office of Technology Development (OTD)  
Washington, D.C. 20228

**Research Opportunity Title:** BEP OTD Long Range Broad Agency Announcement (LRBAA)

**Long Range Broad Agency Announcement Type:** Initial Announcement

**Research Opportunity Number:** **BEP-BAA15-0001**

**Response Date:** This is a five (5) year announcement and will remain open until August 31, 2020, or until amended or superseded. This announcement may be reissued and or/ amended periodically, as needed. Potential Offerors are encouraged to consult with the technical point of contact (POC) for each respective research area to discuss topic of interests, prior to submission of any White Papers. Submission of a White Paper is required prior to submission of a Formal Proposal. White Papers may be submitted at any time during the open period to [BAA@BEP.gov](mailto:BAA@BEP.gov).

If an Offeror is requested to submit a Formal Proposal based on its White Paper submission, please be advised that the due date of the Formal Proposal will be the date that is specified in the Formal Proposal Request letter; and, not the response date of August 31, 2020.

### Main Points of Contact:

Stephen Surko  
Chief, Office of Technology Development  
Bureau of Engraving and Printing  
Office of Technology Development  
300 14<sup>th</sup> Street SW  
Washington, D.C. 20228  
[BAA@BEP.gov](mailto:BAA@BEP.gov)

Kathleen Barton  
Contracting Officer  
Bureau of Engraving and Printing  
Office of Acquisition  
300 14<sup>th</sup> Street SW  
Washington, D.C. 20228  
[BAA@BEP.gov](mailto:BAA@BEP.gov)

## II. INTRODUCTION

A. The BEP reserves the right to reject submissions if the work proposed duplicates current BEP activities, falls outside the particular division's current efforts, or does not comply with the submission instructions. Therefore, all interested parties must read these instructions carefully.

B. This is a LRBA, as prescribed by Federal Acquisition Regulation (FAR) Parts 6.102(d)(2) and 35.016, which provides for the competitive selection of research proposals. The LRBA's submission and evaluation processes are distinct from those of conventional procurements that use Requests for Proposals (RFPs) or Requests for Quotes (RFQs). Proposals submitted and selected for award in response to this LRBA are in full compliance with the provisions of PL 98-369, the Competition in Contracting Act (CICA) of 1984.

C. The mission of the OTD is to: (1) develop innovative security features that protect United States (U.S.) Federal Reserve notes (FRNs) and other security products against counterfeiting; (2) develop features that provide meaningful access to all; and (3) develop new materials and applications to enable the BEP to produce FRNs incorporating the latest technologies for optimal performance. This LRBA declares OTD's general interest in competitively funding Research and Development (R&D) projects across a spectrum of physical science disciplines. Science and Technology (S&T) will focus on areas where risk inhibits mission or operational investments, and where significantly improved or increased capability payoffs can be expected.

D. For background, interested parties may wish to review [A Path to the Next Generation of U.S. Banknotes: Keeping Them Real](#) by the National Research Council (NRC). This study can be downloaded for free from NRC at <http://www.nap.edu/catalog/11874/a-path-to-the-next-generation-of-us-banknotes-keeping>.

E. The BEP seeks R&D projects for revolutionary, evolving, and maturing technologies that are not available in the global market and demonstrate the potential for use in FRNs. The unique contribution of your proposed research or technical concept, and how it differs from similar efforts or solutions, must be clearly articulated in your White Paper. Offerors should read the descriptions of the research topic areas of interest and identify the specific topic for which their concept will have the maximum impact. Offerors are encouraged to select the one division that most directly corresponds to their proposed subject matter.

F. It cannot be emphasized too strongly that all submissions must indicate significant advancement in the evolution of a topic area identified in this LRBA. The U.S. Government reserves the right to reject submissions that do not clearly articulate such advances or innovations.

G. This LRBA is restricted to work relating to basic and applied research and that portion of advanced technology development *not* related to a specific system or hardware procurement. This LRBA does *not* cover support services, such as technical services, engineering services, or other types of support services to include "contracting"-type services (e.g., quasi-directed subcontracting) or contracts to "evaluate" another contractor's performance/program. Such submissions are considered non-compliant with this LRBA and will be rejected without evaluation.

H. Fully developed products will not be considered under this LRBA, unless the Offeror is proposing a totally different application for the product or a modification is needed, which requires substantial research. Purchase of capital equipment will only be allowed under a given proposal if the BEP deems it reasonable and necessary to conduct the particular project. No LRBA award shall be primarily for the purchase of capital equipment.

I. Offerors who seek, through this LRBA, to extend work previously completed must clearly articulate where the old work ended, where the new work begins, and what new advances are expected from the work contemplated under this LRBA. Please ensure it is clear that the work now being submitted is independent of previous work (i.e. the next logical step in the research, or investigating a subject that was discovered and not funded under the previous award). Submitting existing Statements of Work (SOW) and indicating which steps have been completed is not sufficient justification for an independent award under the LRBA.

J. The BEP will not issue paper copies of this LRBA. Oral presentations are not permitted at any point during the LRBA process.

### **III. RESEARCH TOPICS**

Below are brief narratives of the topic areas of interest of the two OTD research and development divisions known as the Security Features Division (SFD) and the Materials and Application Innovation Division (MAD). The narratives are intended to provide an abbreviated description of the eight (8) OTD's research areas. The descriptions of the research areas are organized by function, and the reader may note some overlap between sections. These descriptions are not meant to be exhaustive, but rather to challenge the reader to create and submit truly creative proposals that have the potential to dramatically shift existing currency paradigms. These descriptions furnish specific examples of areas of interest and the BEP focal points associated with these technology areas. However, any submitted White Paper or Formal Proposal must be grounded in achievable technology goals. In your White Paper submission, you will be asked to identify the division and/or specific topic area that best fits your proposed research.

#### **A. SECURITY FEATURES DIVISION**

The Security Features Division (SFD) leads the development of innovative security features that protect FRNs and other security products against counterfeiting activities.

##### **Research Area 1 - Overt Features**

Development of technologies and/or materials with potential application in overt visual authentication features on future generations of FRNs. Technologies offered should provide effective counterfeit deterrence against all types of threats including traditional printing as well as digital reproduction. Proposed counterfeit deterrent features may be incorporated or applied (e.g. inks, substrate) into FRNs, and should not require the use of any external device for verification. An effective overt feature, for example, should be extremely difficult to simulate or duplicate, but should be easy to authenticate by the public under most lighting conditions.

Technical POC: Dr. Chris Dollberg, BEP/SFD  
Phone: (202) 874-3906  
Email: christopher.dollberg@bep.gov

### **Research Area 2 - Device Assisted Features**

Development of technologies and/or materials with potential application in device-assisted, user-interpreted counterfeit deterrent features on future generations of FRNs. Proposed counterfeit deterrent security features should be novel, useful, and non-obvious and not known or available in the global market. Proposed security features may be incorporated or applied into FRNs. An effective device-assisted user-interpreted feature should be extremely difficult to simulate or duplicate, but should be easy to authenticate by the public using a ubiquitous, readily available and low cost device. Examples of these devices include, but are not limited to, optical filters, magnifiers, low cost laser pointers, LED flashlights, magnets, and cell phones.

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Phone: (202) 874-3906  
Email: christopher.dollberg@bep.gov

### **Research Area 3 - Hidden Machine Readable Security Features**

Development of technologies and/or materials with potential application as hidden machine-readable counterfeit deterrent/authenticating features on future generations of FRNs. Proposed counterfeit deterrent feature/system should be novel, useful, and non-obvious and not commercially available in the global market. Proposed security features may be incorporated or applied into FRNs. An effective hidden machine-readable feature should be:

1. Difficult to discover on a banknote even by subject matter experts.
2. Difficult to elucidate the functionality or detection mechanism of the feature.
3. Readable by a discriminating, standalone, high-speed detection system.
4. Resistant to simulation or duplication, both in terms of material and response.

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## **B. MATERIALS AND APPLICATION INNOVATIONS DIVISION**

The Materials and Applications Innovation Division (MAD) leads the technical development of new materials and processes to enable the BEP to improve product quality and production efficiency of FRNs and other security products.

### **Research Area 4 - Pigments and Colorants**

Development of special effect pigments and colorants with potential application on future generations of FRNs. Such pigments could include thermochromics, photochromic, NIR absorbing, photo luminescent, UV luminescent, and other non-traditional colorants and pigments. These materials must be able to be printed on paper (cotton/linen) substrates directly or be incorporated into offset, intaglio, typeset, or other inks.

