

U.S. Army Armaments Research, Development and Engineering Center's (ARDEC) Benet
Laboratories (BL)

BROAD AGENCY ANNOUNCEMENT
FOR
CONTRACTS, GRANTS, COOPERATIVE
AGREEMENTS AND OTHER TRANSACTIONS

W15QKN-11-R-D002

FY 2011 – FY 2016

ISSUED BY:

U.S. Army Contracting Command (USACC) - Picatinny, Benet Laboratories Contracting Center
(BLCC), Watervliet Arsenal, NY

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This publication constitutes a Broad Agency Announcement (BAA) and sets forth basic research areas of interest by the U.S. Army Armaments Research and Development and Engineering Center's (ARDEC) Benet Laboratories (BL). This BAA is issued under the provisions of Federal Acquisition Regulation (FAR) 6.102(d)(2), the Department of Defense Grant and Agreement Regulations (DoDGARs) 22.315, and 10 USC 2358 Section 845 Other Transactions (OT) for Prototype Projects.

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OVERVIEW INFORMATION

Agency Name U.S. Army Armaments Research, Development and Engineering Center's (ARDEC) Benet Laboratories (BL)

Issuing Acquisition Office: U.S. Army Contracting Command (USACC) - Picatinny, Benet Laboratories Contracting Center, Watervliet Arsenal, NY

Research Opportunity Title: BL Broad Agency Announcement (BAA) for Basic and Applied Scientific Research for Fiscal Years 2011 through 2016

Research Opportunity Description: BL has a long-standing mission in the development of cannon and other component technologies. These weapon systems and components are now in use in several active theaters. In support of this long-standing mission and the Army's Brigade Combat Team (BCT) Modernization Initiative, BL is interested in technologies that will extend the life, enhance lethality, reduce weight, lessen the logistical burden, reduce the signature of these systems, and cost reductions. The USACC - Picatinny, BLCC solicits proposals for the following: (1) manufacturing and fabricating components for weapon systems; (2) modeling, simulation, design, manufacturing, and field support of components for weapon systems; and (3) other approaches, technologies, planning, scheduling etc. which may not be explicitly mentioned but which help provide our Nation's leadership with versatile ground force capabilities with applicability across the spectrum of operations, and with the institutional agility to both anticipate emerging challenges and the ability to rapidly adapt.

Announcement Type and Date: This BAA is a continuously open announcement valid throughout the period from the date of issuance through 31 July 2016.

Research Opportunity Number: W15QKN-11-R-D002

Catalog of Federal Domestic Assistance (CFDA) Number and Title: 12.431 – Basic Scientific Research

Unsuccessful Proposal Disposition: Unless noted in an offeror's proposal to the contrary, unsuccessful proposals will be retained for six (6) months and then properly destroyed.

Total amount of funding that BL expects to award: Due to Government budget uncertainties, no specific dollars have been reserved for awards under this BAA.

The expected amount of individual awards: Previous experiences show that the average award amount may vary for a 3 year agreement on average from \$150,000.00 - \$3,000,000.00/year.

The anticipated number of awards: Previous experiences show that the average number of awards may be up to 20 awards per year.

Start Dates and Periods of Performance of awards: There are no specific start dates after selection for award. Start dates are effected by: (1) selection of proposal; (2) availability of funds; and (3) processing time for award. BL normally awards research agreements for periods up to three (3) years (ex: basic year of performance with two 1-year options). Nevertheless, BL may make awards based on proposals with shorter or longer periods of performance (up to five (5) years).

Classified Submissions: Classified proposals are not expected. However, in an unusual circumstance where an offeror believes a proposal has the potential to be classified, the ARDEC Security Officer shall be contacted on (973) 724-4055 prior to the proposal's submission.

I. AWARD INFORMATION

Awards made under this BAA may be in the form of contracts, grants, cooperative agreements, and Other Transactions and are subject to the availability of appropriations. Proposals submitted in response to this BAA and selected for award are considered to be the result of full and open competition and in full compliance with the provision of Public Law 98-369, "The Competition in Contracting Act of 1984" and subsequent amendments..

Types of Awards: BL has the authority to award a variety of instruments. BL reserves the right to use the type of instrument most appropriate for the effort proposed. Offerors should familiarize themselves with these instrument types and the applicable regulations before submitting a proposal. Following are brief descriptions of the possible award instruments.

1. **Contracts (Research & Development):** A legal instrument which, consistent with 31 U.S.C. 6303, reflects a relationship between the Federal Government and a State, a local government, or other recipient when the principal purpose of the instrument is to acquire property or services for the direct benefit or use of the Federal Government. The primary purpose of contracted R&D programs is to advance scientific and technical knowledge and apply that knowledge to the extent necessary to achieve agency and national goals. Unlike contracts for supplies and services, most R&D contracts are directed toward objectives for which the work or methods cannot be precisely described in advance.
2. **Grant** – A legal instrument that, consistent with 31 U.S.C. 6304, is used to enter into a relationship:
 - a. The principal purpose of which is to transfer a thing of value to the recipient to carry out a public purpose of support or stimulation authorized by a law or the United States, rather than to acquire property or services for the DoD's direct benefit or use.
 - b. In which substantial involvement is not expected between the DOD and the recipient when carrying out the activity contemplated by the grant.
 - c. No fee or profit is allowed for research entities.
3. **Cooperative Agreement** – A legal instrument which, consistent with 31 U.S.C. 6305, is used to enter into the same kind of relationship as a grant (see definition "grant"), except that substantial involvement is expected between the DoD and the recipient when carrying out the activity contemplated by the cooperative agreement. The term does not include "cooperative research and development agreements" as defined in 15 U.S.C. 3710a. No fee or profit is allowed for research entities.

Grants and cooperative agreements are governed by the following regulations:

- a. OMB Circular A-21, "Cost Principles for Educational Institutions"
- b. OMB Circular A-87, "Cost Principles for State, Local and Indian Tribal Governments"

- c. OMB Circular A-102, "Grants and Cooperative Agreements with State and Local Governments"
- d. OMB Circular A-110, "Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals, and Other Non-Profit Organizations"
- e. OMB Circular A-122, "Cost Principles for Non-Profit Organizations"
- f. OMB Circular A-133, "Audits of States, Local Governments, and Non-Profit Organizations"
- g. DoD Grant and Agreement Regulations (DoDGARs), DoD 3210.6-R

Copies of OMB regulations may be obtained from:

Executive Office of the President Telephone: (202) 395-7332

Publications Service FAX Requests: (202) 395-9068

New Executive Office Building <http://www.whitehouse.gov/OMB/grants> 725 17th Street, N.W., Room 2200 Washington, DC 20503

An electronic copy of the DODGARs may be found at

<http://www.dtic.mil/whs/directives/corres/html/32106r.htm>

NOTE: In accordance with DOD Directive 3210.6, the DODGARs may include rules that apply to other nonprocurement instruments, when specifically required in order to implement a statute, Executive Order, or Government wide rule that applies to other nonprocurement instruments, as well as to grants and cooperative agreements.

