

2-Step Broad Agency Announcement (BAA)
Number: BAA-12-01-PKS
Metamaterials for RF and Optical Applications

Overview Information

Federal Agency Name: Air Force Research Laboratory, AFRL/RX Sensors Directorate

Broad Agency Announcement Title: Metamaterials for RF and Optical Applications

Broad Agency Announcement Type: This is the initial announcement.

Broad Agency Announcement Number: BAA 12-01-PKS

Catalog of Federal Domestic Assistance (CFDA) Number(s): 12.800_AF

THIS WILL BE A TWO-STEP SOLICITATION:

First Step: WHITE PAPER DUE DATE AND TIME: The BAA is open and effective until 20 Feb 2016. White papers will be considered if received prior to 1400 EST on 20 Feb 2016. Submission of white papers will be regulated in accordance with FAR 15.208.

Second Step: PROPOSAL DUE DATE AND TIME: To be provided in response to the Requests for Proposals sent to offerors that submit White Papers considered to meet the needs of the Air Force.

NOTE: White Paper/Proposal receipt after the due date and time shall be governed by the provisions of FAR 52.215-1(c)(3). It should be noted that this installation observes strict security procedures to enter the facility. These security procedures are NOT considered an interruption of normal Government processes, and proposals received after the above stated date and time as a result of security delays will be considered "late." Furthermore, note that if offerors utilize commercial carriers in the delivery of proposals, they may not honor time-of-day delivery guarantees on military installations. Early white paper submission is encouraged.

Solicitation Request: Air Force Research Laboratory, Sensors Directorate (AFRL/RXD), Wright Research Site is soliciting white papers on the research effort described below. White Papers should be addressed to the Contracting Point of Contact (POC) stated in Section VII of the Full Text Announcement. This is an unrestricted solicitation. Small businesses are encouraged to propose on all or any part of this solicitation. The NAICS Code for this acquisition is **541712**, and the small business size standard is 500 employees. White Papers/Proposals submitted shall be in accordance with this announcement. *There will be no other solicitation issued in regard to this requirement.* Offerors should be alert for any BAA amendments that may permit extensions to the white paper submission date.

CCR Registration: Unless exempted by 2 CFR 25.110 all offerors must (1) Be registered in the Central Contractor Registration (CCR) prior to submitting an application (for an assistance award) or proposal; (2) Maintain an active CCR registration with current information at all times during which it has an active Federal award or an application or proposal under consideration by an agency; and (3) Provide its DUNS number in each application or proposal it submits to the agency. On-line registration instructions can be accessed from the DISA CCR home page at <http://www.ccr.gov>.

On-line Representations and Certifications (ORCA): Potential offerors are notified that effective 01 Jan 2005 to be eligible for an award, they must submit annual Electronic Representations and Certifications, otherwise known as On-line Representations and Certifications Application (ORCA) via the Business Partner Network (BPN) at <http://www.bpn.gov/orca>. These FAR and DFARS level representations and certifications are required in addition to the representations and certifications specific to this acquisition. Before submitting the Electronic Representations and Certifications, contractors must be registered in the Central Contractor Registration (CCR) Database.

Type of Contract/Instrument: The anticipated contract types for awards are Cost (no fee) or Cost Plus Fixed Fee (CPFF). Instruments include grants. The Air Force reserves the right to select for award any, all, part or none of the effort received.

NOTE: All Cost Plus Fixed Fee or Cost type contracts require that the awardee has an adequate accounting system for accumulating costs, approved by DCAA. If you do NOT have a DCAA approved accounting system this may delay or possibly prevent contract award.

Estimated Program Cost: \$6M total (anticipate individual awards between \$50K and \$1M each)

Anticipated Number of Awards: The Air Force anticipates issuing multiple awards for this announcement.

Brief Program Summary*: The objective of this open-open BAA is to encourage a flow of supplementary and/or complementary technologies for electromagnetic metamaterials. Such technologies may include active electronic matching networks, frequency selective structures, and periodic structure with engineered dispersion, including photonic band-gap materials, acoustic metamaterials. Innovative advancements in using metamaterials and/or complementary technologies that leverage commercial economies of scale are highly desired.

****Please see the attached Statement of Objectives (SOO) for a detailed description of the areas of interest for this effort.***

Address technical questions via email to: ry.meta@wpafb.af.mil

Address contracting questions to: Dawn Dalhamer, DET 1 AFRL/PKSE, (937) 255-5372, email: dawn.dalhamer@wpafb.af.mil. Mail address: DET 1 AFRL/PKSE, 2310 Eighth St, Wright Patterson AFB OH 45433-7801.

Full Text Announcement

I. Program Description: Air Force Research Laboratory, Sensor Directorate (AFRL/RYP) is soliciting white papers (and later technical and cost proposals) on the following research effort:

1. **Statement of Objective/Needs*:** The objective of this open-open BAA is to encourage a flow of supplementary and/or complementary technologies for electromagnetic metamaterials. Such technologies may include active electronic matching networks, frequency selective structures, and periodic structure with engineered dispersion, including photonic band-gap materials, acoustic metamaterials. Innovative advancements in using metamaterials and/or complementary technologies that leverage commercial economies of scale are highly desired. The areas of focus are Radio Frequency (RF), Optical, Acoustic and Bio-Related Metamaterials.

****Please see the attached Statement of Objectives (SOO)/Needs for a detailed description of the areas of interest for this effort.***

2. Deliverable Items:

a. Data Items*:

- A001 Scientific and Technical Reports (DI-MISC-80711/T) - Final Report (one)
- A002 Funds and Man Hour Expenditure Report (DI-FNCL-80331/T) - Monthly
- A003 Status Reports (DI-MGMT-80368T) - Monthly or Qtrly
- A004 Presentation Material (DI-ADMN-81373/T) – ASREQ

*The above listed Contract Data Requirements List (CDRL) is provided for reference only. Other data items may apply.

