ARMY GEOSPATIAL CENTER



BROAD AGENCY ANNOUNCEMENT (BAA)

SOLICITATION NUMBER

W5J9CQ-17-R-0002

PREFACE

This solicitation constitutes the Army Geospatial Center (AGC)'s Broad Agency Announcement (BAA). The provisions of the Competition in Contracting Act of 1984 (Public Law 98-369) as implemented in the Federal Acquisition Regulation (FAR) Part 35.016 provide for the issuance of a BAA as a means of soliciting proposals for basic and applied research and that part of development not related to the development of a specific system or hardware procurement. BAAs are used by agencies to fulfill their requirements for scientific study and experimentation directed toward advancing the state-of-the-art or increasing knowledge or understanding rather than focusing on a specific system or hardware solution. The BAA shall only be used when meaningful proposals with varying technical/scientific approaches can be reasonably anticipated. "Basic Research" is defined as research directed toward increasing knowledge in science with the primary aim being a fuller knowledge or understanding of the subject under study, rather than any practical application of that knowledge. "Applied Research" is the effort that normally follows basic research, but may not be severable from the related basic research; attempts to determine and exploit the potential of scientific discoveries or improvements in technology, materials, processes, methods, devices, or techniques; and attempts to advance the state-of-the-art.

This announcement is general in nature, identifies the areas of research interest, includes criteria for selecting proposals, and solicits the participation of all offerors capable of satisfying the Government's needs. The proposals submitted under this BAA will be subject to peer or scientific review. The primary basis for selecting proposals for acceptance shall be technical, importance to agency programs, and fund availability. Cost realism and reasonableness shall also be considered to the extent appropriate. Proposals that are selected for award are considered to be the result of full and open competition and in full compliance with the provisions of Public Law 98-369, the Competition in Contracting Act of 1984. Resulting agreements may be in the form of purchase orders and contracts depending upon the specifics of the effort, such as extent of Government involvement, actual scope of work, and cost.

The AGC encourages small business concerns, women owned small businesses, small disadvantaged business concerns, small businesses located in HUBZones, businesses participating in the Small Business Administration 8(a) program, service disabled veteran-owned small businesses, and veterans to submit research proposals for consideration.

The offeror, by submission of an offer or execution of a contract in response to this solicitation, certifies that the offeror is not debarred, suspended, declared ineligible for award of public contracts, or proposed for debarment pursuant to FAR 9.406-2. If the offeror cannot certify, or if the status of the offeror changes prior to award, the offeror must provide detailed information as to its current status.

Proposals from U. S. Government facilities and organizations will not be considered under this announcement.

COMPANIES SUBMITTING PROPOSALS ARE CAUTIONED THAT ONLY A CONTRACTING OFFICER MAY OBLIGATE THE GOVERNMENT TO ANY AGREEMENT INVOLVING EXPENDITURE OF GOVERNMENT FUNDS.

If the offeror anticipates the efforts of foreign nationals on any proposal submitted, the security requirements are detailed in PART III.

Contact Victoria Floyd, AGC Contracting Office at 703-428-6806 or via email at <u>AGCBAAProposals@usace.army.mil</u>, if you have questions concerning submittal or contractual requirements. Preparation instructions are provided in PART III.

If an R&D effort is determined to have sufficient interest, an informal outline or White Paper of the proposed effort should be submitted to: <u>AGCBAAProposals@usace.army.mil</u> with email subject line "AGC BAA W5J9CQ-17-R-0002 White Paper"

<u>OR</u>

U.S. Army Geospatial Center Contracts Office – CECT-AGC Attn: Victoria Floyd 7701 Telegraph Road, Bldg 2592 Alexandria, VA 22315-3864

Contractors preparing a pre-proposal for submission may follow any convenient format desired. Preproposals (not exceeding 5 pages) convey the concept in simple terms. Some data relating to the estimated cost and schedule is desired.

A review of the papers by AGC staff will determine which efforts are of sufficient interest to merit a formal proposal. If there is sufficient interest in a proposed project, the contracting officer will invite the offeror to submit a formal proposal. All proposals, written communications or documentation concerning this BAA shall be forwarded to the following address:

U.S. Army Geospatial Center Contracts Office – CECT-AGC Attn: Victoria Floyd 7701 Telegraph Road, Bldg 2592 Alexandria, VA 22315-3864

Proposals submitted in response to this BAA may be for a period of performance up to three years. Long-term proposals should contain a brief summary of the work contemplated for each 12-month period, so that contracts may be negotiated for an entire three-year project or for individual one- year options or increments of the total project. A detailed performance schedule for each discrete task must be included along with cost data to include labor cost by labor category.

Proposals submitted in response of this BAA solicitation will be accepted on or before April 30, 2018.

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PART I

BACKGROUND

The U.S. Army Geospatial Center (AGC) is a Major Subordinate Command (MSC) under the U.S. Army Corps of Engineers (USACE) located at the Humphreys Engineer Center in Alexandria, Virginia. The AGC focus is entirely on the Army's Geospatial Enterprise function from policy to Warfighting, supporting the Army's Battle Command Systems by facilitating dissemination of relevant geospatial information to every level across the operational environment.

AGC Mission:

Coordinate, integrate and synchronize geospatial information requirements and standards across the Army; Develop and field geospatial-enterprise enabled systems and capabilities to the Army and the Department of Defense; and Provide direct geospatial support and products to Warfighters.

Roles & Responsibilities:

Execute policy and implement standards; monitor emerging technologies; validate Army Geospatial Enterprise (AGE) technical solutions.

Conduct Research Development Test & Evaluation (RDTE) aimed at increasing the agility of Battle Command through characterization and application of Geospatial Data & Information (GI&S).

Provide technical, acquisition integration and logistical support to the Army acquisition community and transitional technical capabilities under Joint Capability Technology Demonstration (JCTDs) and Quick Reaction Capabilities (QRCs), build and maintain a Ground – Warfighter Geospatial Data Model that provides a framework for common geospatial concepts and semantics required to share data and support common geospatial application services across the Army, other services, Department of Defense (DoD) organizations, and Coalition partners.

Serve as the Army's Geospatial Center of Excellence, providing direct support to Geospatial Engineers (Geospatial Planning Cell down to Brigade Combat Team) as well as all other operating and generating forces that consume or produce geospatial information and services.

PART II

TOPICS

A. Systems and Acquisition Support Directorate

A.1. Enterprise Support Branch

Introduction:

The Enterprise Support Branch synchronizes AGC policies, priorities, programs, production requirements, strategies and technologies across the Army Acquisition Community (Program Executive Officers/Program Managers/Product Managers) to ensure the efficient integration of Geographic Information System (GI&S) technologies in systems acquisition. The branch also advises program management of Army acquisition programs, currently fielded systems and technology integration/demonstration programs on the integration of GI&S capabilities in a manner consistent with Headquarters (HQDA) approved policy, regulation and guidance. Research Areas:

Army Geospatial Enterprise Operations (AGC-01).