Technical POC: Dr. Steven Carlo, BEP/MAD  
Phone: (202) 874-2154  
Email: steven.carlo@bep.gov

#### **Research Area 5 - Substrates (other than cotton/linen)**

Development of alternate substrates with potential application on future generations of FRNs. Advanced substrates should offer specific advantages over the current paper (cotton/linen) substrate – while maintaining the recognized look and feel. Such substrates could include hybrid or polymer materials.

Technical POC: Dr. Steven Carlo, BEP/MAD  
Phone: (202) 874-2154  
Email: steven.carlo@bep.gov

#### **Research Area 6 - Adhesives**

Development of advanced adhesive systems, which can be used to adhere a variety of materials and/or features to the surface of the FRNs. Such systems should effectively prevent removal of the feature, or indicate that removal from the surface has occurred causing the destruction of the feature and/or FRN.

Technical POC: Dr. Steven Carlo, BEP/MAD  
Phone: (202) 874-2154  
Email: steven.carlo@bep.gov

#### **Research Area 7 - Additives and Ink Formulations**

Development of additives and ink formulations that offer fast cure with or without radiation (e.g. UV or e-beam) during the FRNs printing process.

Technical POC: Dr. Steven Carlo, BEP/MAD  
Phone: (202) 874-2154  
Email: steven.carlo@bep.gov

#### **Research Area 8 - Raised Tactile Features**

Development of methods and materials to apply a raised tactile feature to the surface of FRNs for the purposes of denominating notes for the blind and visually impaired.

Technical POC: Dr. Steven Carlo, BEP/MAD  
Phone: (202) 874-2154  
Email: steven.carlo@bep.gov

#### IV. ELIGIBILITY INFORMATION

A. This acquisition is unrestricted. All responsible Offerors are eligible to submit White Papers or Formal Proposal (if requested) under the LRBA. The BEP particularly encourages submissions from small businesses on all or any part of this solicitation; however, no set-aside of any kind will be made. The North American Industry Classification System (NAICS) Code for this acquisition is 541712 for Research and Development in the Physical, Engineering, and Life Sciences (except Biotechnology), and the small business size standard is 500 employees.

B. Foreign or foreign-owned Offerors are advised that their participation is subject to foreign disclosure review procedures, applicable export control laws, and other applicable federal laws, regulations, and policies pertaining to U.S. Government business with foreign entities.

C. Offerors may include independent organizations, single entities, or teams from private sector organizations, Government laboratories, Federally Funded Research and Development Centers (FFRDCs), and academic institutions.

D. The following guidance is provided for Federally Funded Research and Development Centers (FFRDCs) contemplating submitting a proposal, as either a prime or subcontractor, against this LRBA. FAR Part 35.017-1(c)(4) prohibits an FFRDC from competing with any non-FFRDC concern in response to a Federal agency request for proposal for other than the operation of an FFRDC. There is no regulation prohibiting an FFRDC from responding to a BAA. However, the FFRDC's sponsoring agency must first make a determination that the effort being proposed falls within the purpose, mission, general scope of effort, or special competency of the FFRDC, and that determination must be included in the FFRDC's proposal. In addition, the non-sponsoring agency must make a determination that the work proposed would not place the FFRDC in direct competition with domestic private industry. Only after these determinations are made would a determination be made concerning the FFRDC's eligibility to receive an award. **FFRDCs, including the Department of Energy National Laboratories and Centers, are eligible to respond to this LRBA individually or as team members with eligible principal Offerors, as long as they are permitted to respond to such announcements under their applicable sponsoring agreements.**

E. Historically Black Colleges and Universities (HBCUs), Minority Institutions (MI), Small Businesses, Small Disadvantaged Businesses (SDB), Women-Owned Small Businesses (WOSB), Service-Disabled Veteran Owned Small Businesses (SDVOSB), and Historically Underutilized Business Zones (HUBZone) Small Businesses are encouraged to submit proposals and to join other entities as team members in submitting proposals.

F. Offerors must be prepared to cooperate and exchange data and technical information as requested by the BEP. Data rights and intellectual property terms and conditions will be

addressed after Formal Proposal evaluation. In general, the BEP desires exclusivity of use of the technologies developed under any awarded contract..

G. The cost of preparing White Papers and Formal Proposals in response to this LRBA is not considered an allowable direct cost. Offerors should consult FAR Part 31.205-18 when considering whether these costs may be allocated as indirect costs. The Contracting Officer (CO) will determine allowability and allocability. The Offeror may be required to submit certified cost and pricing data if the value of a prospective award exceeds the Truth in Negotiations Act (TINA) threshold.

## **V. AWARD INFORMATION**

A. No inherent funding is associated with this LRBA. All funding is subject to change at the BEP's discretion and availability. All potential Offerors are advised that unanticipated budget fluctuations may affect funding in any or all areas, with little or no notice.

B. The BEP reserves the right to award the instrument best suited to the nature of the research proposed. A contract or contracts to include Indefinite Delivery Indefinite Quantity (IDIQ) type, Firm-Fixed-Price (FFP) or Cost-Reimbursement type contracts could be awarded as a result of this LRBA as appropriate.

C. The BEP technical subject matter expert personnel shall coordinate with the CO to identify White Papers that present "particular value" to the BEP. The CO will solicit the Offerors of accepted White Papers to submit Formal Proposals consisting of detailed technical and cost information. Please note that any Formal Proposal request does not assure an award.

D. The primary basis for selecting proposals for acceptance shall be technical, importance to agency programs, and funding availability. Cost realism and reasonableness shall also be considered to the extent appropriate. Therefore, the BEP reserves the right to select for negotiation of a potential award to fund all, some, or none of the Formal Proposals received in response to this LRBA. The amount of resources made available under this LRBA will depend on the quality of the proposals received and the availability of funds. A proposal may be selected, but only specific portions may be of interest. The award value and period of performance of each selected Formal Proposal will be determined on a case-by-case basis.

E. White Papers and Formal Proposals development costs will not be reimbursed. White Papers and Formal Proposals including technical and cost proposals (or any other material) submitted in response to this LRBA will not be returned. The BEP will handle White Papers and Formal Proposals including source selection information in accordance with the Freedom of Information Act, 5 U.S.C. § 552 and FAR policy. Offerors shall mark any proprietary information provided in White Papers and Formal Proposals as such. It is the policy of the BEP to treat all White Papers and Formal Proposals as proprietary information and to disclose their contents only for the purposes of internal evaluation before the award of a procurement contract to which the information relates.

F. Multiple awards are anticipated through this LRBA. Award decisions will be based on a competitive selection of Formal Proposals resulting from a scientific and cost review. The BEP reserves the right to select for award all, none, or some of the proposals received under this LRBA.

G. The applicable laws and regulations governing a particular award will depend on that award vehicle. The BEP will also facilitate access to laboratory and operationally relevant test and evaluation facilities, where reasonably available. In the event that an Offeror or subcontractor is an FFRDC, Department of Energy, National Laboratory, or other federal entity, the BEP's OTD will work with the appropriate sponsoring agency to issue an interagency agreement pursuant to the Economy Act (31 U.S.C. § 1531) or other appropriate authority.

H. In some cases, other agencies/entities of the U.S. Government are pursuing related technologies. In such cases, the BEP will leverage those technology development efforts wherever it is practicable and efficient to do so.

## **VI. ETHICAL CONSIDERATIONS**

A. *Non-Disclosure of Information and Data.* The following provision will apply to contracts awarded in response to Formal Proposals:

1. During the performance of the contract, the U.S. Government may provide the Contractor with information and/or data, which might be considered Sensitive but Unclassified (SBU) information concerning the design, use, manufacture, process, handling, and/or transport of FRNs and/or other security products. The Contractor acknowledges that this information and/or data is the sole property of the U.S. Government.
2. The Contractor agrees that all information and/or data provided by the U.S. Government, either before or after the contract is awarded, is nonpublic. Such information shall be shared only with employees or agents of the Contractor having a need to know for the performance of their duties.
3. The Contractor agrees to maintain the confidentiality of all information and/or data provided by the U.S. Government during the performance of the contract. The Contractor shall not disclose any information and/or data to third parties without the written consent of the CO. This includes any interpretations, derivatives, opinions, ideas, analyses, and reports related thereto, and all other similar or related information and/or data in any format (i.e. verbal and/or written).
4. The Contractor acknowledges that it will be liable to the U.S. Government for inappropriately handling and/or disclosing any information and/or data to third parties without the written consent of the CO. In particular, the Contractor shall be liable to the U.S. Government for the costs affiliated with such a violation, including but not limited to recovery of the costs of this and other related contracts and other costs the U.S. Government determines appropriate.

