



Broad Agency Announcement (BAA)

National Defense Space Architecture (NDSA)

Systems, Technologies, and Emerging Capabilities (STEC)

Space Development Agency (SDA)

HQ085021S0002

25 January 2021

Table of Contents

- I. OVERVIEW INFORMATION 4**
- II. FULL TEXT OF THE ANNOUNCEMENT 4**
 - A. Funding Opportunity Description..... 4**
 - B. Overview 4**
 - C. SDA Focus Areas..... 6**
 - 1. Real-Time Global Awareness and Connectivity 6**
 - 2. Comprehensive Space-Based Sensing..... 7**
 - 3. Omniscient Command, Control, and Execution..... 8**
- III. Award Information..... 9**
 - A. General Award Information 9**
- IV. Eligibility Information..... 10**
 - A. Eligible Applicants 10**
 - 1. Federally Funded Research and Development Centers (FFRDCs),
University Affiliated Research Centers (UARCs), and Government Entities
..... 10**
 - 2. Non-U.S. Organizations and/or Individuals..... 11**
 - 3. Classified Proposals..... 11**
 - B. Organizational Conflicts of Interest..... 12**
 - C. Cost Sharing/Matching..... 13**
- V. Application and Submission Information..... 13**
 - A. Application Assistance..... 13**
 - B. Content and Form of Submission 13**
 - 1. Executive Summary (ES) Format 14**
 - 2. Proposal Abstract (PA) Format 14**
 - 3. Full Proposal (FP) Format..... 14**
 - 4. Additional Proposal Information..... 24**
 - C. Submission Instructions 27**
 - 1. Unclassified Submission Instructions 27**
 - 2. Classified Submission Instructions, Requirements, and Procedures
Classified submissions shall NOT be emailed to the unclassified address. .. 27**
 - 3. Submission Instructions for both Classified and Unclassified Submissions 29**
 - D. Funding Restrictions..... 29**
 - E. Other Submission Requirements..... 29**
- VI. Application Review Information 29**
 - A. Evaluation Criteria 29**
 - 1. Overall Scientific and Technical Merit..... 30**
 - 2. Potential Contribution and Relevance to the SDA Mission..... 30**

- 3. Cost Realism 30
- 4. Realism of Proposed Schedule..... 31
- 5. Proposer’s Capabilities and/or Related Experience 31
- B. Review of Submissions 31
 - 1. Review Process..... 31
 - 2. Handling of Source Selection Information 32
 - 3. Federal Awardee Performance and Integrity Information (FAPIIS)..... 32
- VII. Award Administration Information..... 32
 - A. Selection Notices and Notifications 32
 - 1. Executive Summaries 32
 - 2. Proposal Abstracts 32
 - 3. Full Proposals 33
 - B. Administrative and National Policy Requirements 33
 - 1. Meeting and Travel Requirements 33
 - 2. FAR and DFARS Clauses 33
 - 3. Controlled Unclassified Information (CUI) on Non-DoD Information Systems 33
 - 4. Representations and Certifications 33
 - C. Reporting..... 33
 - D. Electronic Systems 34
 - 1. Wide Area Work Flow (WAWF)..... 34
- VIII. Agency Contacts 34
- IX. Other Information 34

I. OVERVIEW INFORMATION

- **Federal Agency Name** – Space Development Agency
- **Funding Opportunity Title** – National Defense Space Architecture (NDSA) Systems, Technologies, and Emerging Capabilities (STEC)
- **Announcement Type** – Renewal Announcement
- **Funding Opportunity Number** – HQ085021S0002
- **Dates**
 - o Posting Date: 25 January 2021
 - o Proposal Due Date and Time: 24 January 2022, 4:00 pm Eastern
- **Concise description of the funding opportunity** – The Space Development Agency (SDA) is soliciting executive summaries, proposal abstracts and proposals for novel architecture concepts, systems, technologies, and capabilities that enable leap-ahead improvements for future tranches of currently planned NDSA capability layers, or, enable new capability layers to address other emerging or evolving warfighters needs.
- **Anticipated individual awards** – Multiple awards are anticipated.
- **Types of instruments that may be awarded** – Procurement (FAR-based) contract or other transaction.
- **Agency contact:** Technical and administrative point of contact for this effort can be reached via: osd.pentagon.ousd-r-e.mbx.hq085021s0002@mail.mil
- Space Development Agency, ATTN: HQ085021S0002, 3030 Defense Pentagon Washington, DC 20301-0001

II. FULL TEXT OF THE ANNOUNCEMENT

A. Funding Opportunity Description

This publication constitutes a Broad Agency Announcement (BAA) as contemplated in Federal Acquisition Regulation (FAR) 6.102(d)(2) and 35.016. Any resultant award negotiations will follow all pertinent law and regulation, and any negotiations and/or awards for procurement contracts will use procedures under FAR 15.4, Contract Pricing, as specified in the BAA. The following information is for those wishing to respond to the BAA.

B. Overview

The National Defense Strategy (NDS) acknowledges that space is vital to the U.S. way of life, our national security, and modern warfare. In an era of renewed great power competition, maintaining our advantage in space is critical to winning these long-term strategic competitions. Potential adversaries seek to undermine this goal by employing strategies that exploit real or perceived vulnerabilities in our current and planned National Security Space systems. In addition, these potential adversaries are developing and demonstrating multi-domain threats to national security much faster than we can deploy responsive space-based capabilities. The Acting Secretary of Defense established SDA as a separate Defense Agency pursuant to Title 10, U.S.C. sections 112, 191, and 192, on 12 March 2019 in response to these challenges.

SDA is responsible for the development, fielding, and operation of the Department's future threat-driven space architecture and accelerating the development and fielding of new military

space capabilities necessary to ensure U.S. technological and military advantage in space for national defense. To achieve this mission, SDA is responsible for unifying and integrating next-generation space capabilities to deliver the National Defense Space Architecture (NDSA), a resilient military sensing and data transport capability via a proliferated space architecture primarily in Low Earth Orbit (LEO). SDA will not necessarily develop and field all capabilities of the NDSA but rather orchestrate those efforts across DoD and fill in gaps in capabilities while providing the integrated architecture.

Initially the NDSA is comprised of the following capability layers, addressing the critical priorities for space identified within the DoD Space Vision:

- Transport Layer, to provide assured, resilient, low-latency military data and communications connectivity worldwide to the full range of warfighter platforms;
- Battle Management Layer, to provide architecture tasking, mission command and control, and data dissemination to support time-sensitive kill chain closure at campaign scales;
- Tracking Layer, to provide global indications, warning, tracking, and targeting of advanced missile threats, including hypersonic missile systems;
- Custody Layer, to provide 24x7, all-weather custody of time-sensitive, left-of-launch surface mobile targets (e.g., to support beyond line-of-sight targeting for advanced missiles);
- Navigation Layer, to provide alternate positioning, navigation, and timing (PNT) for Global Positioning System (GPS)-denied environments;
- Support Layer, to enable ground and launch segments to support a responsive space architecture.