The object of this topic is to conduct research on the technology, architecture and processes to support enterprise geospatial operations within the Army, from the individual platform to the theater level, and including support from outside theater. It also considers the efficient integration of GI&S technologies into weapons systems across and within computing environments.

Geospatial Standards (AGC-02).

The object of this topic is to conduct research on the appropriate standards to support geospatial information collaboration, content discovery, content delivery and visualization among Army mission command networks and systems. This research considers creators, consumers and managers of GI&S; and considers the needs of systems ranging from high-powered-to workstations and servers-to handhelds and embedded applications-to disconnected and disadvantaged users. It also takes into account Army data communications limitations, especially at the tactical level scanning and cartographic support equipment, techniques and management. It includes the metadata standards required to support data sharing and discovery services.

Geospatial Applications and Services (AGC-03).

The object of this research topic is to identify and define applications and services needed to support the AGE. These would include geospatially enabled applications to be implemented on multiple Army systems/platforms which improve Army capabilities, enhance geospatial synchronization, enhance the capabilities of systems using geospatial data, decrease bandwidth requirements, or otherwise improve the functioning of the AGE.

Data Model Development (AGC-04).

The object of this research topic is to support development of Army-wide geospatial data model(s) that supports enterprise-wide geospatial services, and analyze the relation of that model to other Army and National System for Geospatial-Intelligence (NSG) models and data standards. It also includes research into the implementation of a geospatial data model in Army systems and programs.

Test and Certification (AGC-05).

The object of this research topic is to identify the experimentation, test, validation and certification strategies to directly support the Army Acquisition Community in ensuring the efficient integration of GI&S technologies and standards into Army acquisitions systems at the appropriate milestones defined by DoD Directive 5000 series. The research considers testing geospatial applications in both distributed and standalone environments.

Army Geospatial Enterprise Migration (AGC-06).

The object of this research topic is to support the evolution of the Army Geospatial Enterprise (AGE) to address emerging technologies, standards and changes to Army, Joint, and Coalition Operations. Prototypes and experiments should address enterprise migration strategies that include the requirements of a Standard and Sharable Geospatial Foundation (SSGF) and Mission Command Essential Capabilities. The research identifies migration issues for existing Army systems as well as novel implementation of technology to demonstrate AGE capabilities. Research areas include Open Geospatial Consortium Standards, Open Source Geospatial Software, 2-D and 3-D visualization software, globes, geospatial portfolio management and integration of multiple software packages. The research includes prototypes supporting geospatial applications in both distributed and standalone environments.

Geospatial Modeling & Simulation (AGC-07)

The object of this topic is to conduct research and engineering development into the production of digital terrain databases used in Modeling & Simulation (M&S). The research will consider processes for verifying and validating digital terrain databases and the processes used to develop these databases. The processes will undergo verification and validation on sample digital terrain databases.

Geospatial Experimentation (AGC-08)

The object of this research topic is to identify and define policies, procedures, instrumentation, and technologies required to conduct geospatial experimentation, to verify implementation of geospatial standards and profiles, and to measure performance parameters of battle command systems that utilize Geospatial Information.

Cloud Computing (AGC-09)

The object of this research topic is to explore various models of cloud computing in a geospatial enterprise and carry out experimentation pilot projects as necessary to validate the models. Research areas would include the optimal architecture to support cloud computing in a geospatial enterprise, the benefits and challenges of cloud computing at various nodes of the enterprise, how various geospatial data types would be stored, indexed, and served in the cloud, and challenges for low-bandwidth and periodically disconnected users, geospatial visualization, geospatial processing, content management, providing analytics as a service, and geospatial data as a service via cloud computing. Additional areas could include security issues in the cloud environment, crowd-sourced data in the cloud, data validation, data synchronization, data backup, maintaining the currency of and adding to geospatial data in a deployed cloud, and the use of existing DoD, Army, Commercial and Federal Cloud Computing services versus standing up a geospatial cloud capability.

Disconnected Intermittent Low-Bandwidth (DIL)(AGC -10)

The object of this research topic is to explore various methods/models of providing geospatial data and services to support the AGE under DIL network conditions. This work can take the form of pilot projects, demonstrations and integration of new Software (SW) technology into existing Army Hardware (HW), development of new HW SW to support this computing environment. Subject areas for this research would be security concerns, providing data back to the AGE, development of crowd sourcing methodologies, data synchronization when devices are connected, fast effective ways to load and manage data in android environments as well as loading multiple devices at one time. Beneficial outcomes of this research would reduce load times, increase data management efficiency and enable delivery of data back to higher Army echelons.

Geospatial Architecture (AGC-11)

The object of this topic is to conduct research topic and engineering to develop architectures supporting the exchange of Geospatial Information using file-based exchange and web services across all echelons from the National to Tactical level. These architectures must support the exchange, distribution, discovery, and processing of faster, feature, and elevation data for all computing environments in both a connected and disconnected environment. Additional areas of research could include cross domain architectures, connected and disconnected access to data, software application architectures, and data architectures. Research must consider multiple platforms, echelons, security issues, and both raster and vector data.

Geospatial Data Center Architectures (AGC-12)

The object of this topic is to conduct research and engineering to design architectures supporting geospatial big data repositories (SIPR, NIPR and JWICS) and experiment with workflows and procedures for efficient distribution of geospatial data from a data center through all echelons to a soldier with a handheld. The architectures should include approaches and considerations for updating geospatial data in a data center, synchronization of data centers with tactical units and NGA (including NSG partners); and exposing Geospatial Authoritative Data Sources (ADS) and non- authoritative data sources. The architecture research should include support for 2D, 3D and 4D capabilities. Research

geospatial analytic services that could be rapidly delivered from a data center to all Computing Environments (CEs). Identify emerging Big Data technologies that could be utilized in lieu of enterprise level service servers to support storage of massive data sets.

Geospatial Content Management Methods (AGC-13)

The object of this topic is to conduct research on geospatial content management tools, techniques and procedures for Army users, identify techniques and technologies for cross domain access to geospatial data – utilizing a build once paradigm and/or propose new and novel geospatial data Quality Assurance/Quality Control (QA/QC) and validation tools/techniques and procedures for Big Data. Research novel methods for copying, moving, distributing and managing large geospatial data sets, rating data for appropriateness of use and completeness, and providing commanders tools to rapidly build mission ready data sets for distribution. The scope of the research includes support to the full spectrum of operations, operating and generating force as well as humanitarian assistance.

A.2. Systems Acquisition Branch

Introduction:

The Systems Acquisition Branch (SAB) develops, provides and supports integrated Engineer Reconnaissance and Surveying Capabilities enabling rapid situational understanding and Decisive Action. SAB integrates Acquisition and Life Cycle Sustainment requirements to provide materiel solutions to meet Capabilities Developer requirements. SAB fields and trains new equipment to Army units in accordance with Army fielding plans.