- b. Software: To be determined (TBD) depending on the nature of the work proposed.
- c. Hardware: TBD depending on the nature of the work proposed.
- d. Other: TBD depending on the nature of the work proposed.

3. Schedule:

- a. Overall effort: It is anticipated that the period of performance for individual awards will vary between nine and twenty-four months.
- b. Data Items: Specified on CDRL(s) on individual awards.
- c. Software: If applicable, specified on individual awards.
- d. Hardware: If applicable, specified on individual awards.

4. Other Requirements

- a. Program security classification: Unclassified
- b. Export Control: Information involved in this research effort will be evaluated to determine if the data will be subject to Export Control (International Traffic in Arms Regulation (ITAR) 22 CFR 120-131, or Export Administration Regulations (EAR) 15 CFR 710-774). If effort is subject to export control then Certified DD Form 2345, Militarily Critical Technical Data Agreement, will be required to be submitted with proposal.
- c. Export Controlled Items: As prescribed by DFARS 204.7303, DFARS 252.204-7008, Export-Controlled Item (APR 2010) is contained in this solicitation (as shown below). This clause shall be contained in ALL solicitations and resulting contracts.

EXPORT-CONTROLLED ITEMS (APR 2010)

(a) *Definition.* "Export-controlled items," as used in this clause, means items subject to the Export Administration Regulations (EAR) (15 CFR Parts 730-774) or the International Traffic in Arms Regulations (ITAR) (22 CFR Parts 120-130). The term includes:

(1) "Defense items," defined in the Arms Export Control Act, 22 U.S.C. 2778(j)(4)(A), as defense articles, defense services, and related technical data, and further defined in the ITAR, 22 CFR Part 120.

(2) "Items," defined in the EAR as "commodities", "software", and "technology," terms that are also defined in the EAR, 15 CFR 772.1.

(b) The Contractor shall comply with all applicable laws and regulations regarding export-controlled items, including, but not limited to, the requirement for contractors to register with the Department of State in accordance with the ITAR. The Contractor shall consult with the Department of State regarding any questions relating to compliance with the ITAR and shall consult with the Department of Commerce regarding any questions relating to compliance with the EAR.

(c) The Contractor's responsibility to comply with all applicable laws and regulations regarding export-controlled items exists independent of, and is not established or limited by, the information provided by this clause.

(d) Nothing in the terms of this contract adds, changes, supersedes, or waives any of the requirements of applicable Federal laws, Executive orders, and regulations, including but not limited to—

(1) The Export Administration Act of 1979, as amended (50 U.S.C. App.2401, *et seq.*);

- (2) The Arms Export Control Act (22 U.S.C. 2751, *et seq.*);
- (3) The International Emergency Economic Powers Act (50 U.S.C. 1701, *et seq.*);
- (4) The Export Administration Regulations (15 CFR Parts 730-774);
- (5) The International Traffic in Arms Regulations (22 CFR Parts 120-130); and
- (6) Executive Order 13222, as extended;
- (e) The Contractor shall include the substance of this clause, including this paragraph (e), in all subcontracts.

(End of clause)

5. Other Information:

- a. Government Furnished Property (GFP) availability: TBD on individual award.
- b. Base Support/ Network Access: TBD on individual award.
- c. Multiple awards subject to Fair Opportunity are not anticipated.
- d. Nuclear Weapons Related Material (NWRM): TBD on individual awards. This effort may require management, delivery, or use of Nuclear Weapons Related Material (NWRM). AFFARS clause 5352.223-9003, Enhanced Security of Products, is hereby incorporated by reference. This applies only to contracts which require NWRM.
- e. Data Rights Desired:
 - (1) Technical Data: Unlimited Rights
 - (2) Non-Commercial Software (NCS): Unlimited Rights
 - (3) NCS Documentation: Unlimited Rights
 - (4) Commercial Computer Software Rights: Customary License

The Air Force Research Laboratory is engaged in the discovery, development, and integration of warfighting technologies for our air, space, and cyberspace forces. As such, rights in technical data and NCS developed or delivered under this contract are of significant concern to the government. The Government will therefore carefully consider any restrictions on the use of technical data, NCS, and NCS documentation which could result in transition difficulty or less-than full and open competition for subsequent development of this technology.

In exchange for paying for development of the data, the Government expects technical data, NCS, and NCS documentation developed entirely at Government expense to be delivered with Unlimited Rights.

Technical data, NCS, and NCS documentation developed with mixed funding are expected to be delivered with at least Government Purpose Rights. Offers that propose delivery of technical data, NCS, or NCS documentation subject to Government Purpose Rights should fully explain what technical data, NCS, or NCS documentation developed with costs charged to indirect cost pools and/or costs not allocated to a Government contract will be incorporated, how the incorporation will benefit the program, and address whether those portions or processes are segregable. The Government expects that delivery of technical data, NCS, and NCS documentation subject to Government Purpose Rights will fully meet program needs.

Offers that propose delivery of technical data, NCS, or NCS documentation subject to Limited Rights, Restricted Rights, or Specifically Negotiated License Rights will be considered. Proposals should fully explain what technical data, NCS, or NCS documentation developed with costs charged to indirect cost pools and/or costs not allocated to a government contract will be incorporated and how the incorporation will benefit the program.