SDA's mission begins and ends with the warfighter. SDA recognizes that "good enough" capabilities in the hands of warfighter sooner may be better than delivering the perfect solution too late. SDA will deliver capabilities to our joint warfighting forces in two-year tranches, beginning as early as Fiscal Year (FY) 2022. While SDA is issuing separate solicitations for the capability layers outlined above, seeking systems and technologies that can be developed and fielded on the SDA tranche timelines to address timely warfighter needs, SDA also recognizes the need to establish an "intellectual pipeline" to access ideas from across the community to inform the future of the NDSA.

While SDA primarily seeks to acquire mature technologies that can be rapidly fielded to address pressing warfighter capability needs, SDA can also make **limited but pivotal investments in research and development activities**, particularly when the return on those investments can be leveraged in future acquisitions. Through this BAA, SDA specifically seeks architecture concepts, strategic assessments and evaluations, systems, technologies, and emerging warfighting capabilities that:

- Enable leap-ahead improvements for future tranches of currently planned NDSA capability layers identified above
- Enable new capability layers to address other emerging or evolving warfighters needs

SDA is soliciting executive summaries, invited white papers or proposal abstracts, and invited proposals in the focus areas described below. Although not required, SDA **strongly encourages submitting an executive summary first** to have your concept reviewed by SDA personnel to ensure interest and potential funding availability. Submission instructions can be found in Section IV. Evaluation criteria for this solicitation can be found in Section V.A. SDA anticipates making multiple awards from this solicitation, leading to detailed technical studies, architecture or system-level technical designs, and/or proofs of concept or risk reduction demonstrations. This full and open solicitation has a companion BAA specifically for Small Business Opportunities (SBO). Please see the System for Award Management (www.beta.sam.gov) for the SDA website (www.sda.mil) for more information.

C. SDA Focus Areas

SDA is seeking architecture studies, concepts of operations (CONOPS), modeling and simulation, system designs, key technologies, and/or risk reduction prototypes that are responsive to the following capability vectors.

1. Real-Time Global Awareness and Connectivity

This vector is primarily aligned with the NDSA's Transport and Navigation Layers and features capabilities enabling global access to low-latency communications and navigation information for Joint warfighters and warfighting systems, including but not limited to:

- **Optical intersatellite links (OISL)** – low size, weight, power, and cost (SWaP-C), free-space OISL terminals capable of high-bandwidth (>1 Gbps) data rates at relevant ranges (~5,000 km) that are compatible with the SDA OISL Open Standard (or identify known deviation(s) and recommended modification(s) to the open standard) and are capable of establishing and maintaining space-to-space, space-to-ground, and space-to-airborne for low-latency, high-bandwidth connectivity and precise and accurate ranging measurements.
- **Multi-beam / multi-user tactical data link connectivity** – low-power antenna technologies enabling tactical data link connectivity with multiple users, especially in L Band, and including but not limited to active electronically scanned arrays (AESA)
- **Flexible software-defined radios (SDR)** – low-SWaP-C tactical data link SDRs with such capabilities as support for trusted on-orbit reconfiguration and multiple tactical data links within a single hardware and software architecture
- **Advanced communications encryption** – miniaturized, low-power NSA-approved Type I (Suite A) encryption solutions

- **Direct-to-weapon data links** – implementations of direct, low-latency connectivity to high-speed weapons, enabling receipt of weapon telemetry and transmission of in-flight target updates
- **GPS-denied positioning, navigation, and timing (PNT)** – capabilities required to enable navigation and timing in GPS-denied environments, including communication systems, mass-producible low-SWaP atomic clocks, inertial navigation systems, star trackers, and other space navigation sensors
- **Novel communication modalities** – concepts and implementations involving novel communications phenomenologies or novel applications of mature communications techniques
- **Tactical data link interoperability** – concepts and implementations enabling tactical data link message translation and rebroadcast via alternate communication networks, including but not limited to Link 16 / Integrated Broadcast Service (IBS) translation
- **Advanced modems and networking** – low-SWaP-C modem, router, and switch designs and implementations capable of high-throughput (>50 Gbps) modulation/demodulation and packet forwarding
- **Optimized control of modulation techniques** – dynamic, adaptive optimization of communications modulation technique selection and employment

2. Comprehensive Space-Based Sensing

Aligned primarily with the Tracking, Custody, and future resilient space sensing layers of the NDSA, this vector enables detection, tracking, and targeting of adversary systems spanning multiple domains, with an emphasis on advanced missile threats and time-critical land and maritime targets. In addition, this vector spans the range of possible complementary missions with space-based sensors, including but not limited to space-based environmental monitoring (SBEM), space domain awareness, and battle damage assessment (BDA).

- **Wide field of view (WFOV) overhead persistent infrared (OPIR) missile tracking** – WFOV OPIR sensor technologies, including focal plane arrays, and processing techniques designed for operation in low Earth orbit
- **Multi-INT fusion** – algorithms, concepts, and systems that fuse multi-modal sensor data from systems spanning multiple domains to develop and maintain targeting solutions against time-sensitive targets, especially space-based fusion implementations
- **Heterogeneous missile tracking architectures** – OPIR missile warning and tracking architectures featuring sensors of different sensitivities, operating in different infrared bands, and deployed in different orbits
- **Electronic support and protection** – passive radio frequency (RF) sensing and processing implementations enabling spacecraft to gather intelligence from adversary

emissions; electronic protection implementations that mitigate the effects of adversary electronic warfare techniques

- **Automatic target recognition** – automated, refined or emerging processes that classify objects of interest in sensor data feeds using trusted artificial intelligence and machine learning implementations
- **Novel remote sensing phenomenologies** – innovative distributed sensing concepts, novel sensing modalities, with applications to missile threat detection and tracking and surveillance of time critical targets.
- **Space-based sensors in complementary missions** – disruptive sensor system designs or dual-use applications of existing sensor payloads that enable valuable support missions, including the body SBEM missions (space weather, theater weather imagery (TWI), cloud characterization (CC), ocean surface vector winds (OSVW), etc.), space domain awareness, and BDA.

3. Omniscient Command, Control, and Execution

This vector is aligned primarily with the Battle Management and Support Layers of the NDSA and includes algorithms, frameworks, and hardware supporting advanced processing, command and control, and seamless interoperability of architecture elements.