5. The Contractor shall be required to sign a Non-Disclosure Agreement (NDA) with the U.S. Government. The Contractor hereby agrees to include this clause in all subcontracts or consulting agreements relating to work under this contract

B. *Communication During Evaluation.* Once a White Paper or Formal Proposal has been submitted, the evaluation period becomes active, ending when the LRBAACO issues an official notification letter to the Offeror. During the evaluation period (White Paper or Formal Proposal), **no communication shall occur** between the BEP personnel and the Offeror regarding the submission or its general subject matter, except as noted below.

During the evaluation period, the LRBAACO must be the focal point of any exchange with Offerors. After receipt of a Formal Proposal, no discussion regarding the scope of work, resources required to execute the scope, etc., will be allowed during the source selection evaluation period. However, a CO may initiate communications if and when specific facts in the submission require further clarification from the Offeror (such as confirmation of a delivery date).

C. *Organizational Conflicts of Interest (OCI).* Per FAR Part 9, OCI issues will be evaluated on a case-by-case basis as outlined below:

1. The Contractor certifies, to the best of the Contractor's knowledge and belief, there are no relevant facts or circumstances which could give rise to an OCI, as defined in FAR Part 9.5, Organizational and Consultants Conflicts of Interest, or that the Contractor has disclosed all such relevant information.
2. The Contractor agrees that if an actual or potential OCI is discovered after award, the Contractor shall make a full disclosure in writing to the CO. This disclosure must include a description of actions, which the Contractor has taken or proposes to take, after consultation with the CO, to avoid, mitigate, or neutralize the actual or potential conflict.
3. The CO may terminate this contract for convenience, in whole or in part, if it deems such termination necessary to avoid an OCI. If the Contractor was aware of a potential OCI prior to award or discovered an actual or potential conflict after award and did not disclose or misrepresented relevant information to the CO, the U.S. Government may terminate the contract for default, debar the Contractor from U.S. Government contracting, or pursue such other remedies as may be permitted by law or this contract.
4. The Contractor must include this clause in all subcontracts and in lower tier subcontracts unless a waiver is requested from, and granted by, the CO.
5. In the event that a requirement changes in such a way as to create a potential conflict of interest for the Contractor, the Contractor must:
  - a. Notify the CO of a potential conflict, and;
  - b. Recommend to the U.S. Government an alternate approach which would avoid the potential conflict, or

- c. Present for approval a conflict of interest mitigation plan that will:
  - i. Describe in detail the changed requirement that creates the potential conflict of interest; and
  - ii. Outline in detail the actions to be taken by the Contractor or the U.S. Government in the performance of the task to mitigate the conflict, division of subcontractor effort, and limited access to information, or other acceptable means.
- d. The Contractor must not commence work on a changed requirement related to a potential conflict of interest until specifically notified by the CO to proceed.
- e. If the CO determines that it is in the best interest of the U.S. Government to proceed with work, notwithstanding a conflict of interest, a request for waiver must be submitted in accordance with FAR Part 9.503.

D. *Disclosure of Conflicts of Interest.* It is the BEP policy to award contracts to only those Offerors whose objectivity is not impaired because of any related past, present, or planned interest, financial or otherwise, in organizations regulated by the BEP or in organizations whose interests may be substantially affected by Departmental activities. Based on this policy, if at any time during the performance of this contract the Contractor knows of any Conflict of Interest situation affecting the organization, any of its officers or key persons working under this contract, has reason to believe that a conflict of interest situation might arise, or is made aware of an actual or potential conflict of interest situation:

1. The Contractor shall immediately provide to the CO a written statement which describes in a concise manner all past, present or planned organizational, financial, contractual or other interest(s) with that organization regulated by the BEP, or with that organization or individual whose interests may be substantially affected by Departmental activities, and which is related to the work under this contract. The interest(s) described shall include those of the Contractor, its affiliates, consultants, Subcontractors and key personnel of any of the above. Past interest shall be limited to within one (1) year of the date of the Offeror's technical proposal. Key personnel shall include any person owning more than 20% interest in the organization, and the organization's corporate officers, its senior managers and any employee who is responsible for making a decision or taking an action on this contract where the decision or action can have an economic or other impact on the interests of a regulated or affected organization.
2. The Contractor shall describe in detail when it became aware of the actual or potential conflict of interest, what action the organization has taken or proposes to take to mitigate and/or rectify the situation, and why it believes, in light of the interest(s) identified in (a) above, that performance of the contract can still be accomplished in an impartial and objective manner.
3. In the absence of any relevant interest identified in (a) above, the Contractor shall certify in its statement that to its best knowledge and belief no affiliation exists relevant to possible conflicts of interest. The Contractor must obtain the same information from any potential Subcontractors prior to award of a subcontract.
4. The CO will review the statement submitted and may require additional relevant

information from the Contractor. All such information, and any other relevant information known to the BEP, will be used to determine whether a conflict of interest exists or a situation exists that may create a conflict of interest. If any such conflict of interest is found to exist, the CO may (1) terminate the contract, or (2) determine that it is otherwise in the best interest of the U.S. Government to continue the contract with the Contractor and (3) modify the contract to include appropriate provisions to mitigate or avoid such conflicts in the contract.

5. If the Contractor refuses to provide the written statement called for in paragraph (a), or any additional information that the CO may require, the CO may terminate the Contract for convenience if he or she deems that termination is in the best interest of the U.S. Government.

6. Offerors who have existing contract(s) with BEP for scientific, engineering, technical or administrative support will receive particular scrutiny.

## **VII. WHITE PAPER SUBMISSION PROCESS AND FORMAT**

A. All LRBA White Paper submissions must be made through the email address at BAA@BEP.gov.

B. Application Package: **THIS ANNOUNCEMENT CONSTITUTES SOLICITATION ONLY. THE BEP IS SOLICITING WHITE PAPERS ONLY. DO NOT SUBMIT A FORMAL PROPOSAL AT THIS TIME.** Those Offerors whose White Papers are found to be consistent with the intent of this LRBA may later be invited to submit a technical and cost Formal Proposal (see Section 8 of this announcement for further details). Debriefings will not be offered for White Papers not selected, but Offerors may contact the technical POC under the appropriate research area to discuss their concept.

C. Number of pages: Offerors are required to submit either one (1) electronic copy or two (2) hard copies of their White Paper not to exceed five (5) pages in length, summarizing their proposed approach/solution. Any pages over the stated five (5)-page limit will not be evaluated. The purpose of the White Paper is to preclude unwarranted effort on the part of an Offeror whose proposed work is not of interest to the BEP. The format for the White Paper is as follows:

### **White Papers:**

1. White Papers shall be no more than five (5) single-sided pages. Offerors shall use the White Paper format included as Appendix 1 of this document. No exceptions.
2. Paper Size - 8.5 x 11 inch paper
3. Margins - 1 inch
4. Spacing - single or double-spaced
5. Font - Times New Roman, 12 point
6. Section A: Title of your White Paper, White Paper in response to Research Area Number (identify #), Period of Performance, Estimated Cost, Name/Address of Company,

Technical and Contracting Points of Contact (phone, fax, and email) (this section is NOT included in the 5 page limit).

7. Section B: Task Objective.
8. Section C: Technical Summary and Proposed Deliverables.
9. Section D: Rough Order of Magnitude (ROM) Cost

## **VIII. FORMAL PROPOSAL SUBMISSION PROCESS AND FORMAT**

A. All LRBA Formal Proposal submissions must be made through the email address at BAA@BEP.gov.

B. Those Offerors whose White Papers are found to be consistent with the intent of this LRBA may be invited to submit a Formal Proposal including the technical and cost proposal.