Offerors are reminded that the Identification and Assertion of Restrictions on the Government's Use, Release, or Disclosure of Technical Data or Computer Software (the assertions list), required under DFARS 252.227-7013 and DFARS 252.227-7014, is included in Section K and due at time of proposals. Assertions must be completed with specificity with regard to each item, component, or process listed. Nonconforming assertions lists will be rejected.

Note that DFARS 252.227-7014(d) describes requirements for incorporation of third party computer software (commercial and noncommercial). Any commercial software to be incorporated into a deliverable must be clearly identified in the proposal. Because many commercial software licenses are not transferrable or may not be acceptable to the Government, commercial software licenses proposed for delivery to the Government must be approved by the contracting officer prior to award.

As used in this subparagraph, the terms Unlimited Rights, Government Purpose Rights, Specifically Negotiated License Rights, and Limited Rights in technical data are as defined in DFARS 252.227-7013. The terms Unlimited Rights, Government Purpose Rights, Specifically Negotiated License Rights, and Restricted Rights in noncommercial computer software and noncommercial software documentation are as defined in DFARS 252.227-7014. The term Commercial Computer Software is as defined in DFARS 252.227-7014.

II. Award Information

1. **Anticipated Award Date:** Awards dates will vary. White papers will be accepted for review through 20 February 2016.
2. **Anticipated funding for the program (not per contract):** The total anticipated funding for this program is \$6M. The anticipated funding per fiscal year (FY) is as follows*: FY12/\$0.75M; FY13 /\$1.75M; FY14 /\$1.75M; FY15/\$1.75M. Individual awards are expected to be between \$50K and \$1M each.
**This funding profile is an estimate only and will not be considered a contractual obligation for funding as all funding is subject to change based on Government discretion and availability*
3. **Number of awards anticipated:** Multiple

III. Eligibility Information

1. **Eligible Offeror:** This is an unrestricted solicitation. Small businesses are encouraged to propose on all or any part of this solicitation.
2. **Cost Sharing or Matching:** Cost Sharing is not required.
3. **Federally Funded Research and Development Centers:** 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 BAA. FAR 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 (with exceptions stated in DFARS 235.017-1(c)(4)). There is no regulation prohibiting an FFRDC from responding to a solicitation. 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 (in this case AFRL) 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.
4. **Other:**
 - a. Foreign participation: Not anticipated
 - b. Notice to Foreign-Owned Firms: Such firms are asked to immediately notify the Contracting POC cited in Section VII before deciding to respond to this announcement. Foreign contractors should be aware that restrictions might apply which could preclude their participation in this acquisition.
 - c. This acquisition may involve data that are subject to export control laws and regulations. When applicable, only contractors who are registered and certified with the Defense Logistics Services Center (DLSC) and have a legitimate business purpose may participate in this solicitation. Contact the Defense Logistics Services Center, 74 Washington Avenue N., Battle Creek, Michigan 49117-3084 (1-800-352-3572) for further information on the certification

process. If applicable, you must submit a copy of your approved DD Form 2345, Militarily Critical Technical Data Agreement, with your proposal.

- d. There are no limits to the number of white papers/proposals an offeror may submit.
- e. You may be ineligible for award if all requirements of this solicitation are not met on the white paper (and later proposal) due date as identified above.

IV. White Paper/Proposal Preparation Instructions:

1. **Application Package:** This Announcement consists of a Two-Step Process described in detail below. White Papers/Proposals submitted shall be in accordance with this announcement. *There will be no other solicitation issued in regard to this requirement.* ONLY WHITE PAPERS ARE BEING SOLICITED AT THIS TIME. Offerors should be alert for any BAA amendments that may permit extensions to the white paper submission date. There is no additional information to be provided.
2. **First Step (White Paper) Instructions:**
 - a. General: The *FIRST STEP* requests a white paper and a rough order of magnitude (ROM) cost. The white paper shall include a discussion of the nature and scope of the research and the offeror's proposed technical approach. The Government will review the white papers in accordance with the FIRST STEP review criteria, set forth in Section V. below. Based on this review, the Government will determine which of them have the potential to best meet the Air Force's needs. Offerors will be notified of the disposition of their white paper. It is anticipated that Government review of the white papers submitted will take 30 working days. Those offerors submitting white papers assessed as meeting Air Force needs will be asked to submit a technical and cost proposal. Those offerors not requested to submit a technical and cost proposal will be notified but may, however, still elect to submit a technical and cost proposal. An offeror submitting a proposal without first submitting a white paper will not be eligible for an award. The cost of preparing white papers in response to this Solicitation is not considered an allowable direct charge to any resulting or any other contract; however, it may be an allowable expense to the normal bid and proposal indirect cost as specified in FAR 31.205-18.
 - b. Page Limitation: The White Paper shall be limited to eight (8) pages, prepared and submitted in Word format. Font shall be standard 10-point business font Arial. Character spacing must be "normal," not condensed in any manner. Pages shall be double-spaced, single-sided, 8.5 by 11 inches, with at least one-inch margins on both sides, top and bottom. Lines between text lines must also be 10-point. All text, including text in tables and charts, must adhere to all font size and line spacing requirements listed herein. Font and line spacing requirements do not have to be followed for illustrations, flowcharts, drawings, and diagrams. These exceptions shall not be used to circumvent formatting requirements and page count limitations by including lengthy narratives in such items. Pages shall be numbered starting with the cover page being Page 1,

and the last page being Page 8. The page limitation covers all information including indices, photographs, foldouts (counted as 1 page for each 8.5 by 11 portion) tables, charts, appendices, attachments, resumes, etc. The Government will not consider pages in excess of these limitations. **All white papers (for contracts and grants) shall be submitted via e-mail to ry.meta@wpafb.af.mil.**