- **Cyber defense of space data networks** – architectures, protocols, and tools for layered cyber defense of the ground and space segment, with emphasis on adaptable, lightweight systems for malware and network intrusion detection, authentication, authorization, and accounting (AAA); and security incident and event management (SIEM)
- **Open interfaces and standards** – open system interfaces and standards supporting integration of NDSA components developed by multiple vendors, as well as interoperability with external systems and users
- **Software frameworks enabling on-orbit reprogramming** – flexible software frameworks that enable software updates and reconfigurations to be published to space vehicles on orbit, including mechanisms for publishing and applying updates via existing communication links
- **Automated, dynamic, and resilient networking and routing techniques** – intelligent network management tools and routing policies that adapt to the current network topology and environmental conditions to maximize performance
- **Radiation-hardened and radiation-tolerant advanced processing** – high-performance, low-SWaP-C on-orbit processing capabilities such as rad-hard or rad-tolerant GPUs, CPUs, FPGAs or other components, hardware / software / firmware architectures, storage, and algorithms, including implementations supporting distributed processing

- **Automated schedule optimization and sensor tasking** – optionally AI-enabled algorithms and systems providing for automation of resource allocation and scheduling, including the prioritization of software processes, tasking of missile tracking and surveillance resources, and power cycling of payloads
- **Seamless multi-level security (MLS) operations** – robust MLS solutions that protect NDSA operations across heterogeneous platforms, multiple warfighting domains, and at multiple levels of security
- **Cooperative maneuver** – coordinated autonomous control of space vehicles and/or payloads to achieve a desired mission effect
- **Distributed command and control in contested environments** – distributed implementations of command and control capabilities supporting the development of operational plans and courses of action, selection of courses of action, and real-time adjustments to employment strategies

III. Award Information

A. General Award Information

Multiple awards are anticipated. The amount of resources made available under this BAA will depend on the quality of the proposals received and the relatively limited availability of funds.

The Government reserves the right to select for negotiation all, some, one, or none of the proposals received in response to this solicitation and to make awards without discussions with proposers. The Government also reserves the right to conduct discussions if it is later determined to be necessary. If warranted, portions of resulting awards may be segregated into pre-priced options. Additionally, the Government reserves the right to accept proposals in their entirety or to select only portions of proposals for award. In the event that the Government desires to award only portions of a proposal, negotiations may be opened with that proposer. The Government reserves the right to fund proposals in phases with options for continued work, as applicable.

Awards under this BAA will be made to proposers on the basis of the evaluation criteria listed below (see Section VI, “Application Review Information,”) and program balance to provide overall value to the Government. The Government reserves the right to request any additional, necessary documentation once it makes the award instrument determination. Such additional information may include but is not limited to Representations and Certifications (see Section VII.B.4, “Representations and Certifications”). The Government reserves the right to remove proposals from award consideration, should the parties fail to reach agreement on award terms, conditions, and/or cost/price within a reasonable time, or the proposer fails to provide requested additional information in a timely manner. Proposals identified for negotiation may result in a procurement contract or other transaction, depending upon the nature of the work proposed, the required degree of interaction between parties, and other factors. Any requests for or assumptions regarding Government Furnished Equipment (GFE) or Government Furnished Information (GFI) shall be clearly stated in the proposal or may not be provided.

For any Other Transaction (OT) awarded in accordance with 10 U.S.C. § 2371b(f), the Government may award a follow-on production contract or OT under this BAA if: (1) that participant in the OT, or a recognized successor in interest to the OT, successfully completed the entire prototype project provided for in the OT, as modified; and (2) the OT provides for the award of a follow-on production contract or OT to the participant, or a recognized successor in interest to the OT.

In all cases, the Government contracting officer shall have sole discretion to select award instrument type, regardless of instrument type proposed, and to negotiate all instrument terms and conditions with selectees.

Any award resulting from this BAA will include a requirement for SDA permission before publishing any information related to the SDA-funded effort. The following, or similar, language will be incorporated into awards:

There shall be no dissemination or publication, except within and between the contractor and any subawardees, of information developed under this contract or contained in the reports to be furnished pursuant to this contract without prior written approval of SDA. All technical reports will be given proper review by the appropriate authority to determine which Distribution Statement is to be applied prior to the initial distribution of these reports by the Contractor.

When submitting material for written approval for open publication, the contractor/awardee must submit a request for public release to SDA and include the following information: (1) Document Information: document title, document author, short plain language description of technology discussed in the material (approx. 30 words), number of pages (or minutes of video) and document type (e.g., briefing, report, abstract, article or paper), event date, desired date for SDA's approval; (2) SDA Program Manager/COR and contract number; and (3) Contractor/Awardee's Information: POC name, email and phone. Allow four weeks for processing; due dates under four weeks require a justification. Unusual electronic file formats may require additional processing time. Requests may be sent either via email to osd.pentagon.osd-r-e.mbx.hq085021s0002@mail.mil or by mail at Space Development Agency, 3030 Defense Pentagon, Washington, DC 20301-0001.

IV. Eligibility Information

A. Eligible Applicants

All responsible sources capable of satisfying the Government's needs may submit a proposal that shall be considered by SDA. Federally Funded Research and Development Centers (FFRDCs), University Affiliated Research Centers (UARC)s, and Government Entities

a) FFRDCs and UARC)s

FFRDCs and UARC)s are subject to applicable direct competition limitations and cannot propose to this BAA in any capacity unless they meet the following conditions: (1) FFRDCs/UARC)s must clearly demonstrate that the proposed work is not otherwise available from the private sector, (2) FFRDCs/UARC)s must provide a letter, on official letterhead, from their sponsoring organization that (a) cites the specific authority establishing their eligibility to propose

to Government solicitations and compete with industry, and (b) certifies the FFRDCs/UARCs compliance with the associated FFRDC/UARC sponsor agreement's terms and conditions. These conditions are a requirement for FFRDCs/UARCs proposing to be awardees or subawardees.

All proposers are expected to address transition; transition is part of the evaluation criteria in Section VI.A. However, given their special status, FFRDCs should describe how and when a proposed technology/system will transition and identify to which Non-FFRDC organization(s).

b) Government Entities

Government Entities (e.g., Government/National laboratories, military educational institutions, etc.) are subject to applicable direct competition limitations. Government Entities must clearly demonstrate that the work is not otherwise available from the private sector and provide written documentation citing the specific statutory authority and contractual authority, if relevant, establishing their ability to propose to Government solicitations and compete with industry. This information is required for Government Entities proposing to be awardees or subawardees.

c) Authority and Eligibility

At the present time, SDA does not consider 15 U.S.C. § 3710a to be sufficient legal authority to show eligibility. While 10 U.S.C. § 2539b may be the appropriate statutory starting point for some entities, specific supporting regulatory guidance, together with evidence of agency approval, will still be required to fully establish eligibility. SDA will consider FFRDC and Government Entity eligibility submissions on a case-by-case basis; however, the burden to prove eligibility for all team members rests solely with the proposer.

2. Non-U.S. Organizations and/or Individuals

Non-U.S. organizations and/or individuals may participate to the extent that such participants comply with any necessary nondisclosure agreements, security regulations, export control laws, and other governing statutes applicable under the circumstances.

3. Classified Proposals

If a submission contains Classified National Security Information or the suspicion of such, as defined by Executive Order 13526, applicants will ensure all industrial, personnel, and information systems processing security requirements are in place and at the appropriate level (e.g., Facility Clearance Level (FCL), Automated Information Security (AIS), Certification and Accreditation (C&A), and any Foreign Ownership Control and Influence (FOCI) issues are mitigated prior to submission. Additional information on these subjects can be found at <http://www.dcsa.mil>.