Research Areas:

Engineer Reconnaissance and Surveying Applications and Services (AGC-14)

The object of this research topic is to identify and define applications and services needed to support engineer reconnaissance and surveying. These would include geospatially enabled applications to be implemented on multiple Army systems/platforms which improve Army engineer capabilities, enhance geospatial synchronization, enhance the capabilities of systems using geospatial data, decrease bandwidth requirements, or otherwise improve the functioning of the AGE. This may also include analysis to support trade studies of existing products which could be leveraged to create these applications and services.

Systems Evaluation (AGC-15)

The object of this topic is to conduct research that will improve speed, quality and efficiency of evaluation of currently available commercial engineer reconnaissance and surveying equipment for military adaptation in support of force modernization.

Technical Data Package Maintenance (AGC-16)

The object of this topic is to conduct research to more effectively provide Technical Data Package maintenance of engineer reconnaissance and surveying related equipment in support of spare/repair parts and obsolete component procurements by the Readiness Command.

Standardization (AGC-17)

The object of this topic is to conduct research to improve the standardization function in the maintenance of Performance Specifications, Commercial Item Descriptions and engineer related Sets, Kits and Outfits.

A.3. Imagery Systems Branch

Introduction:

The Imagery Systems Branch (ISB) conducts advanced and engineering development in the areas of geospatial intelligence including tasking, processing, exploitation and dissemination and provides support for fielding, operations and maintenance of space-related, ground-based Army Tactical Exploitation of National Capabilities (TENCAP) systems. The ISB serves as the AGC interface to the Army TENCAP Office. The ISB provides engineering and program management support, consultation to Product Director (PD) Army TENCAP and other Army organizations, to include identification of emerging technologies and new concepts that have potential application to Army/TENCAP systems implementations and interfaces with elements of the National Intelligence Community dealing with geospatial intelligence systems and architectures. Research Areas:

Advanced and Engineering Development (AGC-18)

The object of this topic is to conduct research on geospatial intelligence systems and architectures along with development of support systems for their fielding, operations and maintenance.

Emerging Concepts and New Technologies (AGC-19)

The object of this topic is to conduct research, development and systems engineering of technologies that facilitate primary data acquisition, exploitation & dissemination of Geospatial Intelligence (GEOINT) by tactical Army warfighters in potentially austere and bandwidth limited environments. Topics may include, but are not limited to, Non-Traditional Intelligence, Surveillance, Reconnaissance (ISR) Pseudo Satellite (Air/Space) applications (collection, computing & networking), ISR automation (including tasking and exploitation), machine learning applications for multi-INT exploitation systems (including Big Data), and Modular Architectures (open-IT, Microservices).

A.4. Systems Applications and Integration Branch

Introduction:

The Systems Applications and Integration Branch (SAIB) conducts research and development in the areas of imagery exploitation, digital image acquisition, processing and dissemination, and intelligence data exploitation architectures in support of the Army/DoD, Space, Electronic Warfare (EW) and mission command networks and systems, i.e., Communications, Computers, Command and Control Intelligence Surveillance and Reconnaissance (C4ISR) programs. SAIB develops and demonstrates capabilities to support improvements in the Army's DoD ability to conduct surveillance, target acquisition, strike planning, weapons delivery and battle damage assessments in support of precision strike, early entry and depth and simultaneous attack operations as well as Operations Other Than War (OOTW). SAIB integrates and demonstrates technologies to improve the representation of realistic synthetic environments in Army and Joint Simulations. Provides technical administrative and program management support as required, to execute the space intelligence and geospatial programs assigned by AGC, the Army, other customers and DoD. Conducts research and development in surveying and mapping to include the Global Positioning System (GPS), hydrographic surveys, and dam and lock measurement. Uses remote sensing as well as field and laboratory research to study spectral reflectance, luminescence and emittance for civil and military applications. SAIB develops, applies and fields the use of geospatial services, data, storage mechanisms and Geospatial Intelligence (GEOINT) technologies to warfighter needs. Executes Joint Capability Concept Demonstrations (JCTDs) within the mission space of AGC and missions assigned from other DoD customers. The emphasis is on research to develop new techniques, equipment and procedures for surveying and mapping in support of USACE Civil Works, Military applications, Environmental Restoration and Military Construction applications; and transfers new technology in multiple engineering and science disciplines to Warfighters, other Government agencies, USACE districts and divisions through reimbursable consulting, training and standards development.

Research Areas:

Imagery Exploitation (AGC-20)

The objective of this topic is to conduct RDT&E in the areas of imagery exploitation, digital image acquisition, processing and dissemination and intelligence data exploitation architectures in support of Army/DoD space and Intelligence Electronic Warfare (IEW) programs and to conduct RDT&E in the areas of imagery Collection, Processing, Exploitation and Dissemination (CPED) process to include all dimensions including but not limited to two-dimensional (2D) and three- dimensional (3D) capability improvements.

Mission Command Networks, Systems and Intelligence, Surveillance, Reconnaissance ISR (AGC-21)

The objective of this topic is to conduct research and development supporting improvements in the Army's/DoD's ability to conduct mission command networks and systems with Intelligence, Surveillance, Reconnaissance (ISR), target acquisition, strike planning, weapons delivery and battle

damage assessments in support of precession strike, early entry and depth, Special Operations Forces (SOF) missions, Counter-terrorism, Counterinsurgency Operations (COIN), Stability and Support Operations and depth and simultaneous attack operations. Providing and integrating technologies including, but not limited to, high resolution terrain collection, biometric, TTL (tagging, tracking, and locating) technologies used, for example, in tracking high-value targets, electro optical, radar and hyperspectral sensors, collection management, other related Intelligence sensor development.

Joint Operational Technologies & Integration (AGC-22)

The objective of this topic is to conduct research into developing and maintaining methodologies, Techniques, Tactics and Procedures (TTPs) and integration of C4ISR technologies for Warfighter (for all US Armed Services) use in: Counter Intelligence and Human Intelligence (CI/HUMINT) Geographic Intelligence (GEOINT); sciences and technologies related to Human terrain and cultural information; Critical Infrastructure Protection (CIP), and Continuity of Operations (COOP); Biometric sciences and application; link analysis; analyses of various types; Information technology improvements in secure networks and multi-level security and dissemination; Humanitarian aid and SOF missions, counter-terrorism, COIN, stability and support operations technologies. This research topic is also used to develop methodologies and technologies for the collection, storing, analysis and dissemination of natural resources, specifically in the areas of Natural Resources Intelligence (NARINT).

Civil Military Operations (AGC-23)

The objective of this topic is to conduct RDT&E to support geospatial analysis, modeling, dissemination and decision support capabilities for Civil-Military Operations (CMO), including: geospatial modeling for CMO resource allocation; social media analysis to include personality insights and sentiment analysis in support of measuring the operational impact of CMO; dissemination of geospatial CMO data products and services to interagency, Intergovernmental (IGOs), and Non-Governmental Organizations (NGOs); utilization of open and crowd sourced geospatial data in developing nations; development of a CMO ontology for knowledge management and inference; semantic inference to extract or deduce meaning from unstructured text novel approaches to automated or semi-automated ontology creation via unstructured text analytics to extract information, entities, and relationships; and subject matter expert support for disaster mitigation, preparedness, relief and recovery operations capabilities.