4. Other Transactions:

a. Other Transaction for Research and/or Technology Investment Agreement (TIA) – A legal instrument, consistent with 10 U.S.C. 2371 and/or 10 U.S.C. 2358, which may be used when the use of a contract, grant, or cooperative agreement is not feasible or appropriate for basic, applied, and advanced research projects. The research covered under another transaction shall not be duplicative of research being conducted under an existing DoD program. To the maximum extent practicable, other transactions for research/TIA shall provide for a 50/50 cost share between the offeror and the government (as research conducted generally transitions into readily marketable technologies with the offeror seeing a near term return on investment (ROI)). No fee or profit is allowed on other transactions for research/TIAs for research entities.

b. Other Transaction for Prototype Projects – A legal instrument, consistent with 10 U.S.C. 2371 (as supplemented by Section 845 of Public Law 104-201 and Section 804 of Public Law 104-201), which may be used when the use of a contract, grant, or cooperative agreement is not feasible or appropriate for prototype projects directly relevant to weapons or weapon systems proposed to be acquired or developed by the DoD.

Other Transactions for Prototype Projects are acquisition instruments that generally are not subject to the federal laws and regulations governing procurement contracts. As such, they

are not required to comply with the Federal Acquisition Regulation (FAR), its supplements, or laws that are limited in applicability to procurement contracts.

In accordance with statute, this authority may be used only when:

(1) There is at least one nontraditional defense contractor participating to a significant extent in the prototype project; or

(2) No nontraditional defense contractor is participating to a significant extent in the prototype project, but at least one of the following circumstances exists:

(i) At least one third of the total cost of the prototype project is to be paid out of funds provided by the parties to the transaction other than the federal government.

(ii) The senior procurement executive for the agency determines in writing that exceptional circumstances justify the use of a transaction that provides for innovative business arrangements or structures that would not be feasible or appropriate under a procurement contract.

As defined at 37 CFR 401.2(a), the intellectual property provisions of an Other Transaction can be negotiated to provide expanded protection to an offeror's intellectual property. An offeror's cost share may take the form of cash, independent research and development (IR&D), foregone intellectual property rights, equipment, or access to unique facilities, as well as others. The effort covered under an Other Transaction shall not be duplicative of effort being conducted under an existing DoD program.

Offerors submitting proposals are cautioned that only a Contracting, Agreements, or Grants Officer may obligate the Government to any agreement involving expenditure of Government funds.

II. ELIGIBILITY INFORMATION

Eligible Applicants: Proposals may be submitted by, single researchers, degree-granting universities, nonprofit organizations, or industrial concerns. Proposals are encouraged from Historically Black Colleges and Universities (as determined by the Secretary of Education to meet requirements of Title III of the Higher Education Act of 1965, as amended (20 U.S.C. § 1061)) and from Minority Institutions defined as institutions “whose enrollment of a single minority or a combination of minorities...exceeds 50 percent of the total enrollment.” [20 U.S.C. § 1067k(3) and 10 U.S.C. § 2323(a)(1)(C)].

In accordance with federal statutes, regulations, and Department of Defense and Army policies, no person on grounds of race, color, age, sex, national origin, or disability shall be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving financial assistance from the Army.

Cost Sharing or Matching: Cost sharing, matching, or cost participation, although not required for eligibility under this BAA, is encouraged for research that will most likely result in the development of readily marketable technologies and may be a requirement for award of an Other Transaction (to include Other Transactions for Prototype Agreements (10 USC 2371 § 845) & Technology Investment Agreements (10 USC 2358 and/or 10 USC 2371)).

Subcontracting:

Pursuant to Section 8(d) of the Small Business Act [15 U.S.C. 637(d)], it is the policy of the Government to enable small business concerns to be considered fairly as subcontractors under all contracts awarded to prime Contractors.

III. RESEARCH OPPORTUNITY

A. Research Topic Areas

RESEARCH AREA 1 NEW MATERIALS FOR WEAPON SYSTEMS

1.1 BL is interested in proposals for advancing the state of the art in materials for weapon systems. BL has a long-standing mission in the development of launcher and other component technologies. These weapon systems and components are now in use in several active theaters. As such BL is interested in materials that will extend the life of the barrels and other components and provide light weight systems. These materials may be associated with coatings e.g. cold spray, plasma spray, laser deposition, high velocity oxygen fuel, laser peening, etc; surface modification i.e. superfine finishing, or material substitutions such as ceramic, polymer and/or composite materials. The behavior of materials in service conditions such as crack initiation and growth as well as fatigue behavior of materials is of interest.

1.2 For future generation systems, BL is interested in materials that can reduce weight of various weapon system components or extend performance either in terms of life, ballistics, or protection. An important element of new materials development is nanomaterials. Nanomaterials hold great promise either of themselves or in combination with other materials to increase the performance of the base material. For example, carbon nanotubes may be used as an additive to a polymer based composite, ceramic material, or metal matrix materials to improve performance. Processes which produce materials with a nanosize grain structure are also of interest.

1.3 BL is interested in the development of other approaches, technologies, planning, scheduling etc. which may not be explicitly mentioned but which help to create or achieve the vision for the future. Potential offerors are encouraged to contact the appropriate Technical Point of Contact (TPOC) for preliminary discussions on their ideas.

Technical Point of Contact (TPOC): Mr. Victor Pugliano, victor.pugliano@us.army.mil

RESEARCH AREA 2 NEW MANUFACTURING TECHNOLOGIES

2.1 BL is interested in proposals for advancing the state of the art in manufacturing and fabricating components for weapon systems. BL has a long-standing mission in the development of cannon and gun barrel and other component technologies. These weapon systems and components are now in use in several active theaters. As such BL is interested in technologies that will extend the life of the barrels and other components. These technologies may be associated with coatings e.g. cold spray, plasma spray, laser deposition, high velocity oxygen fuel, laser peening, intensive quenching etc; surface modification i.e. superfine finishing, or material substitutions such as ceramic materials.