B. Organizational Conflicts of Interest

FAR 9.5 Requirements

In accordance with FAR 9.5, proposers are required to identify and disclose all facts relevant to potential OCIs involving the proposer's organization and *any* proposed team member (subawardee, consultant). Under this Section, the proposer is responsible for providing this disclosure with each proposal submitted to the BAA. The disclosure must include the proposer's, and, as applicable, proposed team member's OCI mitigation plan. The OCI mitigation plan must include a description of the actions the proposer has taken, or intends to take, to prevent the existence of conflicting roles that might bias the proposer's judgment and to prevent the proposer from having unfair competitive advantage. The OCI mitigation plan will specifically discuss the disclosed OCI in the context of each of the OCI limitations outlined in FAR 9.505-1 through FAR 9.505-4.

Agency Supplemental OCI Policy

In addition, SDA has a supplemental OCI policy that prohibits contractors/performers from concurrently providing Scientific Engineering Technical Assistance (SETA), Advisory and Assistance Services (A&AS) or similar support services and being a technical performer.

Therefore, as part of the FAR 9.5 disclosure requirement above, a proposer must affirm whether the proposer or *any* proposed team member (subawardee, consultant) is providing SETA, A&AS, or similar support to SDA under: (a) a current award or subaward; or (b) a past award or subaward that ended within one calendar year prior to the proposal's submission date.

If SETA, A&AS or similar support is being or was provided to SDA, the proposal must include:

- The prime contract number;
- Identification of proposed team member (subawardee, consultant) providing the support; and
- An OCI mitigation plan in accordance with FAR 9.5.

Government Procedures

In accordance with FAR 9.503, 9.504 and 9.506, the Government will evaluate OCI mitigation plans to avoid, neutralize or mitigate potential OCI issues before award and to determine whether it is in the Government's interest to grant a waiver. The Government will only evaluate OCI mitigation plans for proposals that are determined selectable under the BAA evaluation criteria and for which funds are available.

The Government may require proposers to provide additional information to assist the Government in evaluating the proposer's OCI mitigation plan. Proposers shall clearly delineate their approach to ensure physical, organizational and financial separation of the proposing entity and the potentially conflicted entity.

If the Government determines that a proposer failed to fully disclose an OCI; or failed to provide the affirmation of SDA support as described above; or failed to reasonably provide additional information requested by the Government to assist in evaluating the proposer's OCI mitigation plan, the Government may reject the proposal and withdraw it from consideration for award.

C. Cost Sharing/Matching

Cost sharing is not required; however, it will be carefully considered where there is an applicable statutory condition relating to the selected funding instrument. Cost sharing is encouraged where there is a reasonable probability of a potential commercial application related to the proposed research and development effort.

For more information on potential cost sharing requirements for Other Transactions for Prototype, see:

[https://www.dau.edu/guidebooks/Shared%20Documents/Other%20Transactions%20\(OT\)%20Guide.pdf](https://www.dau.edu/guidebooks/Shared%20Documents/Other%20Transactions%20(OT)%20Guide.pdf)

V. Application and Submission Information

A. Application Assistance

All administrative correspondence and questions on this solicitation, including requests for information on how to submit an executive summary, invited proposal abstract, or invited full proposal to this BAA, should be directed to:

osd.pentagon.ousd-r-e.mbx.hq085021s0002@mail.mil

B. Content and Form of Submission

Proposers are **strongly encouraged** to submit an executive summary and, *if* encouraged, a proposal abstract in advance of a full proposal. This procedure is intended to minimize unnecessary effort and cost in proposal preparation and review. Proposers are reminded that SDA's ability and appetite for technology development are limited and our focus is and will remain at the architecture level so as to better serve the warfighter and ensure mission accomplishment. SDA highly values industry partnership and seeks to ensure your resources are applied efficiently wherever possible.

All submissions must be written in English with type not smaller than 12-point font. A page is defined as being no larger than an electronically formatted page of 8.5" by 11.0" with type not smaller than 12 point and margins no smaller than one (1) inch on all sides. Smaller font may be used for figures, tables, and charts. Copies of all documents submitted must be clearly labeled with the SDA BAA number, proposer organization, SDA focus area(s) as described in §II.C, and proposal title/proposal short title.

For a proposal that includes both classified and unclassified information, the proposal may be separated into an unclassified portion and a classified portion. The proposal should use the unclassified portion to the maximum extent reasonable. Submissions should be made according to the instructions outlined in Section V.C.

NOTE: Non-conforming submissions that do not follow the instructions herein may be rejected without further review.

1. Executive Summary (ES) Format

Executive summaries are **strongly encouraged** in advance of submitting invited proposal abstracts and invited full proposals in order to provide potential proposers with a rapid response to minimize unnecessary effort. Proposers should specifically and clearly address the innovation of their proposed system or subsystem component development, the scientific or technical basis for innovative claims, and the architectural impact of the proposed development on military mission capabilities, efficiency, or effectiveness. SDA policy is to treat all submissions as source selection information (see FAR 2.101 and 3.104), and to disclose their contents only for the purpose of evaluation. The executive summary should be clearly marked “EXECUTIVE SUMMARY,” and the total length shall not exceed two [2] pages. All executive summary submissions must be written in narrative form. No formal transmittal letter is required, but submissions must include the organization name, submission title, SDA focus area(s) as described in §II.C, and technical POC information (e-mail and mailing address).

2. Proposal Abstract (PA) Format

Proposers are **strongly encouraged** to submit a proposal abstract, or white paper, in advance of a proposal. Abstracts should follow the same general format as described for proposals (see V.B.3) but include **ONLY** sections I and II of Volume I, Technical and Management Proposal. The abstract must include a statement of the anticipated Rough Order of Magnitude (ROM) cost and the anticipated duration of the proposed effort. It is recommended that proposers provide sufficient information to assess the technical performance claims – SDA policy is to treat all submissions as source selection information (see FAR 2.101 and 3.104), and to disclose their contents only for the purpose of evaluation. The cover sheet should be clearly marked “ABSTRACT,” and the total length should not exceed six [6] pages. The maximum page count excludes the cover page in Volume I, Technical and Management Proposal, section I, and official transmittal letter, but does include any figures, tables, or the requested quad chart. An official transmittal letter is not required.

3. Full Proposal (FP) Format

All proposals must be in the format given below. Non-conforming proposals may be rejected without review. The typical proposal should express a consolidated effort in support of one or more related technical concepts or ideas. Disjointed efforts should not be included into a single proposal. Proposals shall consist of two volumes: 1) Volume I, Technical and Management Proposal (composed of three parts), and 2) Volume II, Cost Proposal. The maximum page limit for Volume I is 15 pages (30 pages if the proposal total value exceeds \$1 million). Bracketed numbers by each section denote page limits. The page limitation for full proposals includes all figures, tables, and charts.

Ensure that each section provides the detailed discussion of the proposed work necessary to enable an in-depth review of the specific technical and managerial issues. Specific attention must be given to addressing both risk and architectural payoff of the proposed work that make it

desirable to SDA.