- c. **Format:** The white paper will be formatted as follows: Section A: Title of Program, Name of Company, Company's Commercial and Government Entity (CAGE) number, Dun & Bradstreet (D&B) Data Universal Numbering System (DUNS) number, Contracting POC and Technical POC with appropriate telephone numbers, fax numbers, and email addresses for the POCs; Section B: Period of Performance and Task Objectives; Section C: Technical Summary; and Section D: Cost of Task (Rough Order of Magnitude (ROM)).
- d. **Technical Portion:** The technical portion of the white paper shall include a discussion of the nature and scope of the research and the offeror's proposed technical approach/solution. It may also include any proposed deliverables. Resumes, descriptions of facilities and equipment, a proposed Statement of Work are not required at this point.
- e. **Cost Portion:** The cost portion of the white paper shall include a ROM cost estimate. No detailed price or cost support information should be forwarded; only a time-phased bottom line figure should be provided.
- f. **Other Information:** Multiple white papers within the purview of this announcement may be submitted by each offeror. If the offeror wishes to restrict its white papers, they must be marked with the restrictive language stated in FAR 15.609(a) and (b).
- g. **White Paper/Proposal Content Summary:** You may be ineligible for award if all requirements of this solicitation are not met on the proposal due date. Reference Section VIII for a Checklist of the requirements.
- h. **White Paper Due Date and Time:** See Overview Information at the beginning of the Solicitation.

3. **Second Step (Proposal) Instructions:**

- a. **General:** The *SECOND STEP* consists of offerors submitting a technical and cost proposal within 30 working days of the proposal request. After receipt, proposals will be evaluated in accordance with the award criteria in Section V. below. Proposals will be categorized and subsequently selected for negotiations. Offerors should apply the restrictive notice prescribed in the provision of FAR 52.215-1(e) Instructions to Offerors—Competitive Acquisition. Offerors should consider proposal instructions contained in the **Broad Agency Announcement (BAA) Guide for Industry**, which can be accessed on line at <http://www.wpafb.af.mil/library/factsheets/factsheet.asp?id=9218>. This guide is specifically designed to assist the offeror in understanding the BAA proposal process. Technical/management and cost volumes should be submitted in separate volumes, and must be valid for 180 days. Proposals must reference the announcement number 12-01-PKS. Offerors must submit proposals for **contracts only** via email to ry.meta@wpafb.af.mil. If submitting

grant proposals, offerors must use Grants.gov. See section 4 below. Offerors are advised that only contracting officers are legally authorized to contractually bind or otherwise commit the government. The cost of preparing proposals in response to the Request for Proposals is not considered an allowable direct charge to any resulting or any other contract; however, it may be an allowable expense to the normal bid and proposal indirect cost as specified in FAR 31.205-18.

- b. Page Limitations: The following describes the page limitations on the proposal submittal:
- 1) Proposal shall be limited to **30** pages, prepared and submitted in Word format.
 - 2) Font shall be standard 10-point business font Arial.
 - 3) Character spacing must be "normal," not condensed in any manner.
 - 4) Pages shall be double-spaced, single-sided, 8.5 by 11 inches, with at least one-inch margins on both sides, top and bottom. Lines between text lines must also be 10-point.
 - 5) All text, including text in tables and charts, must adhere to all font size and line spacing requirements listed herein. Font and line spacing requirements do not have to be followed for illustrations, flowcharts, drawings, and diagrams. These exceptions shall not be used to circumvent formatting requirements and page count limitations by including lengthy narratives in such items.
 - 6) Pages shall be numbered starting with the cover page being Page 1, and the last page being Page 30. The page limitation covers all information including indices, photographs, foldouts (counted as 1 page for each 8.5 by 11 portion) tables, charts, appendices, attachments, resumes, etc.
 - 7) The proposal page limit (30 pages) does not include the offeror's proposed Statement of Work (SOW); however, the same formatting rules apply to the SOW, which is limited to **8** pages.
 - 8) **Due to continuing attempts by numerous offerors to obtain an unfair advantage by failing to conform to the formatting rules above, the Government will check the proposal and SOW for conformance to the stated requirements. Any pages in excess of the stated page limitation after the format check will not be considered. In addition if the proposal or SOW does not conform to the above requirements, a notification will be sent to the offeror's company management to advise of the nonconformance.**
- c. Technical/Management Section: The proposal shall include a discussion of the nature and scope of the research and the technical approach. Additional information on prior work in this area, descriptions of available equipment, data and facilities and resumes of personnel who will be participating in this effort should also be included as attachments to the technical proposal. This volume shall include a SOW detailing the technical tasks proposed to be accomplished under the proposed effort and suitable for contract incorporation. **Do not include any proprietary information in the SOW.** Refer to the BAA

Guide for Industry referenced above to assist in SOW preparation. If Government Furnished Property is requested you are required to submit the following information with your offer—

- 1) A list or description of all Government property that the offeror or its subcontractors propose to use on a rent-free basis. The list shall identify the accountable contract under which the property is held and the authorization for its use (from the contracting officer having cognizance of the property);
- 2) The dates during which the property will be available for use (including the first, last, and all intervening months) and, for any property that will be used concurrently in performing two or more contracts, the amounts of the respective uses in sufficient detail to support prorating the rent;
- 3) The amount of rent that would otherwise be charged in accordance with FAR 52.245-9, Use and Charges; and
- 4) The voluntary consensus standard or industry leading practices and standards to be used in the management of Government property, or existing property management plans, methods, practices, or procedures for accounting for property.