Army and Joint Simulations (AGC-24)

The objective of this topic is to integrate and demonstrate technologies to improve the representation of realistic synthetic environments in Army and Joint simulations and investigate the use of Augmented Reality (AR), gamification, and location services utilized, for example, in popular mobile apps for practical application to GEOINT.

Database Development (AGC-25)

The object of this topic is to provide technical expertise and research to USACE HQ, districts, divisions, other Army and DoD customers in the definition and evolving of geospatial data standards, plans, policies and uses. In this research area, AGC identifies, develops, analyzes, reviews and evaluates applications and technologies that manipulate and process varying levels of topographic and hydrographic geospatial information. AGC seeks new or existing data base manipulation techniques, application methods and procedures to manage information on, but not limited to, USACE projects, dams, river charts, harbors, C4ISR and other information of interest to the USACE Districts, Divisions, Military Engineers and National emergency with defense and civil objectives. Investigations include, but are not limited to, the use of information from new terrain sensors such as Interferometric Synthetic Aperture Radar (IFSAR) and Light Detection and Ranging (LIDAR) to populate databases. Activities also include data dissemination approaches and system development using web-based GIS and map applications. geo-processing and advanced analytics at scale of geospatial big data.

B. Warfighter Support Directorate (WSD)

B.1. Terrain Analysis Branch

Introduction:

The Terrain Analysis Branch (TAB) is the Department of the Army's (DA) primary agent for terrain analysis. As such, WSD meets high-priority DA validated requirements from Army components of Unified Combatant Commands for terrain analysis including urban, tactical and country-scale assured mobility products and services. WSD oversees the Warfighter Support and Production Directorate's modernization efforts, assesses, develops, integrates, and trains solutions and improvements to the collection, management, production, and dissemination of products and services. WSD evaluates, develops and integrates hardware, software and techniques into the Directorate's information and production systems and provides miscellaneous cartographic and publishing technical services to all WGSP's projects and programs.

Research Areas:

Terrain Analysis (AGC-26)

The object of this topic is to conduct research into terrain analysis techniques and standards, and their application to development of urban and mobility/counter mobility products and services. This includes tactical terrain analysis research for the detailed analysis of complex tactical terrain objects/features (i.e., manmade objects of interest, micro-natural terrain, and varied obstacles/impediments to mobility) to the DoD, DA and USACE.

Modernization of Warfighter Support Directorate. (AGC-27)

The object of this topic is to conduct research on advanced methods of collection, management, production and dissemination of geospatial and imagery information.

Cartographic Technical Services (AGC-28)

The object of this topic is to conduct research on advanced electronic publishing, editing, printing, scanning and cartographic support equipment, techniques and management.

B.2. Geospatial Data Branch

Introduction:

The Geospatial Data Branch (GDB) collects, maintains, manages and disseminates geospatial information and imagery from multiple sources, to support analyses at the AGC and elsewhere within Army. GDB also serves as the Acquisition Monitor for the Army's Commercial and Civil Imagery Programs. Research Areas:

Geospatial Information (AGC-29)

The object of this topic is to conduct research into improved methods of maintenance, management and dissemination of geospatial information and imagery from multiple sources.

Acquisition Monitoring (AGC-30)

The object of this topic is to conduct research into improved means of monitoring imagery acquisition for purposes of serving the Army's Commercial Imagery Programs. Research includes improved methods of integrating new information with existing data systems in support of DoD, DA and USACE planning, training and operations.

B.3. Hydrologic and Environmental Analysis Branch

Introduction:

The WSD – Hydrologic and Environmental Analysis Branch (WSH) serves as DoD's primary agent for military hydrologic analysis and water detection. WSH prepares water resources analyses to support DoD and DA planning, training and operations, manages the DoD Water Detection Response Team (WDRT) in support of all DoD well drilling operations and integrates cultural and terrain information and produces reimbursable studies to support DoD, DA and USACE environmental remediation and compliance analyses.

Research Areas:

Military Hydrology and Water Detection (AGC-31)

The object of this topic is to conduct research studies in military hydrology and water detection. Research includes development of advanced methods of water detection and hydrologic analysis, including improved methods of integrating new information with existing data systems in support of DoD, DA and USACE planning, training and operations.

Water Detection and Drilling Management (AGC-32)

The object of this subject is to conduct research into more efficient and capable management of DoD WDRT and other functions in support of all DoD well drilling operations. Research includes methods of improving support to DoD, DA and USACE environmental remediation and compliance efforts.

Cultural Mapping (AGC-33)

The object of this topic is to conduct research studies in regional cultural mapping. Research includes development of advanced methods of identifying cultural influences on land use, migration patterns and responses to environmental events.

Historical Photo Analyses (AGC-34)

The object of this topic is to conduct research into Historical Photo Analyses of DoD remediation sites to determine focus areas and to provide significant cost avoidance in the restoration effort. This technology provides Imagery Intelligence (IMINT) to DoD, DA and USACE planning, training and operations. Research includes methods of improving support to DoD, DA and USACE environmental remediation and compliance efforts.

B.4. Tactical Source Branch

Introduction:

The mission of the Tactical Source Branch (TSB) is to rapidly collect, process, exploit and disseminate high-resolution geospatial data to support Change Detection, ISR and tailored mapping to support the military decision making process and identify, test and deploy Quick Reaction Capabilities (QRC) to support Operational Needs Statements (ONS) related to high-resolution geospatial intelligence/information. Also, to assess state-of-the-art technologies/capabilities for high-resolution geospatial intelligence/information and enhance as required. Provide end-to-end support (tasking, collection, processing, exploitation, dissemination and storage) of high-resolution geospatial information for the Warfighter and to conduct RDT&E to advance geospatial information systems.

Research Areas:

Database Development (AGC- 35)

The object of this topic is to identify, develop, analyze, review and evaluate applications and technologies that manipulate and process varying levels of geospatial information. AGC seeks new or existing database techniques, methods and procedures to manage geospatial information.

Advanced Airborne Sensors (AGC-36)

The object of this topic is to evaluate airborne sensors that can quickly and accurately obtain high-resolution data from high altitudes. Data to investigate includes, but is not limited to, EO, IR, LIDAR and thermal data. Of particular interest are scanning EO sensors and long focal length frame sensors.

Rendering and Display (AGC-37)

The object of this topic is to develop new capabilities and techniques for multidimensional (i.e, 2D, 3D and temporal) rendering and displaying of geospatial information.

Integration and Exploitation (AGC-38)

The object of this topic is to develop techniques for integration and exploitation of geospatial information to produce computer generated images and future map representations.

Battlefield Terrain and Environment (AGC-39)

The object of this topic is to develop new geo-spatial information evaluation and reasoning capabilities to provide the Warfighter with improved situational awareness.