Volume I, Technical and Management Proposal, described below, may include an attached bibliography of relevant technical papers or research notes (published and unpublished), which document the technical ideas and approach upon which the proposal is based. Copies of not more than three (3) relevant papers may be included with the submission. The bibliography and attached papers are not included in the page limits. The submission of other supporting materials along with the proposals is strongly discouraged and will not be considered for review.

a) Volume 1, Technical and Management Proposal

Section I: Administrative

(a) Cover Sheet to include {no page limit}:

- (1) BAA number (HQ085021S0002)
- (2) SDA focus area(s);
- (3) Lead organization submitting proposal;
- (4) Type of organization, selected among the following categories: "LARGE BUSINESS," "SMALL DISADVANTAGED BUSINESS," "OTHER SMALL BUSINESS," "HBCU," "MI," "OTHER EDUCATIONAL," OR "OTHER NONPROFIT";
- (5) Proposer's reference number (if any);
- (6) Other team members (if applicable) and type of organization for each;
- (7) Proposal title;
- (8) Technical point of contact to include: salutation, last name, first name, street address, city, state, zip code, telephone, electronic mail;
- (9) Administrative point of contact to include: salutation, last name, first name, street address, city, state, zip code, telephone, electronic mail;
- (10) Total funds requested from SDA, including total base cost, estimates of base cost in each year of the effort, estimates of itemized options in each year of the effort, and the amount of cost share (if any);
- (11) Award instrument requested: cost-plus-fixed-fee (CPFF), cost-contract – no fee, cost sharing contract – no fee, or other type of procurement contract (specify), or other transaction;
- (12) Place(s) and period(s) of performance;
- (13) Summary of the costs of the proposed research, including total base cost, estimates

of base cost in each year of the effort, estimates of itemized options in each year of the effort, and cost sharing if relevant;

- (14) Name, address, and telephone number of the proposer’s cognizant Defense Contract Management Agency (DCMA) administration office (if known);
- (15) Name, address, and telephone number of the proposer’s cognizant Defense Contract Audit Agency (DCAA) audit office (if known);
- (16) DUNS number;
- (17) TIN number;
- (18) Cage code (lead organization);
- (19) Proposal validity period (minimum 180 days);
- (20) Affirmation of existing SETA, A&AS or MSE&I support contracts (see Section IV, Section B). If none, state “None”;
- (21) Statement of Unique Capability Provided by Government or Government- Funded Team Member {no page limit};
- (22) Per *Section IV, Section A – Eligible Applicants*, proposals that include Government or Government-funded entities (i.e., FFRDC’s, UARCs, National laboratories, etc.) as prime, subcontractor or team member, shall provide a statement that clearly demonstrates the work being provided by the Government or Government- funded entity team member is not otherwise available from the private sector. If none of the team members belongs to a Government or Government-funded entity, then the proposer should state “Not Applicable.”
- (23) Date proposal was submitted.

(b) Official transmittal letter {1}

(c) Table of Contents {no page limit}

Section II: Summary of Proposal {4}

Note: The Summary of Proposal should not have any unique information not contained in the Detailed Proposal Information.

- (a) **Innovation:** Succinctly describe the uniqueness and benefits of the proposed research relative to the existing body of research and industry work. Provide a basic description of the scientific or technical basis for the innovative claims.
- (b) **Results:** Provide a short description of the deliverables associated with the proposed research – discuss the results, products, transferable technology, and transition path.

- (1) Include in this section all proprietary claims to the results, prototypes, intellectual property, or systems supporting and/or necessary for the use of the research, results, and/or prototype. If there are no proprietary claims, this should be stated. For forms to be completed regarding intellectual property, see Section IV.B.4.g of this BAA. There will be no page limit for the listed forms.
 - (2) Proposers responding to this BAA must submit a separate list of all technical data or computer software that will be furnished to the Government with other than unlimited rights. The Government will assume unlimited rights if proposers fail to identify any intellectual property restrictions in their proposals.
- (c) **Technical Rationale:** Provide a short description of the impact of the proposed development on military mission capabilities, efficiency, or effectiveness.
- (1) Should include general discussion of other research in this area.
 - (2) The purpose of this section is to explain why the specific technical approach you chose is superior to other technical approaches. This section is not intended to expand on the military utility of your concept.
- (d) **Technical Approach:** Provide a short description of the technical approach and constructive plan for accomplishment of technical goals in support of innovative claims and deliverable production.
- (e) **Experience:** Describe the unique capabilities of project and corporate team members. Describe the proposer's previous accomplishments and work in closely related research areas.
- (f) **Cost:** Cost, schedule and measurable milestones for the proposed research, including estimates of cost for each task in each year of the effort delineated by the prime and major subcontractors, total cost and company cost share, if applicable. (Note: Measurable milestones should capture key development points in tasks and should be clearly articulated and defined in time relative to start of effort.)

Section III: Detailed Proposal Information { 11, or 26 if proposal total value exceeds \$1 million }

- (a) **Statement of Work (SOW)** – In plain English, clearly define the technical tasks/subtasks to be performed, their durations, and dependencies among them. The page length for the SOW will be dependent on the amount of the effort. For each task/subtask, provide:
- (1) A general description of the technical objective (for each defined task/activity);
 - (2) A detailed description of the approach to be taken to accomplish each defined task/activity in support of the innovative claims and deliverable production;
 - (3) Identification of the primary organization responsible for task execution (prime, sub, team member, by name, etc.);

- (4) A top-level schedule for all major tasks and the completion criteria for each task/activity (a product, event or milestone that defines its completion). Please include where the effort could be partitioned into initial and future phases – future phases should be identified as options.
- (5) Define all deliverables (reporting, data, reports, hardware, software, technology, products, etc.) to be provided to the Government in support of the proposed tasks/activities; and
- (6) Clearly identify any tasks/subtasks (to be performed by either an awardee or subawardee) that will be accomplished on-campus at a university, if applicable.

Note: It is recommended that the SOW should be developed so that each Phase of the program is separately defined. The SOW is not included as part of the Volume I page limit. Do not include any proprietary information in the SOW.

(b) Technical Rationale:

- (1) Provide the technical rationale for the objective requirement, including technology advancements and value-added to DoD capabilities and the NDSA.
- (2) Provide technical rationale, scientific basis, and any supporting analysis for the technical approach for each major task/activity.
- (3) Provide a comparison of the technical objectives and technical approach with other ongoing research and existing state-of-the-art, indicating advantages and disadvantages of the proposed effort.

(c) Risk and Risk Reduction

- (1) Provide an initial list of critical technology risk areas.
- (2) Describe the formal process for identifying and tracking the risk elements that translate into critical and unique technologies, processes and system attributes associated with technology objective.
- (3) For each proposed risk reduction task:
 - i. Provide a detailed discussion of the technical objectives of each of the proposed risk reduction tasks as well as quantifiable success metrics.
 - ii. Describe the technical approach for each risk reduction task.
 - iii. Describe the value of performing the risk reduction activities during the initial phase, as opposed to deferring them until future phases.
- (4) Describe the process for identifying and evaluating applicable technologies available from other Government and industry R&D programs.