2.2 For future generation systems, BL is interested in processes that can reduce weight of various weapon system components or extend performance either in terms of life, ballistics, or protection. Processes which produce materials with a nanosize grain structure are also of interest.

2.3 BL is interested in manufacturing processes to reduce cost, cycle time, and fabricate parts where price is independent of quantity, examples of such processes include rapid prototyping technology, free forming technology whether laser based, plasma based, or polymer based. BL's vision of the future requires a "paperless process" from designer to machine. Inherent in this process are several subsets including a "model centric" design environment, includes intelligent machining, joining, and processing. BL's supports multiple complex machining/joining operations for weapon systems. A medium term goal is to add intelligence to machine tools to enable them to do a self assessment, self programming, self diagnostics, self scheduling, and in process monitoring. This concept involves both software tools and sensor tools. Sensors and the technologies to create them are important. The sensors must be small including meso and MEMS scale. They must be able to survive in adverse environments whether extreme heat associated with fabrication processes or other conditions. In order to transmit the information from the sensors, BL is interested in fiber optic technology, remote sensing or optics necessary for such systems. BL is interested in technologies that instill intelligence in processes or machine tools e.g. modeling, data analysis, data fusion, etc.

2.4 BL is interested in the development of other approaches, technologies, planning, scheduling etc., which may not be explicitly mentioned but which help to create or achieve the vision for the future. Potential offerors are encouraged to contact the appropriate Technical Point of Contact (TPOC) for preliminary discussions on their ideas.

Technical Point of Contact (TPOC): Mr. Victor Pugliano, victor.pugliano@us.army.mil

RESEARCH AREA 3 COMPUTATIONAL SIMULATIONS AND ADVANCED COMPUTING

3.1 BL is interested in proposals for advancing the state of the art in modeling, simulation, design, manufacturing, and field support of components for weapon systems. BL has a long-standing mission in the development of cannon and other component technologies. These weapon systems and components are now in use in several active theaters. As such BL is interested in technologies that will extend the life, enhance lethality, reduce weight, lessen the logistical burden and reduce the signature of these systems.

3.2 In this research area BL is interested in the development of process models and computer simulations capable for Army weapon systems. Predictive models and computer simulations for many advanced processes and state-of-the-art technologies do not exist today. Predictive and simulation models for new processes are necessary to optimize the process so that the first application (and every application thereafter) meets the specified requirements and quality specifications. Validated models will also allow different production scenarios to be "enacted" through simulation and thereby minimize experimentation, design and manufacturing costs. For example, Materials by Design technology provides a cost effective, computational-based, design and development process that provides the ability to create radically new or improved materials and enhanced manufacturing processes.

3.3 The scenario described above is but one situation where computer simulation can be effectively used. In addition to its use as a tool to better understand and optimize performance and/or reliability of systems, simulation is also extensively used to verify the correctness of designs. Many systems manufactured today are first extensively simulated before they are manufactured to identify and correct design errors (reference Advance Design Methodologies, Research Area 4). Simulation early in the design cycle is important because the cost to repair mistakes increases dramatically the later in the product life cycle that the error is detected. Another important application of simulation is in developing "virtual environments", e.g., for training. Such simulations are used extensively today to train military personnel for battlefield situations, at a fraction of the cost of running exercises involving actual personnel, tanks, aircraft, etc.

3.4 BL is interested in the development of other approaches, technologies, planning, scheduling etc. which may not be explicitly mentioned but which help to create or achieve the vision for the future. Potential offerors are encouraged to contact the appropriate Technical Point of Contact (TPOC) for preliminary discussions on their ideas.

Technical Point of Contact (TPOC): Dr. Robert Dillon, bob.dillon@us.army.mil

RESEARCH AREA 4 ADVANCED DESIGN METHODOLOGIES

4.1 BL's vision of the future requires a "paperless process" from designer to machine. To achieve this vision BL is interested in proposals to support our "model centric" design environment to rapidly advance the state of the art in modeling, simulation, design, manufacturing, and field support of components for weapon systems. BL has a long-standing mission in the development of cannon and other component technologies. These weapon systems and components are now in use in several active theaters. As such BL is interested in technologies that will extend the life, enhance lethality, reduce weight, lessen the logistical burden and reduce the signature of these systems.

4.2 BL's interest in transition from development to production of advanced design methodologies is to ensure that this transition occurs seamlessly and with the greatest possible understanding of manufacturing process capability in relation to design intent. It will be essential to establish process capability relative to design intent baselines and goals (i.e., Cp, CpK) and put the disciplines, methodologies, and tools in place to meet these goals. At issue is the attainment of these goals, which is critical to realization of the high volume production capability and affordability expectations for future programs.

4.3 BL is interested in design expertise, methodologies and tools to achieve "quality" hardware from the very start of production and throughout the program production life cycle. The expertise and tools may include the capability to define and flow complex requirements at the characteristic level through multiple layers of the supply chain, simulate optimum processes and tooling for material and machined parts, and seamlessly document process capability in relation to design intent, providing for continuing improvement of both design and manufacturing processes. It is also anticipated that additional innovative concepts, embracing other technologies and approaches, shall be explored and applied as part of Advanced Design Methodologies development. Examples of enabling design tools include Model Centric Design Activities, Knowledge Driven Manufacturing Systems (KDMS), and smart assessment of manufacturing and technology readiness levels (MRL & TRL).

4.4 BL is interested in the development of other approaches, technologies, planning, scheduling etc., which may not be explicitly mentioned but which help to create or achieve the vision for the future. Potential offerors are encouraged to contact the appropriate Technical Point of Contact (TPOC) for preliminary discussions on their ideas.

Technical Point of Contact (TPOC): Mr. Victor Pugliano, victor.pugliano@us.army.mil

RESEARCH AREA 5 NEW TECHNOLOGIES FOR SUSTAINMENT, SYSTEMS HEALTH MONITORING AND SUPPLY CHAIN MANAGEMENT IN SUPPORT OF DEFENSE SYSTEMS

5.1 BL is interested in proposals for advancing the state of the art in force sustainment and health monitoring of systems and supply chain management technologies and methodologies that directly support the war fighter. BL has a long-standing mission in the development of launchers, weapon systems and other component technologies. These systems and components are now in use in several active theaters. As such, BL is interested in technologies and approaches that address the health monitoring of these systems for early warning prior to system failure, aggressive sustainment efforts for logistical support and supply chain management to address the diminishing manufacturing resources and material shortages (DMSMS).