Data Manipulation (AGC-40)

The object of this topic is to develop techniques and methodologies for storing, retrieving, manipulating, translating and disseminating geospatial information for use in a broad range of military and civil applications. The output data must have populated attribution fields (i.e, metadata) and be portable to the broad range of military and civil application software. Techniques are needed for managing, comparing, and fusing data from multiple sources. Input data can be vector data, elevation data, intelligence data, imagery, or a combination of the above.

Geospatial Information Exploitation (AGC-41)

The object of this topic is to conduct RDT&E in the areas of geospatial information exploitation, management and dissemination to provide the Warfighter with improved intelligence, mission

command and targeting. Geospatial data is acquired via direct remote measurement and/or estimation through modeling approaches with emphasis placed on exploitation/integration using existing commercial off the shelf technology. RDT&E includes the application of future smart sensors that process and interpret collected data onboard before providing end user data.

Data Generation (AGC-42)

The object of this topic is to conduct research and/or develop techniques to perform automated/semiautomated extraction of terrain data from remotely sensed imagery, maps, or from direct measurement. Techniques can be based on single or multiple sources. If using multiple sources, fusion issues should be addressed.

Geospatial Communications (AGC-43)

The object of this topic is to conduct research and development on techniques, equipment, and systems for communicating geospatial information among sensors, peers, networks, spatial data bases, and enterprise geographic information systems. There is a need to develop solutions that work on currently fielded or soon-to-be deployed Army tactical networks, across multiple security levels. Research is needed to develop new methods for displaying dynamic data crossing tactical networks and for graphical user interfaces for controlling sensors and their data across networks.

Data Representation (AGC-44)

The object of this topic is to conduct research and development of techniques and methodologies for representing, compressing, or decompressing terrain data. Input can be existing data products or remotely sensed data.

Image Registration (AGC-45)

The object of this topic is to conduct research and development of techniques to compare imagery and/or remotely sensed terrain data from multiple sources in order to improve spatial registration. Photogrammetric Processing Software Tools (AGC-46)

The object of this topic is to conduct research and development into photogrammetric processing software tools and techniques for tactical sensors.

Visualization (AGC-47)

The object of this topic is to conduct research and development on techniques, equipment and systems for visualizing geospatial information. Research will establish design principles and practices for the display of 2D, 3D and temporal data in hardcopy and digital environments. Research will include the investigation of simulation and animation techniques. Physical modeling techniques, as well as digital visualizations, will be evaluated.

Advanced Registration (AGC-48)

The object of this topic is to conduct research and development into techniques and processes for image-to-image registration with data that may have inaccurate metadata. An example is the registration of frame images lacking accurate interior and/or exterior orientation information.

Photogrammetric Techniques for Large Data Sets (AGC-49)

The object of this topic is to research its photogrammetric techniques (such as bundle block adjustment, orthomosaic creation, radiometric correction, automated tie-point calculation) for projects with large numbers of high-resolution frames. Large number of frames is considered to be in the 5000-50000 range.

Geospatial Intelligence Video/Terrestrial Sensors (AGC-50)

The object of this topic is to conduct research studies into the application of terrestrial sensors utilizing multiple camera lenses, LIDAR sensors, microphones, and a Differential Global Positioning System (DGPS) combined with an Inertial Measurement Unit (IMU) to produce seamless, high-resolution, synchronized, georeferenced, omni-directional video integrated and disseminated in a variety of environments. This technology provides Imagery Intelligence (IMINT) to DoD, DA and USACE planning, training and operations.

Tactical Unmanned Aircraft System (TUAS) (AGC-51)

The object of the topic is to conduct research studies into developing an automated, TUAS-based, high-resolution data collection and mapping capability that is portable between platforms.

Geospatial Software & Application Development (AGC-52)

The object of this topic is to conduct RDT&E for geospatial software & application requirements of DoD and DA. This allows for improved methods of integrating new information with existing data systems in support of DoD, DA and USACE planning, training and operations.

PART III

PRE-PROPOSAL AND PROPOSAL PREPARATION

SECTION 1. INTRODUCTION

This part is intended to provide information needed in preparing proposals for submission to the AGC.

In preparing pre-proposals and proposals it is important that the offeror keep in mind the characteristics of a suitable proposal acceptable for formal evaluation, including the focus on scientific study and experimentation directed toward advancing the state-of-the-art or increasing knowledge or understanding. It should include all the information specified in this announcement in order to avoid delays in evaluation. Pre-proposals will be responded to within 60 days of receipt, either encouraging submission of a complete proposal or advising the offeror not to submit.

Pre-proposals and proposals must reference the topic number for the specific area (e.g., AGC-15).

All proposals should include the information specified in this BAA Announcement in order to avoid delays in evaluation. Be sure to specify, the Commercial and Government Entity (CAGE Code), Duns and Bradstreet Data Universal Numbering System (the DUNS Number) and the Tax Identification Number (TIN) with your submission. Completion of the Representations and Certifications as well as registration in the DoD's System for Award Management (SAM) Database will be a prerequisite before receiving an award. Registration can be made at https://www.sam.gov/portal/public/SAM.

Offerors interested in submitting proposals are encouraged to make preliminary inquiries as to the general need for the type of research effort contemplated before expending extensive effort in preparing a detailed proposal or submitting proprietary information. Proposals often represent a substantial investment of time and effort by the offeror and they should present the proposed research effort in sufficient detail to allow the AGC to evaluate the scientific merit and relevance of the proposed research and to determine funding availability.

Offerors are requested to provide their e-mail address upon submission of proposal and also the name, address, and phone number of their cognizant Defense Contract Audit Agency (DCAA) office, if known.

If the offeror anticipates the efforts of foreign nationals on any proposal submitted hereunder; the foreign national's name, nationality and extent of involvement in the proposed research must be provided. Foreign nationals cannot work under a contract or any instrument unless all AGC- required security clearances and approvals have been obtained. There is no exception to these requirements.

Note that there is a requirement for contractor reporting if the contract is funded with military funds. The below information is provided for your assistance in complying.