C. Number of Pages: Offerors are required to submit either one (1) electronic copy or four (4) hard copies of a Formal Proposal including the technical and cost proposal. **The technical proposal is limited to no more than forty (40) single-sided pages.** Any pages over the stated forty (40)- page limit for the technical proposal will not be evaluated. The cost proposal has no page limitations; however, it shall only contain information necessary for determination of cost appropriateness. All technical information must be presented in the technical proposal only. The cover page, table of contents, resumes, and list of intellectual property as cited at Appendix 2 are excluded from the forty (40)-page limitation for the technical proposal. The Subcontracting Plan, if applicable, is not included in the forty (40)- page limitation for the technical proposal. *See description of a cover page below.*

### **1. Formal Proposals Format**

- a. Formal Proposals consist of two volumes: Technical (vol. 1) and Cost (vol. 2)
- b. Paper Size - 8.5 x 11 inch paper
- c. Margins – 1 inch
- d. Spacing - single or double-spaced
- e. Font - Times New Roman, 12 point
- f. Excel files are permitted (unlock all formulas)

### **2. Formal Proposal Content**

#### **Volume 1: Technical Proposal**

Volume 1 of the Formal Proposal must include the following sections:

- a. Cover Page shall include the words “Technical Proposal” and the following:
  - i. BAA number: BAA-BEP15-0001;
  - ii. Title of proposal;
  - iii. Topical area and its reference code;

- iv. Identity of the prime Offeror, including name and address, and complete list of subcontractors, including name and address, if applicable;
- v. Technical contact (name, address, phone, electronic mail address);
- vi. Administrative/business contact (name, address, phone, electronic mail address);
- vii. Duration of effort (separately identify the basic effort and any options);
- viii. BEP OTD point of contact, if applicable;
- ix. Dunn & Bradstreet (DUNS) number/CAGE Code;
- x. Acknowledgement that the Offeror is registered in Central Contractor Registration (CCR). This can be established at the System for Award Management (SAM) website at <https://www.sam.gov/portal/public/SAM/>;
- xi. Statement specifying compliance with FAR Clause 52.222-54 "Employment Eligibility Verification."

b. Table of Contents

- i. Executive Summary: The proposed research and benefits expected from this investment.
- ii. Landscape Assessment or Brief Literature Review: Explain why your proposal is different and superior to similar solutions already available or to the efforts of others who have been researching similar issues.
- iii. Technical Concept: A description of the technical concept, including anticipated risks and approaches to mitigate the risks. Describe the basic scientific or technical concepts that will be used in each counterfeit deterrent system your proposed solution to the problem described above. What particular scientific, technical or engineering issues need to be addressed and resolved to demonstrate feasibility? What is unique about your solution and what advantages might it afford compared to alternative approaches that others have taken? What has been the extent of the principal investigator's past experience in, and qualifications or educational background for, developing the technologies in your proposal?
- iv. Operational Concept: A description of the operational concept used in the proposed technical solution to accomplish the objectives. Explain how the performance of your proposed solution can be expected to meet or exceed and be measured against each of the specific technical attributes and/or performance enhancements. What are the key scientific, technical, or engineering challenges and the timing for each that must be met in order to successfully complete this project? Describe all required material and information, which must be provided by the U.S. Government to support the proposed work.
- v. Operational Utility Assessment Plan: A detailed plan for demonstrating and evaluating the operational effectiveness of the Offeror's products in exercises, including evaluation metrics. Explain your view of the requirements gap to be filled, what capability will be provided upon successful completion of the proposed effort, and what are the technical risks associated with successful maturation of the proposed effort to achieve operational utility. Explain your concept of how you will develop and demonstrate a counterfeit deterrent system. Identify and explain the critical path technologies or key technical challenges you will face when building this system or component and your plans for meeting these challenges. Explain how you

- will demonstrate the system or component performance relative to the performance or enhancement goals described in the proposal.
- vi. Statement of Work: A Statement of Work (SOW) and a Work Breakdown Structure (WBS) that clearly detail the scope and objectives of the effort, the technical approach, and the performance goals. The SOW and WBS will be used in the development of any final award, so the proposal must include a stand-alone SOW and a stand-alone WBS without any proprietary restrictions. The WBS must include a detailed listing of the technical tasks/subtasks in hierarchical fashion for the tasks required to accomplish the effort. The WBS format must be complete to at least WBS level three. Each task in the SOW shall describe the work to be carried out, the end result of the task, the time allocated, the organization performing the task, the predecessor tasks, the performance goals of the task, and the resources (labor, materials, and services) required. The resources shall be costed to provide a baseline budgeted cost for the applicable task. The SOW shall be at a level sufficient to define the nature of the work to be carried out, measure progress, and demonstrate the relationship of the tasks to one another.
  - vii. Project Schedule and Milestones: A summary of the schedule of events and milestones. If applicable, identify the critical path.
  - viii. Deliverables: A detailed list and description of all deliverables and data deliverables the Offeror proposes to provide to the U.S. Government, the schedule for delivery, and acceptance criteria. The deliverables information must be a separate section in the Offeror's proposal and begin on a new page. Proposals must include a severable self-standing detailed list and description of all deliverables without any proprietary restrictions, which can be used to make award.
  - ix. Qualifications: A discussion of the Offeror's previous accomplishments and work in this area, or closely related area, and the qualifications of the investigators. If the proposal involves development or testing scientific and/or engineering concepts, the principal investigators must demonstrate education and/or managerial expertise in these fields. Key personnel resumes must be attached to the proposal and do not count toward the page limitations.
  - x. Detailed Risk Mitigation Plan: Discuss in detail the technical, cost, and schedule risk(s) involved with the project and how each risk will be mitigated.
  - xi. Management Approach: A discussion of the overall approach to the management of the effort, including brief discussions of the total organization, use of personnel, project, function, and subcontractor relationships, government research interfaces, and planning, scheduling and control practice. Identify which personnel and subcontractors (if any) will be involved. Include a description of the facilities that are required for the proposed effort with a description of any U.S. Government-Furnished Equipment/Hardware/Software/Information required, by version and/or configuration.
  - xii. Small Business Considerations: Formal Proposals that exceed \$650,000, submitted by all but small business concerns, must include a Small Business Subcontracting Plan in accordance with FAR Clause 52.219-9. The Small Business Subcontracting Plan is included in the forty (40)- page limit.

Regardless of the proposed dollar value, all Offerors shall indicate their business size status and list all subcontractors and their business size statuses. All LRBA Offerors are encouraged to offer subcontracting opportunities to small businesses to the maximum extent practicable.

- xiii. Employment Eligibility Verification: Include a statement specifying compliance with FAR Clause 52.222-54.
- xiv. Intellectual Property: The U.S. Code requires the use of distinctive materials on FRNs, including distinctive paper and distinctive counterfeit deterrent technologies. It is the U.S. Government's intent that the Contractor develops several security features, which may be based on the Contractor's existing technology for use in FRNs that may be patentable or otherwise protectable under title 35 of the U.S. Code. In the event the security feature or any aspect of it is patentable, it would be considered a "subject invention" made in the performance of work under this contract as defined in FAR Part 52.227-11(a). The security features and/or the "subject invention" shall be novel, useful, and non-obvious to a person having ordinary skill in the pertinent art. The desired security feature and/or "subject invention" is a [INSERT TYPE OF SECURITY FEATURE] that involves [INSERT DESCRIPTION OF PRODUCT OR PROCESS] that is clearly distinguishable from any invention and/or technology available in the global market. The security feature and/or the "subject invention" shall conform to the requirement provided in 31 C.F.R. Part 601. The design of the security feature utilizing the "subject invention" in FRNs *per se* is not the "subject invention".

A security feature and/or "subject invention" shall cease to be a security feature and/or "subject invention" when it is not covered by a contract and/or agreement between the BEP and the Contractor. Hence, a security feature and/or "subject invention" that is covered by a contract and/or agreement between the BEP and the Contractor but that has not been adopted for use in FRNs can be a counterfeit deterrent technology made in the performance of work under this contract. The U.S. Government will not acquire rights in the Contractor's intellectual property regarding any existing technology or non-subject inventions. The Contractor's existing technology consists of [INSERT DESCRIPTION OF TECHNOLOGY BASE].

This section addresses the allocation and protection of rights in the following areas: 1) patents and inventions, copyrights and trade secrets, and other data generated or used in the performance of the contract; 2) the U.S. Government authorization and consent to use the Contractor's intellectual property generated or used in the performance of the contract under the condition that the Contractor ensures the security feature and/or "subject invention" are for exclusive use of the U.S. Government; and 3) the Contractor's liability for licensing any of its intellectual property generated under the performance of the contract or disclosing any data related to the security features and/or "subject inventions" to third parties without the consent of the U.S. Government. The Contractor will incorporate the substance of this clause, its terms, and requirements in all subcontracts under this contract.