Any questions concerning the technical proposal or SOW preparation shall be referred to the Technical POC cited in Section VII.

d. Cost/Business Section:

- 1) Separate the proposal into a business section and cost section. Adequate price competition is not anticipated. The business section should contain all business aspects to the proposed contract, such as type of contractual instrument, any exceptions to terms and conditions of the announcement model contract, any information not technically related, etc. Provide rationale for exceptions. Cost proposals have no page limitations; however, offerors are requested to keep cost proposals to 100 pages as a goal. The proposal shall be furnished with supporting schedules and shall contain a person hour breakdown per task. Refer to the BAA Guide for Industry mentioned in paragraph IV.3.a. above for detailed proposal instructions.
- 2) Subcontracting plans, for efforts anticipated to exceed \$650,000, shall be submitted along with the technical and cost proposals. Reference FAR 19.704, DFARS 219.704, and AFFARS 5319.704(a)(1) for subcontracting plan requirements. Small business concerns are exempt from this requirement. If an ID/IQ contract arrangement is anticipated, the basis for the subcontracting plan should reflect the entire ceiling amount.

Please Note: If you intend to submit a grant, go on to Section IV.4. below which discusses how to find the grant opportunity, prepare the cover page, and complete the certification. This section also provides the process for electronic submission of

proposals for grants. If however, you intend to propose a contract, skip Section IV.4. of this solicitation.

4. (Second Step) Proposals for Grants

- a. Grant Opportunity: Go to <http://Grants.Gov> to find the grant opportunity. The initial screen will provide the synopsis for that specific grant opportunity. To view the entire opportunity open the "Full Announcement" box in the upper center of the synopsis page and select from the documents available under "Announcement Group." NOTE: <http://Grants.Gov> has tools and guiding documents in the left margin under "Applicant Resources" to help you find and apply for grant opportunities. Grants.gov requires Adobe Reader version 8.13 to open, download, save, and submit an application electronically. Adobe Reader version 8.13 is available for free from Grants.gov under "Applicant Resources," "Download Software."
- b. Proposal Cover Page – SF 424 (R&R) Form: All proposals for grants must include an SF 424 (R&R) as the cover page. The SF 424 (R&R) should be downloaded from the "Application" box in the upper right hand corner of the synopsis page. Click on "download" under the column "Instructions and Application." Select "Download Application Package" and complete the SF 424 (R & R).
- c. Certifications: To access the requisite Certifications, select the "Application" box in upper right hand corner of the synopsis page. Click on "Instructions and Application" and select "Download Application Instructions" to view the Certifications. To complete the Certifications you must check Block 18 of the SF 424 (R&R), and by signing it (either by pressing the "submit" button for Grants.gov or by hand if submitting it in hard copy), you are certifying that you have read and agree to abide by the terms in the Certifications. You do not need to submit any additional documentation unless you have lobbying activities to disclose on an SF –LLL.
- d. Proposals for Grants: Proposals for grants, when requested, must be submitted electronically through the Grants.gov government-wide electronic portal. **You must notify your contracting POC via email once you have submitted your proposal electronically through Grants.gov.**
- e. For Electronic Submission to Grants.gov:
 - 1) Advance Preparation – Electronic proposals must be submitted through Grants.gov. There are several one-time actions your organization must have completed. Long before the proposal submission deadline, you should verify that the persons authorized to submit proposals for your organization have completed these actions. If not, it may take them up to **21 days** to complete the actions before they will be able to submit proposals.

- 2) Electronic Submission Process: The process your organization must complete includes obtaining a Dun and Bradstreet Data Universal Numbering System (DUNS) number, registering with the Central Contract Registry (CCR), registering with the credential provider, and registering with Grants.gov. Designating an E-Business Point of Contact (EBiz POC) and obtaining a special password called MPIN are important steps in the registration process. Go to http://www.grants.gov/applicants/get_registered.jsp.
 - 3) Your organization's E-Business POC, identified during CCR Registration, must authorize someone to become an Authorized Organization Representative (AOR). This safeguards your organization from individuals who may attempt to submit proposals without permission. *Note: In some organizations, a person may serve as both an E-Business POC and an AOR.*
 - 4) The Grants.gov Organization Registration Checklist is located at <http://www.grants.gov/assets/OrganizationRegCheck.pdf> to guide you through the process.
 - 5) If a proposal is submitted through Grants.gov, Adobe Reader version 8.13 or later will need to be downloaded. This small, free program will allow you to access, complete, and submit applications electronically and securely. Reference IV. 4.a. above for instructions on how to obtain a free version of the software.
 - 6) Should you have questions relating to the registration process, system requirements, how an application form works or the submittal process, call Grants.gov at 1-800-518-4726 or support@Grants.gov <<mailto:support@Grants.gov>> .
- f. Submitting the Electronic Proposal
- 1) Application forms and instructions are available at Grants.gov. To access these materials, go to <http://grants.gov> <<http://grants.gov>> Select "Apply for Grant", and then select "Download Application Package". Enter the CFDA number (typically 12.800). You should also enter the BAA number, and then follow the prompts to download the application package.
 - 2) The applicant will receive a confirmation page upon completing the submission to Grants.gov. This confirmation page is a record of the time and date stamp that is used to determine whether the proposal was submitted by the deadline. A proposal received after the deadline is "late" and will not be considered for an award.
- g. Future Broad Agency Announcements for basic research that may result in grants or assistance instruments issued by this office will invite electronic proposal submission through the grants.gov government-wide portal.

h. **Section 3 above “Second Step (Proposal) Instructions” applies to grants and contract proposals.”**

5. **Intergovernmental Review:** None

6. **Funding Restrictions:** None

7. **Other Submission Requirements:** All submissions (except grant proposals) must be transmitted electronically via email to ry.meta@wpafb.af.mil.