- (5) Address mitigation of life-cycle and sustainment risks associated with transitioning intellectual property for U.S. military applications, if applicable.

(d) Results

- (1) Describe the results, products, transferable technology and expected technology transfer/transition paths.
- (2) Provide a description of all proprietary claims to the results, prototypes, intellectual property, or systems. If there are no proprietary claims, this should be stated. For forms to be completed regarding intellectual property, see *Section V.B.4.g – Intellectual Property*. There will be no page limit for the listed forms.

(e) Organization

- (1) Describe the programmatic relationship of corporate team members.
 - (2) Describe the responsibilities of corporate and project team members.
 - (3) Describe the teaming strategy among the team members.
 - (4) Identify the key personnel by name and include descriptions of their roles. SDA requires key personnel identified in the proposal to be assigned as proposed, and the resulting contract/agreement will indicate no substitution shall be made without prior approval of the Government.
 - (5) Describe the proposer's previous accomplishments and work in closely related research areas.
 - (6) Submit a clearly defined organization chart for the project team which includes, as applicable:
 - The programmatic relationship of team members;
 - The unique capabilities of team members;
 - The task of responsibilities of team members;
 - The teaming strategy among the team members; and
 - The key personnel along with the amount of effort to be expended by each person during each year.
- (f) **Facilities:** Provide a description of any unique facilities necessary for execution of the proposed effort that would be used for the proposed effort.

(g) Project Management:

(1) Management Plan:

- i. Describe program management process that will be utilized to achieve the technical objective.
- ii. Include a description of how the team will function and share technical and financial information among the team members and with the Government.
- iii. Provide short résumés for the key personnel in key disciplines/risk areas.

(2) Schedule: Provide a detailed integrated schedule of all initial phase activities, including risk reduction tasks. Proposals below \$1 million should provide an Integrated Master Schedule (IMS) at a minimum at WBS Level 2. Proposals that exceed \$1 million (total proposed value, regardless of potential cost share) should provide an IMS at WBS Level 3.

- i. Measurable critical milestones should occur every two (2) to three (3) months after the start of the effort. Additional interim non-critical management milestones are also highly encouraged at regular intervals. Milestones must not include proprietary information.
- ii. Top-level schedules are required for optional phases and should be based on the proposer's initial risk reduction strategy.
- iii. Include key events and demonstrations as appropriate for the technology concept. An electronic copy of the IMS in MS Project shall be included with proposal submissions.
- iv. All tasks in the IMS shall be linked and the ability to display the critical path shall be implemented.

b) Volume II, Cost Proposal

All proposers, including FFRDCs, must submit the following: Section I: Administrative

(a) Cover sheet to include:

- (1) BAA number (HQ085021S0002);
- (2) SDA focus area(s);
- (3) Lead Organization submitting proposal;
- (4) Type of organization selected among the following categories: "LARGE BUSINESS," "SMALL DISADVANTAGED BUSINESS," "OTHER SMALL BUSINESS," "HBCU," "MI," "OTHER EDUCATIONAL," OR "OTHER NONPROFIT";
- (5) Proposer's reference number (if any);

- (6) Other team members (if applicable) and type of organization for each;
- (7) Proposal title;
- (8) Technical point of contact to include: salutation, last name, first name, street address, city, state, zip code, telephone, fax (if available), electronic mail (if available);
- (9) Administrative point of contact to include: salutation, last name, first name, street address, city, state, zip code, telephone, fax (if available), and electronic mail (if available);
- (10) Award instrument requested: cost-plus-fixed-fee (CPFF), cost-contract—no fee, cost sharing contract – no fee, or other type of procurement contract (specify), or Other Transaction;
- (11) Place(s) and period(s) of performance;
- (12) Total proposed cost separated by basic award and option(s) (if any);
- (13) Name, address, and telephone number of the proposer’s cognizant Defense Contract Management Agency (DCMA) administration office (if known);
- (14) Name, address, and telephone number of the proposer’s cognizant Defense Contract Audit Agency (DCAA) audit office (if known);
- (15) Date proposal was prepared;
- (16) DUNS number;
- (17) TIN number;
- (18) CAGE Code;
- (19) Subawardee Information; and
- (20) Proposal validity period.

Section II: Detailed Cost Proposal

Note: Nonconforming proposals may be rejected without review.

(a) Supporting Cost and Pricing Data:

- (1) The proposer should include supporting cost and pricing information in sufficient detail to substantiate the summary cost estimates and should include a description of the method used to estimate costs and supporting documentation. The Government strongly encourages that tables included in the cost proposal also be provided in an editable (e.g., MS Excel) format with calculation formulas intact

to allow traceability of the cost proposal numbers across the prime and subcontractors.

- (2) The awardee is responsible for compiling and providing all subawardee proposals for the Procuring Contracting Officer (PCO).
 - (3) Subawardee proposals should include Interdivisional Work Transfer Agreements (ITWA) or similar arrangements.
 - (4) All proprietary subawardee proposal documentation, prepared at the same level of detail as that required of the awardee's proposal and that cannot be uploaded with the proposed awardee's proposal, shall be provided to the Government either by the awardee or by the subawardee organization by e-mail (osd.pentagon.ousd-r-e.mbx.hq085021s0002@mail.mil) when the proposal is submitted.
 - (5) Where the effort consists of multiple portions that could reasonably be partitioned for purposes of funding, these should be identified as options with separate cost estimates for each.
 - (6) For IT and equipment purchases, include a letter stating why the proposer cannot provide the requested resources from its own funding.
 - (7) Each copy must be clearly labeled with the SDA BAA number, proposer organization, and proposal title (short title recommended).
- (b) Cost Breakdown Information and Format:** Detailed cost breakdown to include the following.
- (1) Provide the total cost and costs broken down by initial phase and options.
 - (2) Provide costs broken down by task for the initial phase, including at a minimum:
 - i. Major tasks by fiscal year
 - ii. A summary of projected funding requirements by month
 - iii. Direct labor, including labor categories and man-hours, and labor rates;
 - iv. Cost by the prime and major subcontractors;
 - v. Cost by major risk/activity;
 - vi. Materials;
 - vii. Other Direct Costs (ODCs) (e.g., travel, equipment, etc.);
 - viii. Overhead/Indirect charges, and rates used to calculate overhead/indirect costs; provide the source, nature, and amount of any industry cost-sharing.

(3) An itemization of major subcontracts and equipment purchases, including:

- i. Documentation supporting the reasonableness of the proposed equipment costs (vendor quotes, past purchase orders/purchase history, detailed engineering estimates, etc.) and a description of the method used to estimate costs and supporting documentation.
- ii. Identification of pricing assumptions of which may require incorporation into the resulting award instrument (e.g., use of Government Furnished Property/Facilities/Information, access to Government Subject Matter Experts, etc.)
- iii. Any information technology (IT) purchase, as defined by FAR 2.101: Documentation supporting the reasonableness of the proposed equipment costs (vendor quotes, past purchase orders/purchase history, detailed engineering estimates, etc.) shall be provided, including a letter stating why the proposer cannot provide the requested resources from its own funding for prime and all sub-awardees.