5.2 Diminishing resources run the gamut from large mechanical components such as turret drive gearboxes, helicopter landing gear to microcircuits. Military customers require specialized parts not normally produced for a commercial application, such as operating in high temperature and vibration environments. To compound the problem the services extend the life of equipment for so long that they routinely surpass the parts availability for the equipment. In the commercial electronic systems life cycles average about 4-7 years while military electronic systems average 25-30 years. BL is interested in pursuing technologies that provide for system health monitoring to provide early warning prior to component failures due to but not limited to high-cycle fatigue, low-cycle fatigue, abrasion, wear, thermal attack, chemical attack or any combination of these to be applied to existing and developmental systems.

5.3 BL is interested in the development of other approaches, technologies, planning, scheduling etc., which may not be explicitly mentioned but which help to create or achieve the vision for the future. Potential offerors are encouraged to contact the appropriate Technical Point of Contact (TPOC) for preliminary discussions on their ideas.

Technical Point of Contact (TPOC): Mr. Victor Pugliano, victor.pugliano@us.army.mil

RESEARCH AREA 6 RESEARCH AND TECHNOLOGY FOR SUSTAINABLE ENERGY AND ENVIRONMENT PROGRAMS

6.1 BL is interested in proposals for advancing the state of the art in materials and technology for sustainable energy and environmental protection. BL has a long-standing mission in the development of launcher and other component technologies. As such, BL is interested in materials and technology that will provide for improved energy efficiency, reduced logistics and/or weight burden, and overall sustainability of energy sources during military deployment and a clean environmental footprint. Technologies of interest include, but are not limited to, those for power and energy conversion, power generation, energy storage and recovery, renewable energy, and hybrid intelligent management technologies. Materials of interest include, but are not limited to, coatings/materials to improve efficiency of photovoltaic and/or thermo-electric generators, novel materials for weight reduction and improved performance in batteries, materials for forward deployable sustainable energy systems, etc. Technologies proposed must demonstrate dual-use applications and have direct application to the Warfighter.

6.2 BL is interested in innovative research that can lead to portable, efficient, and compact power technologies that enhance the military's reach, decrease the logistical burden, and improve energy efficiency at all levels. Specific areas of interest include, but are not limited to, innovative energy conversion, energy harvesting, micro-scale power sources, storage and recovery technologies, renewable energy including solar and wind, energy harvesting/scavenging technologies, hybrid intelligent management technologies, alternative energy systems, fuel cells, and microgrid forward deployable energy solutions. Also, the development of advanced novel electric and magnetic materials, coatings/materials that improve energy efficiency and enable sustainable power and energy technologies is of interest as well as novel coatings/materials for photovoltaic and thermo-electric generators, advanced nano-composites for turbine technology, enabling coatings/materials for advanced oil-free turbomachinery or alternative approaches, high temperature materials to reduce weight and increase efficiency of high temperature engines, novel battery materials, etc. In addition, BL is interested in innovative research that can lead to portable, efficient, and compact power technologies that increase our military's reach, decrease the logistics burden, and improve the overall efficiency of our war fighting forces, especially for distributed and net-centric operations.

6.3 BL is interested in emerging technologies that can eliminate the use of Cr+6 based (hexavalent chromium) surface treatments used on weapon system components to include but not limited to gun barrels, recoil mechanisms, aircraft landing gear assemblies, etc. These processes shall be environmentally-compliant and provide equivalent, or better, performance as compared to Cr+6 -based surface treatments.

Potential offerors are encouraged to contact the appropriate Technical Point of Contact (TPOC) for preliminary discussions on their ideas.

Technical Point of Contact (TPOC): Dr. Robert Dillon, bob.dillon@us.army.mil

RESEARCH AREA 7 TECHNOLOGY EXPLOITATION

7.1 BL is interested in proposals to identify user requirements and operational deficiencies in a variety of operational areas that are amenable to solution through application and exploitation of the existing technology base. The intent is, to the greatest extent possible, to leverage existing technologies and where possible provide for early application and entry of these technologies in to the field. Concomitant with this need is the requirement to actually solve identified problems and deficiencies. These solutions will often take the form of complex, multi-disciplinary and multi-agency collaborations, to include government, industry and academe. However, due to the complex nature of these collaborations, it will be necessary to have single, or very limited, spans of control, coordinating these efforts to optimize the resources spent and return to the government on investment, yet still efficiently and effectively meeting the needs of the end user. To most effectively meet this evolving mission area, it will be necessary to assess, evaluate, and exploit existing resources and capabilities, focusing on integrating in innovative and unconventional ways in order to improve existing and evolving technologies, but also being able to identify and implement research plans to fill gaps in existing tech base capabilities and resources. However, where it is not practical or desirable to use existing tech base resources, accelerated efforts building on already existing programs will be employed. Particular emphasis will be applied to the various and diverse array of technologies and programs extant within a variety of environments, including but not limited to DoD and other governmental agencies. While the focus is on long range, high risk, high-payoff programs there are nonetheless numerous opportunities for early transition of programs towards focused requirements. Effort will be made to identify both candidate technologies and programs to which this paradigm will apply. Failing this, however, focused research efforts to fulfill specific needs and bridge identified gaps in the tech base, will be implemented. Ultimately, final efforts will consist of a combination of acquisition, advanced development and basic research, all focused on achieving an end capability to fulfill a defined deficiency.

7.2 Scientific and Technical Areas of Interest – Assessment of the needs of the various user communities has shown value in providing support for technology identification and program management and integration functions in a variety of areas. These areas include the following:

7.2.1 BL is interested in advanced and innovative technology review. This would include maintaining an understanding and innovative utilization capability of advanced technologies. Efforts might consist of supporting and coordinating meetings with other government agencies, contractors, and educational institutions, as well as any other source of information or technology deemed useful. These meetings will provide a primary source of information concerning both technologies and requirements.