**(a) License**

(1) Patents and Inventions: With respect to any patent that is granted with claims covering any of the “subject invention(s)” developed under this contract, the U.S. Government shall obtain an exclusive, nontransferable, irrevocable, paid-up license to use the “subject invention”. “Subject inventions” include inventions first conceived or actually reduced to practice during the performance of the contract. In those cases where the U.S. Government receives title to the “subject invention”, the Contractor will not obtain a license to practice the “subject invention” and will provide the U.S. Government with any data and/or information generated during the performance of the contract that is required to file a patent application.

(2) Copyrights and Trade Secrets: Copyright and Trade Secrets license rights related to any security feature and/or “subject invention” developed under this contract are jointly referred to as data rights as defined in FAR Part 52.227-14. The U.S. Government shall obtain an exclusive, nontransferable, irrevocable, paid-up license to use, prepare derivative works, perform, display, reproduce, or distribute any data related to a security feature and/or “subject invention”. With respect to any copyright and/or trade secret related to a security feature and/or “subject invention” created or developed during the performance of work under this contract, the Contractor shall not use, prepare derivative works, perform, display, reproduce, or distribute any data related thereto. The Contractor acknowledges that any data and/or information concerning a security feature and/or “subject invention” created during the performance of this contract and before a patent application is filed is a trade secret as defined in title 18 of the U.S. Code. If the Contractor elects not to file a patent application on a “subject invention” all data, discoveries, concepts, ideas, inventions, innovations, improvements, developments, methods, designs, analyses, drawings, reports related thereto, and all other proprietary information and all similar or related information in any format (whether or not patentable) that relates to a security feature and/or “subject invention” shall be deemed to constitute a trade secret for exclusive use of the U.S. Government.

(3) Other Data: In the performance of this contract, the U.S. Government may provide the Contractor with Sensitive but Unclassified (SBU) information. SBU information provided to the Contractor shall be marked with a restrictive notice and shall be protected by the Contractor in accordance with the contract. In addition, the Contractor may not assert intellectual property rights in any information provided by the U.S. Government.

**(b) Exclusivity of Use**

For the U.S. Government to consider a security feature and/or “subject invention”, the Contractor must adhere to this exclusivity clause for the duration of any contract and/or agreement between the BEP and the Contractor covering the security feature and/or “subject invention” (the “Exclusivity Period”). The Contractor gives the U.S. Government exclusive authorization and consent (without prejudice to any rights of indemnification) for all use and manufacture of the security feature and/or “subject invention” covered by any intellectual property made under this contract. The Contractor may not enter into contracts and/or agreements regarding a security feature and/or “subject invention” with third parties during the Exclusivity Period. If the Contractor fails to adhere to this exclusivity prerequisite, the U.S. Government may decide to cease all work with the Contractor and not use the security feature and/or “subject invention” being developed herein in FRNs. In addition, the U.S. Government expects the Contractor to adhere to the exclusivity requirement regarding the security feature(s) and/or “subject invention(s)” incorporated in FRNs in perpetuity, in accordance with 18 U.S.C. § 474A. If the Contractor seeks to disclose or use a security feature and/or “subject invention” or any intellectual property related thereto developed under this contract in any other business opportunity, the Contractor shall submit, in writing, a letter notifying the CO and COR, as soon as reasonably possible, of its plan for use of the security feature and/or “subject invention” and/or any intellectual property developed by the Contractor under this contract.

**(c) Contractor’s Liability**

Any distinctive counterfeit deterrent technology (whether or not patentable) developed under this contract will be governed by 31 C.F.R. Part 601 and 18 U.S.C. § 474A. The Contractor shall be liable throughout the development of the security feature(s) and/or “subject invention(s)” for its disclosure of any information or data related thereto since such disclosure may destroy the value of the distinctive counterfeit deterrents technology use in FRNs. In addition, the Contractor acknowledges that it shall be liable to the U.S. Government for, without express written permission from the U.S. Government, licensing to third parties any intellectual property rights and/or data generated under the performance of this contract pertaining to the security feature(s) and/or “subject invention(s)” adopted for use in FRNs or covered by a contract and/or agreement between the BEP and the Contractor but that has not been adopted for use in FRNs. In case of such violation, the Contractor shall be liable to the U.S. Government for the costs affiliated with such a violation, including but not limited to recovery of the costs of this and other related contracts and other costs the U.S. Government determines appropriate.

- xv. **Contractor’s Publicity:** The Contractor, or any entity or representative acting on behalf of the Contractor, shall not refer to the equipment or services furnished pursuant to the provisions of this contract in any news release or commercial

advertising, or in connection with any news release or commercial advertising, without first obtaining explicit written consent to do so from the Contracting Officer. Should any reference to such equipment or services appear in any news release or commercial advertising issued by or on behalf of the Contractor without the required consent, the U.S. Government shall consider institution of all remedies available under applicable law, including 31 U.S.C. § 333, and this contract. Further, any violation of this provision may be considered during the evaluation of past performance in future competitively negotiated acquisitions.

### **3. Volume 2: Cost Proposal**

- a. The cost proposal must consist of a cover page and two (2) parts. Part 1 is a detailed breakdown of all costs by cost category by U.S. Government fiscal year (October 1 - September 30). Part 2 further breaks down this information as it pertains to each task or sub-task.
- b. The following information must be provided for the base year and any proposed option(s) or option year(s):
  - i. Part 1 must provide a detailed cost breakdown of all costs by cost category by Government fiscal year. (Provide a time-phased spend plan).
  - ii. Part 2 must provide a detailed cost breakdown by task/sub-task using the same task numbers in the SOW. (Provide Basis of Estimates – contractor format is permitted).
  - iii. Identify any cost drivers.
  - iv. Options (if any proposed) must be separately priced.
- c. The words “Cost Proposal” must appear on the cover page in addition to the following information:
  - i. BAA Number: BAA-BEP15-0001
  - ii. Title of proposal
  - iii. Topical area and reference code
  - iv. Identity of prime Offeror, including name and address, and complete list of subcontractors, including names and addresses, if applicable
  - v. Technical contact (name, address, phone/fax, electronic mail address)
  - vi. Administrative/business contact (name, address, phone/fax, electronic mail address)
  - vii. Duration of effort (separately price out the basic effort and any options)
  - viii. DUNS number and CAGE code
  - ix. Statement on whether or not the Offeror has been audited by a Government organization (Defense Contract Audit Agency, Private Independent Auditors, etc.), and if the Offeror has a U.S. Government/Independent auditor-approved accounting system
  - x. DCAA/DCMA POC (name, telephone number, and email address)
- d. Cost Proposal Part 1

Part 1 of the cost proposal must include a detailed breakdown of all costs by cost category by Government fiscal year and include a summary explaining how each element is applied in the cost proposal:

- i. Direct Labor: Individual labor category or person, with associated labor hours and **unburdened** direct labor rates.
- ii. Indirect Costs: Fringe Benefits, Overhead, General and Administrative (G&A), Cost of Money (COM), etc. (Must show base and pool amounts and the rates). If applicable and available, Forward Pricing Rate Agreement (FPRA) or Defense Contract Audit Agency (DCAA) approved or recommended rates. Identify if there are outstanding CAS violations. Offerors please note the following:

In order to qualify for the award of a cost reimbursement contract, the Offeror must have an adequate accounting system in accordance with FAR 16.301-3(a)(1). Evidence of an adequate accounting system would include a written opinion or other statement from the cognizant federal auditor (CFA) or the cognizant federal agency official (CFAO) or an independent private auditing firm that the system is approved or has been determined to be adequate; however, if this is not available, the BEP will initiate an audit with DCAA-

- iii. If the Offeror does not have an accounting system that has been determined adequate by the CFA, CFAO, or an independent auditor but believes its accounting system is adequate, the Offeror shall so state in its proposal. As part of the pre-award evaluation process, the U.S. Government will obtain the necessary review by the CFA. The Offeror will be required to allow the CFA to review the accounting system and correct (or have a timely action plan to correct) any issues identified as precluding the system from being adequate. The Offeror will provide the CFA name, address and telephone number and the point of contact as part of its proposal.
- iv. Travel: Separate by destinations and include number of trips, durations in number of days, number of travelers, per diem (travel costs, hotel and meals in accordance with the Federal Travel Regulations (FTR) and FAR Part 31), airfare, car rental, if additional miscellaneous expense is included, list description and estimated amount, etc.
- v. Subcontracts: Subcontractors must each submit a cost proposal that is as detailed as the Offeror's cost proposal. The subcontractor's detailed cost proposal can be submitted separately from the Prime Offeror's cost proposal, or will be requested from the subcontractor at a later date. The subcontractor's cost proposal must be on company letterhead and include the complete company name and mailing address, technical and administrative/business point of contacts, email address, and telephone number. Include the DUNS number. The prime Offeror must submit a copy of its subcontracting agreement(s). The CO may elect to waive this requirement.
- vi. Consultants: Provide consultant agreement or other documents which verify the proposed loaded daily/hourly rate and labor category.
- vii. Materials: Materials amounts must be specifically itemized with costs or estimated costs. Where possible, indicate purchasing method (e.g., competition,

engineering estimate, market survey, etc.). Include supporting documentation, i.e. vendor quotes, catalog price lists, and past invoices for similar purchases.