Tables included in the cost proposal in editable (e.g. MS Excel) format with calculation formulas intact. NOTE: *If PDF submissions differ from the Excel submission, the PDF will take precedence.*

(c) Cost Note

Per FAR 15.403-4, certified cost or pricing data shall be required if the proposer is seeking a procurement contract award per the referenced threshold, unless the proposer requests and is granted an exception from the requirement to submit cost or pricing data. Certified cost or pricing data are not required if the proposer proposes an award instrument other than a procurement contract (e.g. other transaction.)

(4) Subawardee Proposals

The awardee is responsible for compiling and providing all subawardee proposals for the Procuring Contracting Officer (PCO)/Agreements Officer (AO), as applicable. Subawardee proposals should include Interdivisional Work Transfer Agreements (ITWA) or similar arrangements. Where the effort consists of multiple portions that could reasonably be partitioned for purposes of funding, these should be identified as options with separate cost estimates for each.

All proprietary subcontractor proposal documentation, prepared at the same level of detail as that required of the prime and which cannot be uploaded with the proposed prime contractor's proposal, shall be provided to the Government either by the prime contractor or by the subcontractor organization by e-mail (osd.pentagon.ousd-r-e.mbx.hq085021s0002@mail.mil) when the proposal is submitted. The subject line of the e-mail shall contain the lead organization's proposal title, lead organization name, lead organization proposal submission date, and subcontractor name. The subawardee must provide the same number of copies to the PCO/AO as is required of the awardee. See Section V.C of this BAA for proposal submission information.

(5) Other Transaction Requests

The Government may award either a Federal Acquisition Regulation (FAR) based contract or an Other Transaction for Prototype (OT) agreement for prototype system development.

All proposers requesting an OT must include a detailed list of milestones. Each milestone must include the following:

- i. milestone description;
- ii. completion criteria;
- iii. due date; and
- iv. payment/funding schedule (to include, if cost share is proposed, awardee and Government share amounts).

It is noted that, at a minimum, milestones should relate directly to accomplishment of program technical metrics as defined in the BAA and/or the proposer's proposal. Agreement type, expenditure or fixed-price based, will be subject to negotiation by the Agreements Officer.

Do not include proprietary data. If the proposer requests award of an OT for Prototype as a non-traditional contractor, information must be included in the cost proposal to support the claim. The term non-traditional defense contractor, with respect to a transaction authorized under 10 USC section 2371b, means an entity that is not currently performing and has not performed, for at least the one-year period preceding the solicitation of sources by the Department of Defense for the procurement or transaction, any contract or subcontract for the Department of Defense that is subject to full coverage under the cost accounting standards prescribed pursuant to section 1502 of title 41 and the regulations implementing such section.

4. Additional Proposal Information

a) Proprietary Markings

Proposers are responsible for clearly identifying proprietary information. Submissions containing proprietary information must have the cover page and each page containing such information clearly marked with a label such as "Proprietary." NOTE: "Confidential" is a classification marking used to control the dissemination of U.S. Government National Security Information as dictated in Executive Order 13526 and should not be used to identify proprietary business information.

b) Marking Classified Submissions

Submission instructions for classified information can be found in Section V.C.2. If a determination is made that the award instrument may result in access to classified information, a SCG and/or DD Form 254 will be issued by SDA and attached as part of the award.

Classified submissions shall be transmitted and marked in accordance with the following

guidance. Security classification guidance via a Security Classification Guide (SCG) and/or SDA DD Form 254, “DoD Contract Security Classification Specification,” may be provided at a later date.

If a submission contains Classified National Security Information or the suspicion of such, as defined by Executive Order 13526, the information must be appropriately and conspicuously marked with the proposed classification level and declassification date.

Submissions requiring SDA to make a final classification determination shall be marked as follows:

“CLASSIFICATION DETERMINATION PENDING. Protect as though classified__ (insert the recommended classification level, e.g., Top Secret, Secret or Confidential)”

NOTE: Classified submissions must indicate the classification level of not only the submitted materials, but also the classification level of the anticipated award.

- c) Disclosure of Information and Compliance with Safeguarding Covered Defense Information Controls

The following provisions and clause apply to all solicitations and contracts:

DFARS 252.204-7000, “Disclosure of Information”

DFARS 252.204-7008, “Compliance with Safeguarding Covered Defense Information Controls”

DFARS 252.204-7012, “Safeguarding Covered Defense Information and Cyber Incident Reporting”

The full text of the above solicitation provision and contract clauses can be found at <https://www.acquisition.gov/dfars>.

Compliance with the above requirements includes the mandate for proposers to implement the security requirements specified by National Institute of Standards and Technology (NIST) Special Publication (SP) 800-171, “Protecting Controlled Unclassified Information in Nonfederal Information Systems and Organizations” (see <https://doi.org/10.6028/NIST.SP.800-171r1>) that are in effect at the time the BAA is issued.

- d) Approved Cost Accounting System Documentation

Proposers that do not have a Cost Accounting Standards (CAS) complaint accounting system considered adequate for determining accurate costs that are negotiating a cost-type procurement contract must complete an SF 1408. For more information on CAS compliance, see <http://www.dcaa.mil/>. To facilitate this process, proposers should complete the SF 1408 found at <http://www.gsa.gov/portal/forms/download/115778> and submit the completed form with the proposal.

e) Small Business Subcontracting Plan

Pursuant to Section 8(d) of the Small Business Act (15 U.S.C. § 637(d)) and FAR 19.702(a)(1), each proposer who submits a contract proposal and includes subcontractors might be required to submit a subcontracting plan with their proposal. The plan format is outlined in FAR 19.704.

f) Section 508 of the Rehabilitation Act (29 U.S.C. §749d)/FAR 39.2

All electronic and information technology acquired or created through this BAA must satisfy the accessibility requirements of Section 508 of the Rehabilitation Act (29 U.S.C. § 749d)/FAR 39.2.

g) Intellectual Property

All proposers must provide a good faith representation that the proposer either owns or possesses the appropriate licensing rights to all intellectual property that will be utilized under the proposed effort. If not specified, the Government will assume unlimited rights.