7.2.2 BL is interested in technology utilization support. This would include the process of identifying and analysis of opportunities for government program managers, as well as evaluating transition potential for existing and new technologies. Efforts would include gathering and correlation of data on a wide array of technologies, as well as assisting in assembly and evaluation of requirements from all users. Other efforts might include obtaining various technologies, through whatever means appear appropriate, and assess and evaluate their utility. This will be done through a variety of means including purchase,

custom-design, development, and integration of existing systems. Evaluation will be under a variety of conditions including operational and laboratory.

7.2.3 BL is interested in prototyping, manufacturing technologies, assessment and development of R&D systems at government facilities. Efforts would focus on use of various technologies transitioned from other arenas. Efforts may include location and identification, analysis and assessment, assembly of multi-disciplinary teams and management of integrated efforts to achieve an end capability in as optimal manner as possible.

7.2.4 BL is interested in evaluation of operational environments and requirements. Efforts would focus on supporting the evaluation of operational environments for determination of technology transition and support opportunities. These might include observation, participation, and evaluation and analysis of operational situations, primarily involving training scenarios, but potentially involving actual operational missions. Mission areas may include military, Federal Agency, and civilian missions as appropriate and required.

7.2.5 BL is interested in the development and implementation processes for rapid response and prototyping needs of critical, high priority missions. Focus would be on developing a capability to meet rapid response to prototyping requirements as well as assist in the methodology implementation of a wide array of users and mission oriented agencies. This will include evaluation of existing capabilities, development of a method of scheduling and coordination of work, support of design conception and implementation, managing of the manufacturing process, evaluation final product and iterative design changes as required to meet user needs.

7.2.6 BL is interested in the integration and implementation of multi-disciplinary, multi-agency and multi jurisdictional integrated efforts to meet complex programs needs. This would include the analysis and identification of key problems and solution approaches, the creation of integrated program implementation and problem solution plans, and the overall management of resources, assets, and creation of programs to meet these needs. This may include a combination of in-house assets and resources, subcontracting to various industrial and academic centers, and coordination and collaboration of and with various government agencies and organizations. The efforts will consist of overall analysis, management and integration of highly complex and diverse resources to meet the needs of the end user. This process may culminate in products ranging from prototypes of materiel solutions through complete delivery and IOC to analysis and recommendations of doctrinal or procedural changes.

Technical POC: Dr. Robert Dillon, TEL: 518-266-5904, bob.dillon@us.army.mil

B. Other Programs, Conference, and Symposia Grants

1. Introduction: The Army supports conferences and symposia in special areas of science that bring experts together to discuss recent research or educational findings or to expose other researchers or advanced graduate students to new research and educational techniques. The Army encourages the convening in the United States of major international conferences, symposia, and assemblies of international alliances.
2. Eligibility: Notwithstanding the above, the Department of Defense (DOD) has imposed certain restrictions on the Army's co-sponsorship of scientific and technical conferences and symposia. Specifically, DOD Instruction 5410.20 prohibits co-sponsorship of conferences and symposia with commercial concerns. Scientific, technical, or professional organizations which qualify for tax exemption under the provision of 26 U.S.C. Sec. 501(c)(3) may receive conference and symposia grants.
3. Conference Support: Conference support proposals should be submitted a minimum of six (6) months prior to the date of the conference.
4. Technical Proposal Preparation: The technical portion of a proposal for support of a conference or symposium should include:
 - a. A one page or less summary indicating the objectives of the project.
 - b. The topics to be covered.
 - c. The location and probable date(s) and why the conference is considered appropriate at the time specified.
 - d. An explanation of how the conference will relate to the research interests of the Army and how it will contribute to the enhancement and improvement of scientific, engineering, and/or educational activities as outlined in PART I B of the BAA.
 - e. The name of chairperson(s)/principal investigator(s) and his/her biographical information.
 - f. A list of proposed participants and the methods of announcement or invitation.
 - g. A summary of how the results of the meeting will be disseminated.
 - h. A signed cover page.
5. Cost Proposal Preparation: The cost portion of the proposal should show:
 - a. Total project conference costs by major cost elements.
 - b. Anticipated sources of conference income and amount from each.
 - c. Anticipated use of funds requested.
 - d. A signed budget.
6. Participant Support: Funds provided cannot be used for payment to any federal government employee for support, subsistence, or services in connection with the proposed conference or symposium.

IV. PROPOSAL PREPARATION AND SUBMISSION INFORMATION

This BAA may be accessed from the Grants.gov, FedBizOpps, and the Army Contracting Command Procurement Network website: <http://procnet.pica.army.mil/> . Amendments to this BAA will be posted to these websites when they occur. Interested parties are encouraged to periodically check these websites for updates and amendments.

The following information is for those wishing to respond to the BAA:

A. General Information

Verify the accuracy of your Dun & Bradstreet (D&B) registration at the D&B website <http://fedgov.dnb.com/webform> before registering with the Central Contractor Registration (CCR) at <http://www.ccr.gov>. Prospective offerors must be registered in CCR prior to award. The CCR obtains Legal Business Name, Doing Business Name (DBA), Physical Address, and Postal Code/ Zip+4 data fields from D&B: If corrections are required, registrants will not be able to enter/modify these fields in CCR; they will be pre-populated using D&B Data Universal Numbering System (DUNS) record data. When D&B confirms the correction has been made, the registrant must then re-visit [ccr.gov](http://www.ccr.gov) and 'accept' D&B's changes. Only at this point will the D&B data be accepted into the CCR record. Allow two (2) business days for D&B to send the modified data to CCR.

B. Application Process

The application process is in two stages as follows:

Stage 1 White Papers – Prospective proposers are requested to submit white papers prior to the submission of a complete, more detailed proposal. The purpose of white papers is to minimize the labor and cost associated with the production of detailed proposals that have very little chance of being selected for funding. Based on assessment of the white papers, feedback will be provided to the proposers to encourage or discourage them to or from submitting full proposals. White papers should present the effort in sufficient detail, explained further in Section 3, to allow evaluation of the concept's technical merit and its potential contributions of the effort to the Army mission. All white papers should be submitted electronically in a Portable Document Format (PDF) via email to the Technical Point of Contact for that research area; the specific research area noted your White paper submission Subject should be similar to “BAA W15QKN-11-R-D002 - White Papers – Research Area #”.

Stage 2 Full Proposals – Interested offerors are required to submit full proposals. All proposals submitted under the terms and conditions cited in this BAA will be reviewed regardless of the feedback on, or lack of, a white paper. All proposals will be submitted electronically through Grants.gov (Section IV.d).