V. **White Paper Review/ Proposal Evaluation Information**

1. **FIRST STEP – White Paper Review Criteria:** White papers will be reviewed to determine if full proposals will be requested. The review will determine if the technical approach is consistent with the technologies listed in the BAA, if the research is of interest to the Government and if appropriate funding is available. Offerors submitting White Papers found to be of interest to the Government may be requested to submit a formal technical and cost proposal by a specified date which will be evaluated in accordance with the Proposal Evaluation Criteria listed in Section V.2 of this BAA. However, offerors may still submit a full proposal on any White Paper even if not requested to do so

2. **SECOND STEP – Proposal Evaluation Criteria:** The selection of one or more sources for award will be based on an evaluation of each offeror’s proposal (both technical and cost/price aspects) to determine the overall merit of the proposal in response to the announcement. The technical aspect, which is ranked as the first order of priority, shall be evaluated based on the following criteria that are of equal importance, as well as on Agency need and funding availability:

a. **Technical:**

- 1) Unique and innovative approach proposed to accomplish the technical objectives. New and creative solutions and/or advances in knowledge, understanding, technology, and the state of the art.
- 2) The offeror’s understanding of the scope of the technical effort.
- 3) Soundness of the offeror’s technical approach.
- 4) The potential for AFRL to transition the research and development deliverables to future Government needs. Any proposed restriction on technical data or computer software will be considered.
- 5) Availability of qualified technical personnel and their experience with the applicable technologies.
- 6) Availability, from any source, of necessary research, test, laboratory, or shop facilities.

- b. **Cost/Price:** Cost/Price includes the reasonableness and realism of the proposed cost and fee and consideration of proposed budgets and funding profiles. Cost/Price is a substantial factor, but ranked as the second order of priority. (If an offeror proposes the use of GFP other than any GFP identified in this BAA, and that proposed GFP provides the offeror an unfair competitive advantage, then FAR 45.202 requires rental equivalent be applied to the Cost Factor for evaluation purposes only).
- c. **Proposal Risk Assessment:** Proposal risk for technical, cost, and schedule will be assessed 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 payoff.

3. **SECOND STEP /PROPOSAL - Review and Selection Process**

- a. **Categories:** The technical and cost proposals will be evaluated at the same time and categorized as follows:
 - 1) **Category I:** Proposal is well conceived, scientifically and technically sound, pertinent to the program goals and objectives, and offered by a responsible contractor with the competent scientific and technical staff and supporting resources needed to ensure satisfactory program results. Proposals in Category I are determined to be acceptable, but will be recommended for award based on availability of funds. They are normally displaced only by other Category I proposals.
 - 2) **Category II:** Proposal is scientifically or technically sound, but requires further development, and may be recommended for award, but at a lower priority than Category I.
 - 3) **Category III:** Proposal is not technically sound or does not meet agency needs.
- b. No other evaluation criteria will be used. The technical and cost proposals will be evaluated at the same time. The Air Force reserves the right to select for award any, all, part or none of the proposal received.

VI. Award Administration Information

1. **Award Notices:** Offerors will be notified whether their proposal is recommended for award by letter. 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.
2. **Administrative Requirements:** See Section I.
3. **Reporting:** See paragraph I.2.a. Data Items (CDRLs)

VII. Agency Contacts

1. **Address technical questions via email to:** ry.meta@wpafb.af.mil
2. **Address contracting questions to:** Dawn Dalhamer, DET 1 AFRL/PKSE, (937) 255-5372, email: dawn.dalhamer@wpafb.af.mil. Mail address: DET 1 AFRL/PKSE, 2310 Eighth St, Wright Patterson AFB OH 45433-7801.
3. **Submittal e-mail address for all white papers and contract proposals only:** ry.meta@wpafb.af.mil
4. **Submittal website for grant proposals only:** Grants.gov

VIII. Other Information

1. **Acquisition of Commercial Items:** Based upon market research, the Government is not using the policies contained in Part 12, Acquisition of Commercial Items, in its solicitation for the described supplies or services. However, interested persons may identify to the contracting officer their interest and capability to satisfy the Government's requirement with a commercial item within 15 days of this notice.
2. **Support contractors:** Offerors are advised that employees of commercial firms under contract to the Government may be used to administratively process proposals, monitor contract performance, or perform other administrative duties requiring access to other contractors' proprietary information. These support contracts include nondisclosure agreements prohibiting their contractor employees from disclosing any information submitted by other contractors or using such information for any purpose other than that for which it was furnished.
3. **Wide Area Work Flow:** NOTICE: Any contract award resulting from this solicitation will contain the clause at DFARS 252.232-7003, *Electronic Submission of Payment Requests and Receiving Reports (Mar 2008)*, which requires electronic

submission of all payment requests. The clause cites three possible electronic formats through which to submit electronic payment requests. Pursuant to that clause, the Department of Defense is adopting Wide Area Work Flow-Receipt and Acceptance (WAWF-RA). Any contract resulting from this solicitation will establish a requirement to use WAWF-RA for invoicing and receipt/acceptance, and provide coding instructions applicable to this contract. Contractors are encouraged to take advantage of available training (both web-based and through your local DCMA office), and to register in the WAWF-RA system. Information regarding WAWF-RA, including the web-based training and registration, can be found at <https://wawf.eb.mil>. Note: This WAWF-RA requirement does not apply to Universities that are audited by an agency other than DCAA.