- viii. Other Directs Costs (ODCs): ODCs, particularly including any proposed equipment or facilities. Equipment and facilities generally must be furnished by the Offeror. Justifications must be provided when Government funding for such items is sought.
- ix. Fee/Profit: Must include fee percentage or, if calculated differently, amount.
- x. Spend Plan: Provide a time-phased spend plan which includes all costs proposed, i.e., labor, travel, materials, and ODCs (contractor format is acceptable).
- xi. Basis of Estimate (BOE): Provide a BOE for all proposed labor. The BOE must provide the rationale for the proposed labor category(ies) and proposed labor hours for each labor category (contractor format is acceptable).

e. Cost Proposal Part 2

Cost breakdown by task/sub-task using the same task numbers in the SOW.

- i. **Classified Information: Classified information MUST NOT be transmitted via the LRBA email site.** For instructions on submitting classified information, please contact Mary E. Warren, Information Security Officer, BEP, on 202-874-1866 or [mary.warren@bep.gov](mailto:mary.warren@bep.gov).

## IX. SIGNIFICANT DATES

This announcement will remain open until August 31, 2020. White Papers are due by this response date. If your White Paper is of interest, and you are encouraged to submit a Formal Proposal, then the due date for your Formal Proposal will be specified in your White Paper notification letter. This new due date, set by the CO for your Formal Proposal submission, supersedes the date on which this BAA expires.

Evaluations and awards will occur on a “rolling selection” basis. Generally, evaluations should occur within thirty (30) days from receipt of the White Paper, and sixty (60) days for a Formal Proposal. This is not a firm commitment to thirty (30) or sixty (60) days, but every effort will be made to conduct reviews as expeditiously as possible.

Awards resulting from a selected Formal Proposal are projected to occur within approximately one hundred eighty (180) days after award notification, contingent upon successful negotiations with the BEP Contracting Officer and/or subject to availability of funds. Formal Proposals submitted should cite a validity timeframe of 240 days.

## X. PROPRIETARY PROTECTION

The BEP will handle White Papers and Formal Proposals including source selection information in accordance with the Freedom of Information Act, 5 U.S.C. § 552 and FAR policy. White Papers and Formal Proposals will be considered proprietary information and will be protected accordingly as long as they are appropriately marked. The BEP has contracted for business and

staff support services, including assistance for LRBAAs submissions (reference below **NOTE**). Contractors will provide administrative assistance support to U.S. Government employees. Only authorized U.S. Government employees will perform scientific and technical evaluations of White Papers and Formal Proposals and will sit on Source Selection Evaluation Boards. In submitting a White Paper or Formal Proposal, Offerors consent to allow BEP's contractors access to submissions. All contractors who provide support services to the BEP for LRBAAs activities have signed general non-disclosure agreements and, where applicable, organizational conflict of interest statements.

## **XI. WHITE PAPER/ PROPOSAL EVALUATION INFORMATION**

Offerors who receive notification that OTD has discouraged further interest in a White Paper may not submit a Formal Proposal; however, Offerors may contact the technical POC under the appropriate research area to discuss their concept.

**A. White Paper Evaluation Criteria:** The following three factors will be used to determine whether Formal Proposals will be requested based on the White Paper submitted. The following factors are listed in descending order of importance.

### **Evaluation Criteria:**

1. Factor 1: White Paper will be evaluated on how well the integrated assessment of the proposed technical approach to include scientific and/or technical merits and the potential contributions of the effort to extending the scientific understanding associated with the technologies being pursued by the BEP's OTD and described in the eight (8) research areas.
2. Factor 2: White Paper will be evaluated on the Offeror's capabilities, related experience, facilities, techniques, or unique combinations of these that are integral factors for achieving the proposed project objectives presented in the white paper.
3. Factor 3: Rough Order of Magnitude (ROM) commensurate with technical approach.

**B. Formal Proposal Evaluation Criteria:** For purposes of making an evaluation, the Offeror's proposal will be evaluated according to the evaluation criteria and process set forth below. The U.S. Government will not consider information provided in the Executive Summary (if included) in its evaluation.

Best value is defined as the offer that results in the most advantageous acquisition decision for the government, as determined by an integrated assessment among price and non-price factors and sub-factors. The factors and sub-factors that will be considered for Solicitation # BEP-BAA15-0001 and their relative order of importance are listed below.

### **Evaluation Criteria:**

The evaluation of the Offeror's capability to perform the contract requirements will consider the following four evaluation factors listed in order of importance:

### **1. Technical Approach**

- a. The evaluation will be based on a complete assessment of the Offeror's technical proposal. The proposal shall be evaluated on how well the Offeror addresses the technical needs of the BEP as described in the appropriate research area. Offerors shall address all of the technical needs of the efforts to the extent that their expertise allows. Lack of expertise in a particular technical need will not necessarily result in a low score. However, lack of a response will result in a low score.
- b. Formal Proposals will be evaluated on how well the business components the Offeror describes align with the proposed technical activities. Lack of sufficient support in this section could result in the Offeror receiving a low rating.
- c. Proposed performance objectives and program reviews will be evaluated to determine how well they address the proposed technical requirements and how realistic, measurable, and structured the performance objectives and standards are. Proposed performance objectives and program reviews must provide for effective assessment of the contractor's performance.
- d. The proposed SOW will be evaluated for inclusion of a project plan and a work breakdown staffing plan that thoroughly demonstrates to the Government that the Offeror (1) has a thorough understanding of the technical requirements; (2) proposes a realistic and viable approach/plan of action; (3) has the available resources to perform; (4) identifies any potential problems and/or critical issues that will relate to the successful completion of the project; and (5) identifies measurable and structured performance objectives and standards that represent the greatest value to the U.S. Government.

### **2. Experience and Past Performance**

- a. This criteria will evaluate the Offeror's capabilities, related experience, and past performance, including the qualifications, capabilities, and experience of the proposed principal investigator, team leader, and other key personnel who are critical to achieving the proposed project objectives. For these rating criteria, similar experience is more important than general past performance. This is due to the highly specific nature of the requirements for banknote features and components.
- b. The Government will evaluate the Offeror's relevant experience during the past five (5) years. The U.S. Government will determine whether the Offeror's experience on development contracts, including planning and implementation, is similar in size, scope and complexity to those outlined in the appropriate research area.
- c. The information presented in the Offeror's proposal, together with information from

any other sources available to the U.S. Government, will provide the primary input for evaluation of this factor.