C. White Papers

White Papers must be submitted electronically using EMAIL SUBMISSION: for Grants, Contracts, or Other Agreements. White papers should be emailed directly to the Technical Point of Contact. Include the BAA number ‘W15QKN-11-R-D002’ and Research Topic Area Number in the email subject line. The following format must be used:

- Single PDF formatted file as an email attachment
- Page Size: 8 ½ x 11 inches
- Margins – 1 inch
- Spacing – single
- Font – Times New Roman, 12 point

D. Full Proposals

Application forms and instructions are available at Grants.gov. To access these materials, go to <http://www.Grants.gov>, select “Apply for Grants,” and then select “Download a Grant Application Package.” Enter CFDA for Basic Scientific Research, 12.431, or the funding opportunity number, W15QKN-11-R-D002. Follow the prompts to download the appropriate application package; use the below information to assist in you in completing the forms in the package.

The following formatting rules apply for file attachments:

Page Size – 8.5 x 11 inches (when printed)

Margins – 1 inch

Spacing – single

Font – No smaller than Times New Roman, 12 point

a. FORM: SF 424 (R&R) – Application for Federal Assistance (Mandatory):

Complete all required fields in accordance with the pop-up instructions on the form. Authorized Organization Representative (AOR) usernames and passwords serve as “electronic signatures” when your organization submits applications through Grants.gov. By using the SF 424 (R&R), proposers are providing the certification required by 32 CFR Part 28 regarding lobbying as contained in Section VI.B.i.

b. FORM: Research & Related Other Project Information (Mandatory):

Complete questions 1 through 6 and attach files. Files must comply with the following instructions:

Project Summary/Abstract (Field 7) (200 words or less):

The Project Abstract shall include a statement of objectives, methods to be employed, and the significance of the proposed activity to the advancement of knowledge or education. Avoid use of the first person to complete this summary. The abstract should be suitable for release under the Freedom of Information Act, 5 U.S.C. 552, as amended.

Project Narrative (Field 8) (not to exceed 30 pages):

Introduce the problem to be addressed, survey related work, identify key obstacles, describe how the proposed research improves current state-of-the-art, outline the proposed solution

and well-defined objective, detail the yearly research plan with milestones, and analyze the impact if successful. Offerors should not feel compelled to use the entire page allotment. All pages should be numbered consecutively.

Bibliography & References Cited (Field 9) (no page limitation):

Provide a bibliography of pertinent literature. Citations must be complete including full name of author(s), title, and location in literature.

Facilities and Other Resources (Field 10) (no page limitation):

Describe facilities available for performing the proposed research and any additional facilities or equipment the organization proposes to acquire at its own expense.

Equipment (Field 11) (no page limitation):

Provide a rationale for each item of equipment requested in the budget and how this equipment will contribute to the goals of the proposal.

Other Attachments (Field 12) (no page limitation):

Attach Forms 52 or 52A, Protection of Proprietary Information During Evaluation, and After Award/Statement of Disclosure Preference. Dependant on whether you are an industrial contractor (Form 52) or an Educational Institute/Non-Profit Organization (Form 52A) the following are the links to the appropriate forms:

Form 52 - <http://www.arl.army.mil/www/pages/218/aro52v7.pdf>

Form 52A - <http://www.arl.army.mil/www/pages/shared/documents/form52af.pdf>

c. FORM: Research & Related Senior/Key Person Profile (Mandatory):

Complete the requested information for the Principal Investigator (PI) and each key Co-investigator. Attach biographical sketches including relevant publications where indicated for the PI and Co-investigators. The following additional information is required:

- A. List up to 5 publications most closely related to the proposed project and up to 5 other significant publications, including those being printed. Patents, copyrights, or software systems developed may be substituted for publications. Do not include additional list of publications, invited lectures, etc.
- B. List of persons, other than those cited in the publication list, who have collaborated on a project or a book, article, report or paper within the last 4 years. Negative reports should be indicated.
- C. Names of graduate and post graduate advisors and advisees.
(The information in B. and C. is used to help identify potential conflicts or bias in the selection of reviewers.)

Attach statement of current and pending support where indicated for the PI and Co-investigators. The statement should include the project title and brief description, source of support, award amount, period of performance, and breakdown of the time required of the PI and other senior personnel. The recommended form to be used for Current and Pending Support can be found on the U.S. Army Research Laboratory website at the following link: <http://www.arl.army.mil/www/pages/218/supportf.pdf>.

d. FORM: Research & Related Budget (Mandatory):

Complete Sections A through J and attach a budget justification at Section K. The estimated project costs must be shown in total as well as broken down to show cost elements for each year of the program. The budget justification should provide the additional narrative data (not included in Sections A through J) by element of cost, sufficient to meet the guidance within each section below and ensure meaningful evaluation.

Salary Costs (Sections A and B) - For all employees/labor categories, indicate the amount of time being charged to the proposed project and show resulting costs based on current or projected salary and fringe benefits. Show the current and projected salary amounts in terms of man-hours, man-months, or annual salary to be charged by the principal investigator(s), faculty, research associates, postdoctoral associates, graduate and undergraduate students, secretarial, clerical, and other technical personnel either by personnel or position. State the number of man-hours used to calculate a man-month or man-year. For proposals from universities, research during the academic term is deemed part of regular academic duties, not an extra function for which additional compensation or compensation at a higher rate is warranted. Consequently, academic term salaries shall not be augmented either in rate or in total amount for research performed during the academic term. Rates of compensation for research conducted during non-academic (summer) terms shall not exceed the rate for the academic terms. When part or all of a person's services are to be charged as project costs, it is expected that the person will be relieved of an equal part or all of his or her regular teaching or other obligations. For each person or position, provide the following information:

- (1) The basis for the direct labor hours or percentage of effort (e.g., historical hours or estimates).
- (2) The basis for the direct labor rates or salaries. Labor costs should be predicted upon current labor rates or salaries. These rates may be adjusted upward for forecast salary or wage cost-of-living increases that will occur during the agreement period. The cost proposal should separately identify the rationale applied to base salary/wage for cost-of-living adjustments and merit increases. Each must be fully explained.
- (3) The portion of time to be devoted to the proposed research, divided between academic and non-academic (summer) terms, when applicable.
- (4) The total annual salary charged to the research project.
- (5) Any details that may affect the salary during the project, such as plans for leave and/or remuneration while on leave.