4. **Item Identification and Valuation.** Any contract award resulting from this solicitation may contain the clause at DFARS 252.211-7003, *Item Identification and Valuation*, (Aug 2008) which requires unique item identification and valuation of any deliverable item for which the Government's unit acquisition cost is \$5,000 or more; subassemblies, components, and parts embedded within an item valued at \$5,000 or more; or items for which the Government's unit acquisition cost is less than \$5,000 when determined necessary by the requiring activity for serially managed, mission essential, or controlled inventory. Also included are any DoD serially managed subassembly, component, or part embedded within a delivered item and the parent item that contains the embedded subassembly, component, or part. Per DFARS 211.274-3 *Policy for Valuation*, it is DoD policy that contractors shall be required to identify the Government's unit acquisition cost for all items delivered, even if none of the criteria for placing a unique item identification mark applies. Therefore, your proposal must clearly break out the unit acquisition cost for any deliverable items. Per DFARS 211.274-3, *Policy for Valuation*, "The Government's unit acquisition cost is the Contractor's estimated fully burdened unit cost at time of delivery to the Government for cost type or undefinitized line, subline, or exhibit line items" (Per DoD, "fully burdened unit costs" to the Government would include all direct, indirect, G&A costs, and an appropriate portion of fee.). If you have questions regarding the Unique Item Identification requirements, please contact the Contracting Point of Contact listed above. For more information, see the following website: <http://www.acq.osd.mil/dpap/pdi/uid/index.html>.
5. **Limitations on Pass-Through Charges.** As prescribed in FAR 52.408(n)(1) & 52.408(n)(2), provisions 52.215-22, "Limitations on Pass Through Charges – Identification of Subcontract Effort (Oct 2009)," and 52.215-23, "Limitations on Pass-Through Charges (Oct 2009)," are contained in this solicitation (as shown below). Any contract valued greater than the threshold for cost or pricing data threshold, except fixed price contracts awarded on the basis of adequate price competition, resulting from this solicitation, shall contain the Clause at FAR 52.215-23 (or Alt I).

52.215-22 – Limitations on Pass-Through Charges—Identification of Subcontract Effort (Oct 2009)

(a) Definitions. "Added value, excessive pass-through charge, subcontract, and subcontractor," as used in this provision, are defined in the clause of this solicitation entitled "Limitations on Pass-Through Charges" (FAR 52.215-23).

(b) General. The offeror's proposal shall exclude excessive pass-through charges.

(c) Performance of work by the Contractor of a subcontractor.

(1) The offeror shall identify in its proposal the total cost of the work to be performed by the offeror, and the total cost of the work to be performed by each subcontractor, under the contract, task order, or delivery order.

(2) If the offeror intends to subcontract more than 70 percent of the total cost of work to be performed under the contract, task order, or delivery order, the offeror shall identify in its proposal—

(i) The amount of the offeror's indirect costs and profit/fee applicable to the work to be performed by the subcontractor(s); and

(ii) A description of the added value provided by the offeror as related to the work to be performed by the subcontractor(s).

(3) If any subcontractor proposed under the contract, task order, or delivery order intends to subcontract to a lower-tier subcontractor more than 70 percent of the total cost of work to be performed under its subcontract, the offeror shall identify in its proposal—

(i) The amount of the subcontractor's indirect costs and profit/fee applicable to the work to be performed by the lower-tier subcontractor(s); and

(ii) A description of the added value provided by the subcontractor as related to the work to be performed by the lower-tier subcontractor(s).

(End of Provision)

52.215-23 – Limitations on Pass-Through Charges (Oct 2009)

(a) *Definitions.* As used in this clause--

"Added value" means that the Contractor performs subcontract management functions that the Contracting Officer determines are a benefit to the Government (e.g., processing orders of parts or services, maintaining inventory, reducing delivery lead times, managing multiple sources for contract requirements, coordinating deliveries, performing quality assurance functions).

"Excessive pass-through charge," with respect to a Contractor or subcontractor that adds no or negligible value to a contract or subcontract, means a charge to the Government by the Contractor or subcontractor that is for indirect costs or profit/fee on work performed by a subcontractor (other than charges for the costs of managing subcontracts and any applicable indirect costs and associated profit/fee based on such costs).

"No or negligible value" means the Contractor or subcontractor cannot demonstrate to the Contracting Officer that its effort added value to the contract or subcontract in accomplishing the work performed under the contract (including task or delivery orders).

"Subcontract" means any contract, as defined in FAR 2.101, entered into by a subcontractor to furnish supplies or services for performance of the contract or a subcontract. It includes but is not limited to purchase orders, and changes and modifications to purchase orders.

"Subcontractor," as defined in FAR 44.101, means any supplier, distributor, vendor, or firm that furnishes supplies or services to or for a prime Contractor or another subcontractor.

(b) *General.* The Government will not pay excessive pass-through charges. The Contracting Officer shall determine if excessive pass-through charges exist.

(c) *Reporting.* Required reporting of performance of work by the Contractor or a subcontractor. The Contractor shall notify the Contracting Officer in writing if—

(1) The Contractor changes the amount of subcontract effort after award such that it exceeds 70 percent of the total cost of work to be performed under the contract, task order, or delivery order. The notification shall identify the revised cost of the subcontract effort and shall include verification that the Contractor will provide added value; or

(2) Any subcontractor changes the amount of lower-tier subcontractor effort after award such that it exceeds 70 percent of the total cost of the work to be performed under its subcontract. The notification shall identify the

revised cost of the subcontract effort and shall include verification that the subcontractor will provide added value as related to the work to be performed by the lower-tier subcontractor(s).

(d) *Recovery of excessive pass-through charges.* If the Contracting Officer determines that excessive pass-through charges exist;

(1) For other than fixed-price contracts, the excessive pass-through charges are unallowable in accordance with the provisions in FAR subpart 31.2; and

(2) For applicable DoD fixed-price contracts, as identified in 15.408(n)(2)(i)(B), the Government shall be entitled to a price reduction for the amount of excessive pass-through charges included in the contract price.