"The Office of the Assistant Secretary of the Army (Manpower & Reserve Affairs) operates and maintains a secure Army data collection site where the contractor will report ALL contractor

manpower (including subcontractor manpower) required for performance of this contract. The contractor is required to completely fill in all the information in the format using the following web address: https://cmra.army.mil/. The required information includes: (1) Contracting Office, Contracting Officer, Contracting Officer's Technical Representative; (2) Contract number, including task and delivery order number; (3) Beginning and ending dates covered by reporting period; (4) Contractor name, address, phone number, e-mail address, identity of contractor employee entering data; (5) Estimated direct labor hours (including sub-contractors); (6) Estimated direct labor dollars paid this reporting period (including sub-contractors); (7) Total payments (including sub-contractors); (8) Predominant Federal Service Code (FSC) reflecting services provided by contractor (and separate predominant FSC for each sub-contractor if different); (9) Estimated data collection cost; (10) Organizational title associated with the Unit Identification Code (UIC) for the Army Requiring Activity (the Army Requiring Activity is responsible for providing the contractor with its UIC for the purposes of reporting this information); (11) Locations where contractor and sub-contractors perform the work (specified by zip code in the United States and nearest city, country, when in an overseas location, using standardized nomenclature provided on website); (12) Presence of deployment or contingency contract language: and (13) Number of contractor and sub-contractor employees deployed in theater this reporting period (by country). As part of its submission, the contractor will also provide the estimated total cost (if any) incurred to comply with this reporting requirement. Reporting period will be the period of performance not to exceed 12 months ending 30 September of each government fiscal year and must be reported by 31 October of each calendar year. Contractors may use a direct XML data transfer to the database server or fill in the fields on the website. The XML direct transfer is a format for transferring files from a contractor's systems to the secure web site without the need for separate data entries for each required data element at the web site. The specific formats for the XML direct transfer may be downloaded from the web site."

SECTION 2. CONTENTS OF PRE-PROPOSALS

Pre-proposals should not exceed a maximum of 5 pages and state the topic number under which they are being submitted. Three copies are requested (unless pre-proposal is emailed). Upon receipt, the AGC staff will perform an initial review of its scientific merit, its potential contribution to the Army/AGC mission, and the current availability of funding. As prescribed in FAR 35.016, proposed efforts shall focus on supporting AGC's requirements for scientific study and experimentation directed toward advancing the state-of-the-art or increasing knowledge or understanding, rather than focusing on a specific system or hardware solution. If the pre-proposal receives a favorable initial review, the offeror will be encouraged to submit a more detailed full proposal, in the format outlined in Section 6, Contents of Full Proposals. The proposal will be evaluated in accordance with the criteria detailed in Section 5, Evaluation Criteria. The pre-proposal should contain the following information:

A title descriptive of the research to be performed.

The name and address of the individual, company or educational institution submitting the preproposal (to include email address). The name and phone number of the principal investigator or senior researcher who would be in charge of the project. The duration of the project. The detailed estimated cost (i.e., labor costs, material costs, burdens, etc.).

One or more paragraphs describing the objective(s) or goals of the proposed research to include a statement of the working hypothesis to be proved or disproved, if appropriate.

One or more paragraphs describing the technical approach to be taken in the course of the research. If experimental, it should include a description of the scope of the testing program. If analytical, it should include key assumptions to be made, the scientific basis for the analysis, and the numerical procedures to be used.

One or more paragraphs describing the potential military and/or civil payoffs that might ultimately derive from the proposed research to the Corps of Engineers.

A one-page curriculum vitae of the principal investigator.

SECTION 3 - GENERAL INFORMATION

The proposal is the only vehicle available to the offeror for receiving consideration for award. The proposal must stand on its own merit; only information provided in the proposal can be used in the evaluation process leading to an award. The proposal should be prepared simply and economically, providing straightforward, concise delineation of capabilities necessary to perform the proposed work. The technical proposal must be accompanied by a fully supported cost proposal, as cost and technical considerations are reviewed simultaneously.

Proposals containing data that is not to be disclosed to the public for any purpose or used by the Government except for evaluation purposes shall include the following statement on their cover page.

"The proposal includes data that shall not be disclosed outside the Government and shall not be duplicated, used, or disclosed - in whole or in part - for any purpose other than to evaluate this proposal. If, however, a contract is awarded to this offeror as a result of, or in connection with, the submission of this data, the Government shall have the right to duplicate, use, or disclose the data to the extent provided in the resulting contract. This restriction does not limit the Government's right to use information contained in this data if it is obtained from another source without restriction. The data subject to this restriction are contained in sheets ______."

The offeror shall also mark each sheet of data it wishes to restrict with the following legend:

"Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this proposal."

To ensure all technical proposals receive proper consideration, the Government proposal format shown below shall be followed. This format can be incorporated as the proposal table of contents and serve

as a final checklist as well. White papers and proposals must reference the topic number for the specific research area (e.g. AGC -15).

Proposal Contents/Checklist: i Cover Page ii Table of Contents iii List of Illustrations/Tables iv Executive Summary

VOLUME I - Technical Proposal

- 1.1 Technical Approach
- 1.2 Technical Discussion
- 1.3 Technical Program Summary
- 1.4 Risk Analysis and Alternatives
- 1.5 References
- 2.1 Special Technical Factors
- 2.2 Capabilities and Relevant Experience
- 2.3 Previous or Current Relevant Independent Research and Development (IR&D) Work
- 2.4 Related Government Contracts
- 2.5 Facilities/Resources
- 3.1 Schedule
- 3.2 Time Line Chart by Task
- 4.1 Program Organization
- 4.2 Organization Chart(s) with Key Personnel
- 4.3 Management and Technical Team
- 4.3.1 Prime Contractor Responsibilities
- 4.3.2 Subcontractor(s) Responsibilities
- 4.3.3 Consultant(s) Responsibilities
- 4.4 Resumes of Key Personnel
- 5.0 Appendix (ces)

VOLUME II – Quality Control Plan (QCP)

VOLUME III - Cost Proposal

- 1.0 Proposal Cover Sheet for Total Proposal
- 2.0 Summary by Cost Element and Profit or Fee for Total Proposal
- 3.0 Cost Summary Breakout and Supporting Detail

VOLUME IV - Additional Representations and Certifications

SF 33 MUST BE COMPLETED BY EACH OFFEROR AND SUBMITTED WITH EACH FULL PROPOSAL

NOTE: PLEASE USE THE ABOVE DECIMAL NUMBERING SYSTEM FOR PROPOSAL PREPARATION.

Pre-proposals and proposals submitted in response to this BAA should be submitted via email to <u>AGCBAAProposals@usace.army.mil.</u>

SECTION 4. CONTENTS OF FULL PROPOSALS

Proposals should be furnished in three copies (unless submitted via email), state the topic number under which they are being submitted, and contain the following:

VOLUME 1: Technical Proposal

The technical portion of the proposal should contain the following and any other information the offeror considers necessary to address the evaluation criteria in Part III, Section 5.

<u>i. Cover Page</u>: The cover page should include the BAA number, R&D topic and reference number, name and telephone number for the principal points of contact (both technical and contractual), and any other information that identifies the proposal. The cover page should also contain the proprietary data disclosure statement, if applicable.

<u>ii. Table of Contents</u>: The offeror should follow the proposal contents/checklist provided in Part III, Section 3 and use it for a final quality-control checklist.

<u>iii. List of Illustrations/Tables</u>: This list is a quick reference of charts, graphs, and other important information. A separate list of tables is recommended.

iv. Executive Summary: The executive summary allows the offeror to present briefly and concisely the important aspects of its proposal to key management personnel. The summary should present an organized progression of the work to be accomplished, without the technical details, such that the reader can grasp the core issues of the proposed program. The executive summary should rarely exceed two pages.