Fringe Benefits and Indirect Costs (Overhead, General and Administrative, and Other): The most recent rates, dates of negotiation, the base(s) and periods to which the rates apply must be disclosed and a statement included identifying whether the proposed rates are provisional or fixed. If the rates have been negotiated by a Government agency, state when and by which agency. **A copy of the negotiation memorandum should be provided.** If negotiated forecast rates do not exist, offerors must provide sufficient detail to enable a determination to be made that the costs included in the forecast rate are allocable according to applicable OMB Circulars or FAR/DFARS provisions. Offerors' disclosure should be sufficient to permit a full understanding of the content of the rate(s) and how it was established. As a minimum, the submission should identify:

- (1) All individual cost elements included in the forecast rate(s);
- (2) Base(s) used to prorate indirect expenses to cost pools, if any;

- (3) How the rate(s) was calculated;
- (4) Distribution basis of the developed rate(s);
- (5) Basis on which the overhead rate is calculated, such as "salaries and wages" or "total costs," and
- (6) The period of the offeror's fiscal year.

Equipment (Section C) - If facilities or equipment are required, a justification why this property should be furnished by the Government must be submitted. State the organization's inability or unwillingness to furnish the facilities or equipment. Offerors must provide an itemized list of permanent equipment showing the cost for each item. Permanent equipment is any article or tangible nonexpendable property having a useful life of more than one year and an acquisition cost of \$5,000 or more per unit. The basis for the cost of each item of permanent equipment included in the budget must be disclosed, such as:

- (1) Vendor Quote: Show name of vendor, number of quotes received and justification, if intended award is to other than lowest bidder.
- (2) Historical Cost: Identify vendor, date of purchase, and whether or not cost represents lowest bid. Include reason(s) for not soliciting current quotes.
- (3) Engineering Estimate: Include rationale for quote and reason for not soliciting current quotes. If applicable, the following additional information shall be disclosed in the offeror's cost proposal:
 - (4) Special test equipment to be fabricated by the awardee for specific research purposes and its cost.
 - (5) Standard equipment to be acquired and modified to meet specific requirements, including acquisition and modification costs, listed separately.
 - (6) Existing equipment to be modified to meet specific research requirements, including modification costs. Do not include equipment the organization will purchase with its funds if the equipment will be capitalized for Federal income tax purposes. Proposed permanent equipment purchases during the final year of an award shall be limited and fully justified.
 - (7) Grants, cooperative agreements, or contracts may convey title to an institution for equipment purchased with project funds. At the discretion of the contracting/grants officer, the agreement may provide for retention of the title by the Government or may impose conditions governing the equipment conveyed to the organization. The Government will not convey title to commercial contractors. Exempt property authority is contained in the Federal Grant and Cooperative Agreement Act (31 U.S.C. 6306).
- (8) It is the policy of the DoD that all commercial and nonprofit contractors provide the equipment needed to support proposed research. In those rare cases where specific additional equipment is approved for commercial and nonprofit organizations, such approved cost elements shall be "nonfee-bearing."

Travel (Section D)- Estimate the required amount of travel and state its relationship to the research. List the proposed destinations and basis of cost estimates. Forecasts of travel expenditures (domestic and foreign) that identify the destination and the various cost elements (airfare, mileage, per diem rates, etc.) must be submitted. The costs should be in sufficient detail to determine the reasonableness of such costs. Allowance for air travel

normally will not exceed the cost of round-trip, economy air accommodations. Specify the type of travel and its relationship to the research project. Requests for domestic travel must not exceed **\$5,000 per year per principal investigator**. Separate, prior approval by BL is required for all foreign travel (i.e., travel outside the continental U.S., its possessions and Canada). **Foreign travel requests must not exceed \$3,000 each per year per principal investigator**. Special justification will be required for travel requests in excess of the amounts stated above and for travel by individuals other than the principal investigator(s). Individuals other than the principal investigator(s) are considered postdoctoral associates, research associates, graduate and undergraduate students, secretarial, clerical, and other technical personnel. Additional travel may be requested for travel to Army laboratories and facilities to enhance agreement objectives and to achieve technology transfer.

Participant/Trainee Support Costs (Section E)- Estimate tuition/fees/health insurance for students. This budget category also refers to costs of transportation, per diem, stipends, and other related costs for participants or trainees (but not employees) in connection with BL-sponsored conferences, meetings, symposia, training activities, and workshops (see PART 2 "Other Programs Conference and Symposia Grants"). Generally, *indirect costs are not allowed on participant support costs*. The number of participants to be supported should be entered in the parentheses on the budget form. These costs should also be justified in the budget justification page(s) attached to the cost proposal.

Other Direct Costs (Section F):

- *Materials and Supplies and Consumables*: Estimate costs of materials and supplies. List types of materials needed and costs. The basis for developing the cost estimate (vendor quotes, invoice prices, engineering estimate, purchase order history, etc.) must be included.
- *Publication Documentation, and Dissemination Costs*: The budget may request funds for the costs of preparing, publishing, or otherwise making available to others the findings and products of the work conducted under an agreement, including costs of reports, reprints, page charges, or other journal costs (except costs for prior or early publication); necessary illustrations, cleanup, documentation, storage, and indexing of data and databases; and development, documentation, and debugging of software: Estimate the costs of publishing and reporting research results.
- *Consultant Services*: Offerors normally are expected to utilize the services of their own staff to the maximum extent possible in managing and performing the project's effort. If the need for consultant services is anticipated, the nature of proposed consultant services should be justified and included in the technical proposal narrative. The cost proposal should include the names of consultant(s), primary organizational affiliation, each individual's expertise, daily compensation rate, number of days of expected service, and estimated travel and per diem costs.
- *Subaward Costs*: Support the estimate of subaward work by indicating the specific items or portion of the work to be subawarded, type of subaward anticipated, name of subawardee, and a detailed budget for each. Budgets should contain the same level of detail as required on the R&R Budget form. Subaward budgets must be in PDF format and attached to the R&R Subaward Budget Attachment(s) Form.

- *Equipment Rental User Fees:* Estimate anticipated direct costs such as rental for computers or other equipment and facility usage fees. Unusual or expensive items should be fully justified.