- d. Provide a list of similar contracts, delivery orders, purchase orders, and/or subcontracts (hereafter referred to as "contracts") completed during the past five (5) years, a list of similar contracts currently in process, or a combination of both. Similar contracts listed may include any contract entered into with the U.S. Government, agencies of state and local governments, and commercial customers. Offerors that are newly formed entities without prior similar contracts shall associate proposed personnel with similar current or completed contracts. Include the following information for each contract, if unclassified and possible to disclose:
  - i. Name of contracting activity
  - ii. Contract number
  - iii. Contract type
  - iv. Total contract value
  - v. Description of contract work
  - vi. Contracting Officer name, telephone number, and email address
  - vii. COTR name, telephone number, and email address (if applicable)
  - viii. Administrative Contracting Officer's name, telephone number, and email address (if different from the Contracting Officer listed above)
  - ix. List of first-tier subcontractors

### **3. Price/Cost**

- a. The U.S. Government will evaluate the reasonableness of the total price in accordance with FAR Part 15.4 and may utilize FAR clause 52.215-20. The U.S. Government will evaluate the offer for award purposes by adding the total price for all options (if applicable) to the total price for the basic requirement. Evaluation of options shall not obligate the U.S. Government to exercise the option(s). The evaluation will be based on how well the cost proposal is assessed to be realistic, reasonable and complete. Costs proposed must reflect the efforts described in the technical proposal.
- b. Cost analysis is the review and evaluation of any of the separate cost elements and profit or fee in an Offeror's proposal as needed to determine a fair and reasonable price or to determine cost realism in accordance with FAR Part 15.404-1(d) . Realism determines how well the proposed costs represent what the cost of the contract should be, assuming reasonable economy and efficiency.
- c. The U.S. Government will evaluate the Offeror's proposed staffing plan and hours against its proposed technical capabilities to determine that the hours and associated costs are realistic. Any proposal lacking these attributes will be considered lacking realism. In performing the cost analysis, the U.S. Government may use:
  - i. Supporting data provided

- ii. Past procurement history.
  - iii. DCMA/DCAA audit findings for direct and indirect rates.
- d. A U.S. Government-calculated Independent Government Cost Estimate (IGCE) may be utilized in the realism evaluation and considered in the contract best-value determination. Realism will be determined by the extent to which proposed costs indicate a clear understanding of solicitation requirements, and the proposal reflects a sound approach to satisfying those requirements and is consistent with the approach described in the Offeror's proposal. Unrealistically low proposed costs/prices may be grounds for rejecting a proposal.
- e. If available, DCMA/DCAA audits may be the basis for determining cost element (indirect rates) validity. Cost elements approved by DCMA/DCAA will be considered realistic for this requirement. If DCMA/DCAA audits are not available, then the BEP may use the last five (5) years of indirect rates and the support for direct labor including escalation to determine reasonable rates for analysis purposes. The analysis of the Offeror's proposal against audited rates, or the submitted historical rate information, will support a realism analysis.

#### **4. Extent of Subcontracting Commitment (Large Businesses Only)**

- a. For proposed awards to be made as contracts to large businesses, the small business consideration section of each proposal will be evaluated based on the extent of the Offeror's commitment to providing meaningful subcontracting opportunities for Small Businesses, SDB, WOSB, HUBZone Small Businesses, VOB, SDVOSB, MI, and HBCSs.
- b. All Offerors shall indicate their business size status (listed above) and list each subcontractor and its business size status. Formal Proposals that exceed \$650,000, submitted by all but small business concerns, must include a Small Business Subcontracting Plan in accordance with FAR Clause 52.219-9.

**C. Proposal Risk Assessment:** Proposal risk for technical, cost, and schedule will be assessed for Formal Proposals, should they be requested, as part of the evaluation of the above evaluation criteria. Proposal risk relates to the identification and assessment of the risks associated with an Offeror's proposed approach as it relates to accomplishing the proposed effort. Tradeoffs of the assessed risk will be weighed against the potential scientific benefit. Proposal risk for schedule relates to an assessment of the risks associated with the Offeror's proposed number of hours, labor categories, materials, or other cost elements as it relates to meeting the proposed period of performance. Risk may be assessed as High; Moderate, or Low; however, high-risk, revolutionary ideas that change paradigms are sought.

## **XII. AWARD ADMINISTRATION INFORMATION**

**A. Award Notices (White Papers):** Offerors of those White Papers found to be consistent with the intent of this LRBA may be invited to submit a Formal Proposal containing the technical

and cost proposal. Notification by email or letter will be sent by the CO. Such invitation does not assure that the submitting Offeror will be awarded a contract. Offerors of those White Papers not selected for further consideration will be notified in the same manner. Prospective Offerors are advised that only COs are legally authorized to commit the U.S. Government. Offerors may request status of their white paper no earlier than 45 calendar days after submission.

**B. Award Notices (Formal Proposals):** Offerors will be notified whether their Formal Proposal is recommended for award after its evaluation. The notification is not to be construed to mean the award of a contract is assured, as availability of funds and successful negotiations are prerequisites to any award.

**C. Administrative Requirements**

1. North American Industry Classification System (NAICS): The NAICS code for this announcement is 541712 with a small business size standard of 500 employees.
2. Central Contractor Registry (CCR): Successful Offerors not already registered in the Central Contractor Registry (CCR) will be required to register in CCR prior to award of any grant, contract, cooperative agreement, or other transaction agreement. Information regarding CCR registration is available at the System for Award Management (SAM) website at <https://www.sam.gov/portal/public/SAM/>.
3. Certifications: In accordance with FAR Part 4.11, all prospective contractors shall be registered in the System for Award Management (SAM) prior to award. The SAM is the official U.S. government system that consolidates the capabilities of CCR/FedReg, Online Representations and Application (ORCA) and the Excluded Parties List System (EPLS). There is NO fee to register for SAM. If you used any of the previous systems, you should now go to [www.sam.gov](http://www.sam.gov) to update your information. SAM training tools and quick-start guides are available on both the SAM and Federal Service Desk websites, located at [www.sam.gov](http://www.sam.gov) and [www.fsd.gov](http://www.fsd.gov).
4. Subcontracting Plans: Formal Proposals that exceed \$650,000, submitted by all but small business concerns, must include a Small Business Subcontracting Plan in accordance with FAR Clause 52.219-9. The Small Business Subcontracting Plan is not included in the forty (40) page limit.
5. Federal Travel Regulations (FTR): Information on per diem rates based on travel locations are provided on [www.gsa.gov](http://www.gsa.gov). Also, refer to FAR Part 31 for information on travel costs.

**D. Reporting:** Contractors should expect any contract resulting from this LRBA to contain a requirement to provide various types of periodic and final technical reports, prototypes, and possibly cost and other reports.

1. Monthly/Quarterly Program Report: Narrative reports must be submitted to the Program Manager in accordance with the terms of the contract.
2. Final Technical Report: For a final report, each selected Awardee must provide a technical report of work performed during the period of performance, delivered no later than the last day of the period of performance. The final report must be a cumulative,

stand-alone document that describes the work of the entire test and evaluation period leading up to it. It must detail how the design prototype was refined or otherwise prepared for the test and evaluation program and, if applicable, why such refinements or preparations were undertaken. It must include any technical data gathered, such as measurements taken, models developed, simulation results, and formulations developed. The final report must include a summary of all performance goals versus performance achieved during the program (either measured or substantiated). The final report must discuss all variances from the performance goals versus performance achieved, including reasons or theories for variances. If applicable, provide a discussion of how the Awardee might meet any unmet performance goals under a future effort. This final report must also include “lessons learned” from the effort, recommendations for future research, development, or testing that would lead to success in meeting the performance goals. The final report must provide a comprehensive and detailed account of all funds expended.

3. **Guaranteed Final Report/Samples:** If a task order is terminated prior to completion, the Contractor agrees to provide the most advanced feature exemplars in accordance with the SOO/PWS and a final summary report of exemplar activities from the last quarterly report. During the life of each contract/task order, the contractor shall continuously reserve sufficient funds from the amount allotted to guarantee the preparation and delivery of said advanced feature exemplars and the final summary report.

### **XIII. OTHER INFORMATION**

#### **A. Government Furnished Property (GFP), Government Furnished Equipment (GFE) and Facilities**

Each Offeror must provide a specific description of any equipment/hardware that it needs to acquire to perform the work. This description must indicate whether or not each particular piece of equipment or hardware will be included as part of a deliverable item under the resulting award. This description must identify the component, nomenclature, and configuration of the equipment/hardware that it proposes to purchase for this effort. The U.S. Government strongly prefers that contractors purchase the equipment or hardware for deliverable items under an award. Other arrangements, leading to GFP, will be considered on a case by case basis. Maximum use of U.S. Government integration, test, and experiment facilities is encouraged.

Government research facilities may be available and must be considered as potential government furnished equipment/facilities. These facilities and resources are of high value and some are in constant demand by multiple programs. It is unlikely that all facilities would be used for any one specific project or program. The use of these facilities and resources will be negotiated as the program unfolds. Offerors shall explain which of these facilities they recommend and why.

#### **B. Project Meetings and Reviews**

Program status reviews may also be held to provide a forum for reviews of the latest results from experiments and any other incremental progress towards the major demonstrations. These meetings will be held at various sites throughout the country and overseas location. For costing

purposes, Offerors shall assume that 40% of these meetings will be at the BEP offices in Washington, D.C. and 60% at the contractor's offices or other government facilities. In any event, all travel shall be done in accordance with the FTR. Interim meetings are likely, but these will be accomplished via video telephone conferences, telephone conferences, or via web-based collaboration tools.