<u>1.1 Technical Approach</u>: In this section, the offeror should provide as much technical detail and analysis as is necessary or useful to support the technical approach it is proposing. One must clearly identify the core of the intended approach. It is not effective to address a variety of possible solutions to the technology problems.

<u>1.2 Technical Discussion</u>: A complete discussion stating the background and objectives of the proposed work, the approaches to be considered, the proposed level of effort, and the anticipated results/products, to include the proposed reports and deliverables to be furnished. No technical approach is without its limitations or shortcomings. Every issue should be identified and compared

with the successes/failures of previous approaches. A tradeoff analysis is a good way to make this comparison and should be supported by theory, simulation, modeling, experimental data, or other sound engineering and scientific practices. If the offeror has a "new and creative" solution to the problem(s), that solution should be developed and analyzed in this section. The preferred technical approach should be described in as much detail as is necessary or useful to establish confidence in the approach.

<u>1.3 Technical Program Summary</u>: This section summarizes the above technical discussion in an orderly progression through the program, emphasizing the strong points of the proposed technical approach.

<u>1.4 Risk Analysis and Alternatives</u>: Every technology has its limitations and shortcomings. The proposal evaluator(s) will formulate a risk assessment and it is in the best interest of the offeror to have its own understanding of the risk factors presented. Critical technologies should be identified along with their impact on the overall program as well as fallback positions that could still improve on existing approaches.

<u>1.5 References</u>: Any good technology discussion must present the basis for and reference the findings cited in the literature. Include the names, brief biographical information, experience, and a list of recent publications of the offeror's key personnel who will be involved in the research.

2.1 Special Technical Factors: In this section, the offeror should describe any capabilities it has that are uniquely supportive of the technology to be pursued. The following subparagraphs are offered as possible areas to be addressed.

2.2 Capabilities and Relevant Experience.

<u>2.3 Previous or Current Relevant Independent Research and Development (IR&D) Work</u>. Include the names of other agencies to which the proposal has also been submitted.

<u>2.4 Related Government Contracts</u>. Past performance information to include the name, address, point of contact, phone number, email address, contract identification number, contract award date and amount for a minimum of three (3) customers for whom the offeror has performed similar services in the last three (3) years.

2.5 Facilities/Resources.

<u>3.1 Schedule</u>: The schedule represents the offeror's commitment to perform the program tasks in an orderly and timely manner.

<u>3.2 Time Line Chart by Task</u>: Each major task identified must appear as a separate line on the program schedule. Planned meetings, such as kick-off, presentations (including final), technical interchange meetings, etc., must be included in the time line. The time line must also indicate the anticipated meeting site.

<u>4.1 Program Organization</u>: A brief description of the offeror's organization, to include name, address, phone numbers and email addresses. In this paragraph, the offeror should present its organization's ability to conduct difficult technical programs. Any pertinent or useful information may be included in this paragraph, but a minimum recommended response should address the following subparagraphs:

<u>4.2 Organizational Chart(s) with Key Personnel:</u> Include prime contractor and subcontractor organization charts.

<u>4.3 Management and Technical Team</u>: This should specifically identify what tasks will be performed by which party and why each subcontractor, if any, was selected to perform its task(s).

<u>4.4 Resumes of Key Personnel</u>: Include the resumes of the prime contractor, subcontractor and consultant personnel to include the names, brief biography and list of recent publications of the offeror's key personnel. Documentation of previous work or experience in the field of the proposer is especially important.

<u>5.0 Appendix(ces)</u>: Appendices may include technical reports, published papers and referenced material. A listing of these reports/papers with short descriptions of the subject matter is usually adequate. Do not provide commercial product advertising brochures; these are unwanted.

VOLUME II: Quality Control Plan (QCP)

Quality control activities are associated with the creation of project <u>deliverables and services being</u> <u>offered under the suggested BAA topic</u>. Quality control is used to prevent and resolve errors in project deliverables and services under the resultant contract. Quality control verifies that deliverables and services are of acceptable quality and meet the standards of the criteria established.

The offeror shall implement a documented Quality Control Plan (QCP) that identifies and results in correction of potential problem areas throughout the entire scope of the contract. The QCP shall be submitted as part of the proposal. The offeror's QCP shall:

Contain procedures of written and verbal communication with the Government regarding performance of the work.

Contain procedures for handling corrective action without dependence upon Government intervention.

Contain, at a minimum, specific surveillance procedures for each proposed deliverable and/or service identified in the proposal. These surveillance procedures shall identify who will perform the surveillance, the frequency, the method, listing of items under surveillance, and corrective actions that will be taken to correct deficiencies. - Provide a plan for maintenance of records of all quality control checks and corrective actions.

For each deliverable and/or service, describe the quality control activities you will execute. Examples of quality control activities:

Quality control check list Deliverable review Structured walkthroughs Statistical sampling Testing process

VOLUME III: Cost Proposal

a. Content of Cost Proposal. The cost portion of the proposal should contain a cost estimate or a firm fixed price for the proposed effort sufficiently detailed by element of cost for meaningful evaluation. The estimate should be detailed for each task of the proposed work.

b. The cost proposal should be limited to the minimum number of pages necessary to satisfy the specific requirements set forth herein. Submission of volumes of computer-generated data to support the cost proposal is not necessary or desired. If computer-generated data is essential to support the cost proposal, it may be submitted as an addendum and must be clearly cross- referenced to the material it supports in the cost proposal.

c. Cost proposals should represent the offeror's best response to the solicitation. Any inconsistency, whether real or apparent, between promised performance and cost or pricing data must be fully explained in the proposal. Failure to explain any significant inconsistencies may demonstrate the offeror's lack of understanding of the nature and scope of the work required. Accordingly, cost proposals must be sufficient to establish the reasonableness, realism and completeness of the proposed cost/price. Further, any modifications made to the initial proposal must likewise be thoroughly supported in writing regardless of whether such changes are made during negotiations or at the time of a proposal revision.

- 1. Proposal Cover Sheet for total proposal.
- 2. Summary by cost element and profit or fee for total proposal (Fixed Price or Cost).
- 3. Labor summary for total proposal by categories, rates and hours. For firm fixed price proposals submit fully loaded labor rates.
- 4. Explanation of how labor rates are computed including base rates (actuals) and escalation, if any.
- 5. Interdivisional Transfers (detailed breakout of costs), if applicable
- 6. Identification of indirect rates by fiscal year and explanation of how established and base to which they apply.
- 7. Bill of Materials detailing items by type, quantity, unit price, total amount and source of estimate. Provide vendor written quotes.
- 8. Summary of all travel by destination, purpose, number of people and days, air fare, per diem, car rental, etc.
- 9. Consultants by name, rate and number of days or hours. Furnish copy of consulting agreement, and identify prior agreement(s) under which the consultant commanded proposed rate.
- 10. Computer use by type, rate and quantity.
- 11. Other direct costs by type, amount, cost per unit and purpose (specifically identify any costs for printing or publication).