Indirect Costs (Section H): This section should include Overhead, General and Administrative, and Other indirect costs incurred. Provide the most recent rates, dates of negotiations, the base(s) and period to which the rates apply, and a statement identifying whether the proposed rates are provisional or fixed. If the rates have been negotiated by a Government agency, state when and by which agency. Include a copy of any current indirect rate agreement or provide a URL if this document is available from the Internet.

Fee (Section J): State the fixed fee, if any, which a commercial organization proposes to assess the research project.

Budget Justification (Section K): Using the detailed information in each of the above Sections, A through J, you must provide a Narrative explanation of how you came to each of the estimates provided.

e. FORM: Disclosure of Lobbying Activities (Standard Form LLL) (Mandatory):
If applicable, this form must be completed. This form is applicable if any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the application for a grant under this BAA.

Failure to provide the requested information or exceed page limits may render the proposal non-responsive, and the proposal may not be evaluated.

Separate attachments, such as institutional brochures or reprints, cannot be considered.

V. PROPOSAL REVIEW INFORMATION

Proposals submitted in response to this BAA will be evaluated using the factors listed below (in descending order of importance):

- The overall scientific and/or technical merits of the proposal.
- The potential contributions of the effort to the Army mission and the extent to which the research effort will contribute to balancing the overall BL research program.
- The offeror's capabilities, related experience, facilities, techniques, or unique combinations of these, which are integral factors for achieving the proposed objectives.
- The qualifications, capabilities, and experience of the proposed principal investigator, team leader, or other key personnel who are critical to achievement of the proposed objectives. (see PART 3, Section 5 “Biographical Sketches”)
- The offeror's record of past performance.
- The reasonableness and realism of proposed costs, and any fee. [**NOTE:** If your proposal leads to the award of a contract, proposal evaluation and award performance may be subject to the Office of Federal Procurement Policy's (OFPP) guidance on past performance.]

Upon receipt of a proposal, the BL staff will perform an initial review of its scientific merit and potential contribution to the Army mission and also determine if funds are expected to be available for the effort. Proposals not considered having sufficient scientific merit or relevance to the Army's needs and/or for which funds are not available may be declined without further review.

All proposals are treated as privileged information prior to award and the contents are disclosed only for the purpose of evaluation. Proposals not declined as a result of an initial review will be subject to a peer review by highly qualified scientists. The offeror must indicate on the appropriate proposal form (Form 52 or 52A) any limitation to be placed on disclosure of information contained in the proposal.

Each proposal will be evaluated based on the scientific merit and military relevance of the specific research proposed as it relates to the overall Army program rather than against other proposals for research in the same general area

VI. AWARD ADMINISTRATION INFORMATION

A. Award Notices

Notification of selection of proposals will be e-mailed by BLCC to successful offerors. Unsuccessful offerors will receive notification of the results of their proposal review. Offerors whose proposals are recommended for negotiation of award will be contacted by a Contract/Grant Specialist to discuss additional information required for award. This may include representations and certifications, revised budgets or budget explanations, certificate of current cost or pricing data, subcontracting plan for small businesses, and other information as applicable to the proposed award. The award start date will be determined at this time. A contract or grant document signed by the Contracting/Grants Officer is the authorizing award document.

B. Administrative and National Policy Requirements

- i. *Certification Required for Grant Awards* - The certification at Appendix A to 32 CFR Part 28 regarding lobbying is the only certification required at the time of proposal submission for a grant award. The certification is as follows:

“By signing and submitting a proposal that may result in the award of a grant exceeding \$100,000, the prospective awardee is certifying, to the best of his or her knowledge and belief, that:

No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, “Disclosure Form to Report Lobbying,” in accordance with its instructions.

The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, and subgrants, and contracts under grants, and loans, or cooperative agreements) and that all sub recipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required

certification shall be subject to a civil penalty or not less than \$10,000 and not more than \$100,000 for each such failure.”

ii. Certifications Required for Contract Awards

Certifications and representations shall be completed by successful offerors prior to award. Department of Defense FAR Supplement (DFARS) Online Representations and Certifications Application (ORCA) are at website <http://orca.bpn.gov>.

iii. Export Control

- Contractors shall comply with all U.S. export control laws and regulations, including the International Traffic in Arms Regulations (ITAR), 22 CFR Parts 120 through 130, and the Export Administration Regulations (EAR), 15 CFR Parts 730 through 799, in the performance of this contract. In the absence of available license exemptions/exceptions, the Contractor shall be responsible for obtaining the appropriate licenses or other approvals, if required, for exports of (including deemed exports) hardware, technical data, and software, or for the provision of technical assistance.
- The Contractor shall be responsible for obtaining export licenses, if required, before utilizing foreign persons in the performance of this contract, including instances where the work is to be performed on-site at any Government installation (whether in or outside the United States), where the foreign person will have access to export-controlled technologies, including technical data or software.
- The Contractor shall be responsible for all regulatory record keeping requirements associated with the use of licenses and license exemptions/exceptions.
- The Contractor shall be responsible for ensuring that the provisions of this clause (and any required DFARS clause) apply to its subcontractors as applicable or required.

iv. Proprietary Data

All proposals containing proprietary data should have the cover page and each page containing proprietary data clearly marked as containing proprietary data. It is the Offeror’s responsibility to clearly define to the Government what is considered proprietary data.

v. Security Requirements

While non-classified work is relevant, research at ARDEC often leads to military applications and development or use of data that can be classified. This is not always known ahead of time, and when it does the applicant must be prepared to deal with classified information. Possession of a SECRET facility clearance is recommended.

vi. Critical Research Technology

Increasingly, the US Government relies on sophisticated technology in its systems. Technology is today’s and will be tomorrow’s force multiplier, and technology improves the warfighter and civil responders ability to survive and perform their mission. It is prudent and practical to protect technologies deemed so critical that their exploitation will diminish or neutralize a US defense system’s effectiveness. Offerors may be required to develop a Technology Protection Plan in order to protect critical research technology (CRT) or critical program information (CPI).

VII. AGENCY CONTACTS

Questions of a business nature are to be directed to Ms. Laura Arscott at email address: laura.e.arscott@us.army.mil with the BAA number W15QKN-11-R-D002 in the subject line of the email.

Questions of a technical nature are to be directed to the technical Point of Contact for each Research Area with the BAA number W15QKN-11-R-D002 in the subject line of the email.

Comments or questions submitted should be concise and to the point, eliminating any unnecessary verbiage. In addition, the relevant part and paragraph of the Broad Agency Announcement (BAA) should be referenced.