**C. Pre-Award Clearance:** Pursuant to FAR Part 22.805, a pre-award clearance must be obtained from the U.S. Department Of Labor, Employment Standards Administration, Office Of Federal Contract Compliance Program's (OFCCP) prior to award of a contract (or subcontract) of \$10,000,000 or more unless the contractor is listed in OFCCP's National Pre-award Registry <http://www.dol-esa.gov/preaward>. This registry indicates that the contractor has been found to be "in compliance" within the past 2 years with the Equal Employment Opportunity (EEO) regulations that the OFCCP is mandated to enforce. The registry is updated nightly and facilities reviewed more than 2 years ago are removed and new ones are added. Award may be delayed if an offeror is not currently listed in the registry and the contracting officer must request a pre-award clearance from the OFCCP.

**D. Limitations on Pass-Through Charges:** Any contract award resulting from this announcement may contain the FAR Clause 52.215-23, Limitations on Pass-Through Charges (October 2009), which requires the contractor to identify in its proposal the percentage of effort to be performed by the prime contractor and the percentage expected to be performed by each subcontractor. If the contractor intends to subcontract more than 70% of the total cost of work under the contract or task order, then it shall identify the amount of the contractor's indirect costs and profit applicable to the subcontract work, and a description of the value added by the contractor. If any subcontractor intends to subcontract to a lower tier subcontractor more than 70% of the total cost of its work, then it shall identify the amount of the subcontractor's indirect costs and profit applicable to the lower tier subcontract work, and a description of the value added by the subcontractor.

**E. Post-Award Small Business Program Re-representation:** As prescribed in FAR Part 19.308, FAR Clause 52.219-28, "Post-Award Small Business Program Re-representation (April 2012)," is incorporated by reference in this solicitation. This clause will be contained in any contracts resulting from this solicitation. This clause requires a contractor to re-represent its size status when certain conditions apply. The clause provides detail on when the re-representation must be complete and what the contractor must do when a re-representation is required.

**F. Employment Eligibility Verification:** As prescribed by FAR Part 22.1803, FAR Clause 52.222-54, Employment Eligibility Verification (July 2012), is hereby incorporated by reference in this solicitation (if work is performed in the United States). Any contract awarded as a result of this LRBA that is above the Simplified Acquisition Threshold (SAT), and contains a period of performance greater than 120 days, shall include this clause. This clause provides the requirement of contractors to enroll as a Federal Contractor in the E-Verify program within thirty (30) days after contract award.

**G. Reporting Executive Compensation and First-Tier Sub-contract/Sub-recipient Awards:** As prescribed by FAR Part 4.1403(a), FAR Clause 52.204-10 Reporting Executive

Compensation and First-Tier Subcontract Awards (August 2012) is hereby incorporated by reference in this solicitation. Any contract valued at \$25,000 or more, excluding classified contracts or contractors with individuals, must contain this clause. Any grant or agreement award resulting from this announcement may contain the award term set forth in 2 CFR, Appendix A to Part 25 <http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&sid=c55a4687d6faa13b137a26d0eb436edb&rgn=div5&view=text&node=2:1.1.1.4.1&idno=2#2:1.1.1.4.1.2.1.1>.

**H. Updates of Publicly Available Information Regarding Responsibility Matters:** Any contract or assistance award that exceeds \$500,000.00; when an Offeror checked “has” in paragraph (b) of the provision FAR Clause 52.209-7, shall contain the clause/article, FAR Clause 52.209-9 Updates of Publicly Available Information Regarding Responsibility Matters (February 2012).

**I. Safety:** State "Right to Know" laws and 29 C.F.R. Part 1910.1200, Employee Hazard Communication Program, require manufacturers, importers and suppliers to label containers of toxic substances or hazardous chemicals with the chemical name and appropriate hazard warning and to provide Material Safety Data Sheets (MSDS) for these substances. Hazard Material Information System (HMIS) data shall be provided, as required, on all packaging. Materials not meeting this requirement will not be accepted (off-loaded) by the BEP.

**J. Control and Disposal of Hazardous Chemicals:** The Contractor shall comply with the Occupational Safety and Health Administration (OSHA) regulations 29 C.F.R. Parts 1910 and 1926. Attention is directed to the control of hazardous material, Section 1910.1200 of the OSHA regulations and the Environmental Protection Agency (EPA) regulations concerning the disposal of hazardous waste [Solid Waste Disposal Act, as amended by the Resources Conservation Act (RCRA) of 1976, as amended (42 U.S.C. § 6901 et seq.)].

**K. Communication:** Dialogue between prospective Offerors and the U.S. Government representatives is encouraged until submission of Formal Proposals. Discussions with any of the points of contact shall not constitute a commitment by the U.S. Government to subsequently fund or award any proposed effort. Only COs are legally authorized to commit the U.S. Government.

**L. Debriefings (Proposals Only):** When requested, a debriefing will be provided. The debriefing process will follow the time guidelines set out in 10 U.S.C. § 2305(b)(5), but the debriefing content may vary to be consistent with the procedures that govern BAAs (FAR Part 35.016).

**M. Internet Payment Platform (IPP) Notice:** Any contract award resulting from this announcement will contain the DTAR Clause 1052.232-7003, Electronic Submission of Payment Requests, which requires electronic submission of all payment requests. Any contract resulting from this announcement will establish a requirement to use the IPP for invoicing and receipt/acceptance, and provide coding instructions applicable to this contract. Information regarding IPP is available on the Internet at [www.ipp.gov](http://www.ipp.gov). Assistance with enrollment can be

obtained by contacting the IPP Production Helpdesk via email [ippgroup@bos.frb.org](mailto:ippgroup@bos.frb.org) or phone (866) 973-3131.

**K.** Provisions of the Federal Acquisition Regulation may be accessed electronically at this address: [www.acquisition.gov/far](http://www.acquisition.gov/far).

**L. Inspection and Acceptance:** Any contract award resulting from this announcement will contain the applicable inspection clause(s) and Attachments A-H of this LRBA.

LIST OF ATTACHMENTS

Attachments	Title/Description
A	Non-Disclosure Agreement (NDA)
B	Security Designation Guide, Level I Overt Features
C	Test methods for light-fastness (ASTM G155, Table X3.1 Cycle 11)
D	Chemical Resistance Test (BEP STM 300.003)
E	Laundry Test (BEP STM 300.002)
F	EHS Requirements for Purchased Materials (BEP Document 75D-07.0-05)
G	Restricted Materials at DCF (BEP Document 75D-07.0-07)
H	Small Business Subcontracting Plan (Large Business only)

**Contracting Office Address:**

300 14<sup>th</sup> Street SW  
Office of Acquisition  
Suite 705A  
Washington D.C. 20228

**Primary Point of Contact:**

Tracy Carey  
Contract Specialist  
Email: [tracy.carey@bep.gov](mailto:tracy.carey@bep.gov)  
Phone: 202-874-3308  
Fax: 202-874-2200

**Secondary Point of Contact:**

Fredrick Watson  
Contract Specialist

Email: fredrick.watson@bep.gov  
Phone: 202-874-0709  
Fax: 202-874-2200

**APPENDIX 1**  
**BEP LONG RANGE BAA 15-0001 White Paper Format**

Offerors shall not exceed five (5) pages total using this format.

*The U.S. Government reserves the right to reject  
submissions in excess of 5 pages.*

Name of Project/OTD Division
Name(s) and Contact Information of Performers
Name and Citizenship: Mailing Address: Telephone: Email:
Name and Contact Information of Financial Contact
Name and Citizenship: Mailing Address: Telephone: Email:
Overall scientific and technical merits of the Proposal /Mission Relevance
Estimated Duration of Project (From Award Date)
Estimated Total Project Cost
Offeror's capabilities, related experience, and past performance, including the qualifications, capabilities, and experience of the proposed principal investigator and personnel. Resumes are not requested but qualifications must be included.

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**APPENDIX 2**  
**BEP LONG RANGE BAA 15-0001**  
**INTELLECTUAL PROPERTY CHART TEMPLATE**

<b>List Technical Data Computer Software to be Furnished with Restrictions</b>	<b>Provide a Summary of Intended Use in the Conduct of the Research</b>	<b>List Basis for Assertion</b>	<b>List Asserted Rights Category</b>	<b>Provide Name/Title of the Person Asserting Restrictions</b>

Office of Technology Development  
Bureau of Engraving and Printing