- 12. DD Form 1861 (if proposing facilities capital cost of money).
- 13. Subcontractor's proposal, with the offeror's price/cost analysis of subcontractor's proposal. If subcontract was not competed, include justification.

14. Forecast of monthly and cumulative dollar commitments for the proposed contract period.

15. Proposed fee, if any.

d. Subcontractors' proposals must be similarly structured. All subcontracted work must be properly identified as such. If a subcontractor elects to submit an abbreviated proposal to the offeror, it is the offeror's responsibility to see that the subcontractor simultaneously submits a complete detailed proposal properly identified directly to the contracting officer. The offeror must ensure that the subcontractor adheres to the guidance set forth herein. FAR 15.404-3 requires that the offeror provide an analysis of the subcontractors' cost proposals. To that end, the offeror's proposal must:

- 1. Identify principal items/services to be subcontracted.
- 2. Identify prospective subcontractors and the basis on which they were selected. If noncompetitive, provide selected source justification.
- 3. Identify the type of contractual arrangement contemplated for the subcontract and provide a rationale for same.
- 4. Identify the basis for the subcontract costs as included in the offeror's proposal (e.g., firm quote or engineering estimate, etc.).
- 5. Identify the cost or pricing data or information other than cost or pricing data submitted by the subcontractor.
- 6. Provide a price analysis of the proposed subcontract in accordance with FAR 15.404-1(b). The analysis should determine the reasonableness and completeness of each subcontractor's proposal. If the analysis is based on a comparison with prior prices, identify the basis on which the prior prices were determined to be reasonable. If price analysis techniques are inadequate or the FAR requires submittal of subcontractor cost or pricing data, provide a cost analysis in accordance with FAR 15.404-3(b). Cost analysis should include, but not be limited to, an analysis of materials, labor, travel, other direct costs and proposed profit rates.

e. Cost Element Summary Format. Cost elements which do not pertain to the offeror's proposal may be omitted. Do not lump elements together. Cost elements peculiar to a particular offeror which are not listed may be added. Elements may be rearranged to fit an offeror's pricing structure.

f. Adequate price competition (APC) is anticipated as defined in FAR 15.403-1(c). If it is later determined that APC does not exist, and the threshold for a negotiated contract is expected to exceed \$700,000, submission of certified cost or pricing data may be required. If cost or pricing data are requested and submitted by an offeror, but an exception is later found to apply, the data will not be considered cost or pricing data as defined in FAR 2.101 and will not be certified in accordance with FAR 15.406-2.

When cost or pricing data are required, the contracting officer shall require the offeror to submit to the contracting officer (and to have any subcontractor or prospective subcontractor submit to the prime contractor or appropriate subcontractor tier) the following in support of any proposal:

- 1. The cost or pricing data.
- 2. A certificate of current cost or pricing data, in the format specified in FAR 15.406-2, certifying that to the best of its knowledge and belief, the cost or pricing data were accurate, complete, and current as of the date of agreement on price or, if applicable, an earlier date agreed upon between the parties that is as close as practicable to the date of agreement on price.

VOLUME IV: Signed and dated Standard Form 33 and Additional Representations and Certifications.

SECTION 5. EVALUATION CRITERIA

Proposals submitted in response to this BAA will be evaluated in accordance with the following criteria:

The overall scientific and/or technical merits of the proposal, including how the proposal meets the FAR requirements for scientific study and experimentation directed toward advancing the state-of-theart or increasing knowledge or understanding, rather than focusing on a specific system or hardware solution.

The potential contributions of the effort to the U.S. Army Geospatial Center mission.

The offeror's capabilities, related experience, facilities, techniques, or unique combination of these which are integral factors for achieving the proposal objectives.

The qualifications, capabilities and experience of the proposed principal investigator, team leader and other key personnel who are critical to the achievement of the proposal objectives.

The reasonableness and realism of proposed costs (and fees, if any) and prices and the availability of funds.

The offeror's record of past performance.

Upon receipt of a proposal, the AGC evaluators 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 or those in areas for which funds are not expected to be available may be declined without further review.

It is the policy of AGC to treat all proposals as privileged information before award and to disclose the contents only for the purposes of evaluation. Proposals not declined as a result of initial review will be subject to an extensive peer review by highly qualified scientists from within the Government. The offeror must indicate on the appropriate proposal form, any limitation to be placed on Disclosure of Information contained in the proposal.

Each proposal will be evaluated based on the merit and relevance of the specific R&D proposed as it relates to the overall AGC research and development program, rather than against other proposals in the same general area.

SECTION 6. TYPE OF CONTRACT

Selection of the type of contract is based upon various factors, such as the type of research to be performed, the contractor's experience in maintaining cost records, and the ability to detail and allocate proposed costs and performance of the work.

Any contract awards resulting from this BAA will incorporate the most current FAR, DFARS, AFARS and USACE clauses.

Contracts awarded by AGC will contain, where appropriate, detailed special provisions concerning patent rights, rights in technical data and computer software, reporting requirements, equal employment opportunity, etc.

The contract type is negotiable and offerors may propose either cost reimbursable or firm fixed price arrangements. For proposal pricing purposes, an offeror should assume a contract start date of ninety (90) days after submission of the proposal. The Government will only award a contract to an offeror deemed responsible in accordance with FAR 9.104-1 which requires that the prospective contractor has the necessary accounting controls. For cost contracts only, the offeror shall provide evidence indicating that its accounting system is adequate for determining costs applicable to the contract (see FAR 16.301-3(a)(3)). Consequently, to be determined responsible for purposes of award of a contract under this solicitation, an offeror's accounting system must be adequate for determining costs applicable to this contract. Evidence may include DCAA audit reports, or other relevant audit reports. Note that the contracting officer may conduct exchanges with an offeror pertaining to its responsibility. Such exchanges, if any, do not constitute discussions. An offeror may be deemed non-responsible in the event it fails to provide evidence indicating its accounting system is adequate.

Awards:

With the submittal of all required information as described herein and the favorable evaluation of your proposal, the Government may unilaterally make award; therefore, it is in the offeror's best interest to review all requirements listed within. Note that contract clauses are self- deleting; therefore, there is neither a requirement nor need for a modification to the award if any clause is found not applicable. Performance after the receipt of an award signed by the Contracting Officer indicates your full acceptance of all terms and conditions within the award.

Awards will be made on Standard Form 33, Standard Form 26, DD Form 1155 or other document as appropriate. Offerors shall provide a completed SF 33 with their technical and cost proposals. Awards will consist of all applicable clauses and contracts shall be in accordance with the Uniform Contract Format (UCF).

Report Requirements:

The number and types of reports will be specified in Section J of the contractual document. The reports will be prepared and submitted in accordance with DD Form 1423, Contract Data Requirements List.

Contract award may be made electronically. Offerors are required to provide their e-mail address upon submission of proposal and also the name, address, and phone number of their cognizant Defense Contract Audit Agency (DCAA) office, and/or Office of Naval Research office, if known/applicable.