(e) *Access to records.*

(1) The Contracting Officer, or authorized representative, shall have the right to examine and audit all the Contractor's records (as defined at FAR 52.215-2(a)) necessary to determine whether the Contractor proposed, billed, or claimed excessive pass-through charges.

(2) For those subcontracts to which paragraph (f) of this clause applies, the Contracting Officer, or authorized representative, shall have the right to examine and audit all the subcontractor's records (as defined at FAR 52.215-2(a)) necessary to determine whether the subcontractor proposed, billed, or claimed excessive pass-through charges.

(f) *Flowdown.* The Contractor shall insert the substance of this clause, including this paragraph (f), in all cost-reimbursement subcontracts under this contract that exceed the simplified acquisition threshold, except if the contract is with DoD, then insert in all cost-reimbursement subcontracts and fixed-price subcontracts, except those identified in 15.408(n)(2)(i)(B)(2), that exceed the threshold for obtaining cost or pricing data in accordance with FAR 15.403-4.

(End of clause)

Alternate I (OCT 2009). As prescribed in [15.408\(n\)\(2\)\(iii\)](#), substitute the following paragraph (b) for paragraph (b) of the basic clause:

(b) *General.* The Government will not pay excessive pass-through charges. The Contracting Officer has determined that there will be no excessive pass-through charges, provided the Contractor performs the disclosed value-added functions.

6. **Ombudsman:** The Ombudsman clause, 5352.201-9101 Ombudsman (Aug 2005) will be contained in any contracts or agreements resulting from this Solicitation. The AFRL Ombudsman is Barbara G. Gehrs, Director of Contracting, AFRL/PK, (937) 904-4407, email: Barbara.Gehrs@wpafb.af.mil.
7. **Post-Award Small Business Program Rerepresentation:** As prescribed in FAR 19.308, FAR Clause 52.219-28, "Post-Award Small Business Program Rerepresentation (Apr 2009)," 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 rerepresent its size status when certain conditions apply. The clause provides detail on when the rerepresentation must be complete and what the contractor must do when a rerepresentation is required.
8. **Employment Eligibility Verification:** As prescribed by FAR 22.1803, FAR Clause 52.222-54, "Employment Eligibility Verification (Jan 2009)," is hereby incorporated by reference in this solicitation. Any contract awarded as a result of this BAA that is above the Simplified Acquisition Threshold, and contains a period of performance greater than 120 days, shall include this clause in its contract. This clause provides the requirement of contractors to enroll as a Federal Contractor in the E-Verify program within 30 days after contract award.
9. **Reporting Executive Compensation and First-Tier Sub-contract/Sub-recipient Awards:** As prescribed by FAR 4.1403(a), FAR 52.204-10, "Reporting Executive Compensation and First-Tier Subcontract Awards," 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>.
10. **Updates of Publicly Available Information Regarding Responsibility Matters:** Any contract or assistance award that exceeds \$500,000.00; and when an offeror checked "has" in paragraph (b) of the provision 52.209-7, shall contain the clause/article, 52.209-9, "Updates of Publicly Available Information Regarding Responsibility Matters (Jan 2011)."
11. **Contractor Business Systems:** DFARS 252.242-7005, Contractor Business Systems, is hereby incorporated by reference.

- 12. White Paper/Proposal Content Checklist:** You may be ineligible for award if all requirements of this solicitation are not met on the proposal due date.
- a. *Step One:* White Papers are due to the Contracting POC.
 - b. *Step One:* White Papers are due no later than the due date and time specified in this announcement.
 - c. *Step One and Step Two:* White Paper and Proposal page limits are strictly enforced. See Section IV.2.b. and IV.3.b. of the solicitation for page limits.
 - d. *Step One and Step Two:* Proposals and White Papers must be submitted in the format specified in Section IV.
 - e. *Step Two:* Completed Certifications and Representations (Section K) are due with the proposal. Certifications and Representations (Section K) can be found at <http://www.wpafb.af.mil/library/factsheets/factsheet.asp?id=6790> under the Sample Contract Documents title of the Business Resources Header. In the interests of transformation and streamlining and in order to be in position to award within days of completion of the technical evaluation, it is imperative that you review the model contract appropriate for your business type and provide with your proposal any exceptions to terms and conditions.
 - f. *Step Two:* The Cost/Business Proposal must contain all information described in Section IV. 3.d.
 - g. *Step Two:* For any subcontracts proposed, the Cost/Business Proposal must contain a subcontractor analysis IAW FAR 15.404-3(b).
 - h. *Step Two:* The Cost/Business Proposal must contain any exceptions to the sample Model Contract Terms and Conditions. (See <http://www.wpafb.af.mil/library/factsheets/factsheet.asp?id=6790> for sample model contracts.) However, be advised that the document awarded may include contract line items (CLINs)/clauses/articles in addition to those in the models, and/or some of the CLIN/clauses/articles in the models may be deleted, depending on the specific circumstances of the individual program. Any additions or deletions will be discussed with the offeror prior to award of the document.
 - i. *Step Two:* Offerors other than small businesses are to include a subcontracting plan in Microsoft Word Readable Format on a CD ROM as well as a hard copy.
 - j. *Step Two:* Offerors who have Forward Pricing Rate Agreements (FPRA's) and Forward Pricing Rate Recommendations (FPRR's) should submit them with their proposal.
 - k. *Step Two:* If a DD254 is applicable, offerors must verify their Cognizant Security Office information is current with Defense Security Service (DSS) @ www.dss.mil.
 - l. *Step Two:* If export control is applicable, offerors must submit a Certified DD Form 2345, Militarily Critical Technical Data Agreement, with proposal.