(1) For Procurement Contracts

Proposers responding to this BAA requesting procurement contracts will need to complete the certifications at DFARS 252.227-7017. If no restrictions are intended, the proposer should state “none.” The table below captures the requested information:

Technical Data Computer Software To be Furnished With Restrictions	Summary of Intended Use in the Conduct of the Research	Basis for Assertion	Asserted Rights Category	Name of Person Asserting Restrictions
(LIST)	(NARRATIVE)	(LIST)	(LIST)	(LIST)

(2) For All Non-Procurement Contracts

Proposers responding to this BAA requesting an Other Transaction for Prototypes Agreement shall follow the applicable rules and regulations governing these various award instruments, but, in all cases, should appropriately identify any potential restrictions on the Government’s use of any Intellectual Property contemplated under the award instrument in question. This includes both Noncommercial Items and Commercial Items. Proposers are encouraged use a format similar to that described in Paragraph (1) above. If no restrictions are intended, then the proposer should state “NONE.”

h) System for Award Management (SAM) and Universal Identifier Requirements

All proposers must be registered in SAM unless exempt per FAR 4.1102. FAR 52.204-7, “System for Award Management” and FAR 52.204-13, “System for Award Management Maintenance” are incorporated into this BAA.

International entities can register in SAM by following the instructions in this link: [https://www.sam.gov/SAM/transcript/Quick Guide for International Entity Registration.pdf](https://www.sam.gov/SAM/transcript/Quick%20Guide%20for%20International%20Entity%20Registration.pdf)

C. Submission Instructions

SDA will acknowledge receipt of all submissions. Submissions will not be returned. An electronic copy of each submission received will be retained at SDA.

The typical submission should express a consolidated effort in support of one or more related technical concepts or ideas. Disjointed or separate efforts should not be included into a single submission.

Executive summaries and proposal abstracts must be submitted on or before 4:00 PM Eastern Time, 1 December 2021. Full proposals must be submitted on or before 4:00 PM Eastern Time, 24 January 2022. Submissions received to HQ085021S0002 after these times and dates may not be evaluated. The ability to review and select proposals submitted will be contingent on availability of funds.

1. Unclassified Submission Instructions

Unclassified concepts sent in response to this BAA may be submitted via email to the following address: osd.pentagon.ousd-r-e.mbx.hq085021s0002@mail.mil. All submissions must be attached as zip files (.zip or .zipx extension). The final zip file should be no greater than 20 MB in size. Only one zip file will be accepted per submission. Submissions should be made separately – multiple submissions submitted in the same email (or zip file) will not be reviewed.

Classified submissions and proposals should NOT be submitted to this email address. Instructions for a proposal that includes both classified and unclassified information can be found below under “Submission Instructions for both Classified and Unclassified Submissions.”

2. Classified Submission Instructions, Requirements, and Procedures **Classified submissions shall NOT be emailed to the unclassified address.**

Proposers submitting classified information must have, or be able to obtain prior to award, cognizant security agency approved facilities, information systems, and appropriately cleared/eligible personnel to perform at the classification level proposed. All proposer personnel performing Information Assurance (IA)/Cybersecurity related duties on classified Information Systems shall meet the requirements set forth in DoD Manual 8570.01-M (Information Assurance Workforce Improvement Program). Additional information on the subjects discussed in this section may be found at <http://www.dss.mil>.

Proposers choosing to submit classified information from other collateral classified sources (i.e., sources other than SDA) must ensure (1) they have permission from an authorized individual at the cognizant Government agency (e.g., Contracting Officer, Program Manager); (2) the

proposal is marked in accordance with the source Security Classification Guide (SCG) from which the material is derived; and (3) the source SCG is submitted along with the proposal.

a) Confidential, Secret, and Top Secret Information

Use transmission, classification, handling, and marking guidance provided by previously issued SCGs, the DoD Information Security Manual (DoDM 5200.01, Volumes 1 - 4), and the National Industrial Security Program Operating Manual, including the Supplement Revision 1 (DoD 5220.22-M and DoD 5200.22-M Sup. 1), when submitting Confidential, Secret, and/or Top Secret classified information.

b) Confidential and Secret

Confidential and Secret classified information shall be emailed to: OSD.SDA.Proposals@mail.smil.mil.

c) Top Secret Information

Top Secret information shall be emailed to: SDA.Proposals@osdj.ic.gov.

d) Sensitive Compartmented Information (SCI)

SCI must be marked, managed and transmitted in accordance with DoDM 5105.21 Volumes 1 - 3. Questions regarding the transmission of SCI may be sent to the SDA Technical Office Program Security Officer (PSO) via the BAA mailbox or by contacting the SDA Special Security Officer (SSO) at 703-812-1970.

Successful proposers may be sponsored by SDA for access to SCI. Sponsorship must be aligned to an existing DD Form 254 where SCI has been authorized. Questions regarding SCI sponsorship should be directed to the attention of the SDA Personnel Security Office via email to osd.pentagon.ousd-r-e.mbx.hq085021s0002@mail.mil.

e) Special Access Program (SAP) Information

SAP information must be marked in accordance with DoDM 5205.07 Volume 4 and transmitted by specifically approved methods which will be provided if required.

Proposers choosing to submit SAP information from an agency other than SDA are required to provide the R&E PSO written permission from the source material's cognizant Special Access Program Control Officer (SAPCO) or designated representative. For clarification regarding this process, contact SDA at osd.pentagon.ousd-r-e.mbx.hq085021s0002@mail.mil.

Additional SAP security requirements regarding facility accreditations, information security, personnel security, physical security, operations security, test security, classified transportation plans, and program protection planning may be specified in the DD Form 254.

NOTE: All proposals containing Special Access Program (SAP) information must be processed on a SAP information technology (SAP IT) system that has received an Approval- to-Operate

(ATO) from the R&E PSO or other applicable SAP IT Authorizing Official. The SAP IT system ATO will be based upon the Risk Management Framework (RMF) process outlined in the Joint Special Access Program Implementation Guide (JSIG), current version (or successor document). (Note: A SAP IT system is any SAP IT system that requires an ATO. It can range from a single laptop/tablet up to a local or wide area network.)

The Department of Defense mandates the use of a component's SAP enterprise system unless a compelling reason exists to use a non-enterprise system. SDA must approve any performer proposal to acquire, build, and operate a non-enterprise SAP IT system during the awarded period of performance.

SAP IT disposition procedures must be approved by SAPCO, IAW the OSD SAPCO Memorandum, "Disposition of DoD Special Access Program Information Technology Devices," July 27, 2017.

3. Submission Instructions for both Classified and Unclassified Submissions

For a proposal that includes both classified and unclassified information, the proposal must be separated into an unclassified portion and a classified portion. The proposal should include as much information as possible in the unclassified portion and use the classified portion ONLY for classified information. The unclassified portion can be submitted to osd.pentagon.ousd-r-e.mbx.hq085021s0002@mail.mil, per the instructions in "Unclassified Submission Instructions" above. The classified portion must be provided separately, according to the instructions outlined in the 'Classified Submission Instructions, Requirements, and Procedures' section above.

D. Funding Restrictions

No Applicable.

E. Other Submission Requirements

Not Applicable.

VI. Application Review Information

A. Evaluation Criteria

Conforming proposals will be evaluated using the following criteria, listed in descending order of importance. Evaluators will base their conclusions only on information contained in the proposal. It cannot be assumed that evaluators are acquainted with the firm or key individuals or any referenced experiments. Relevant supporting data such as journal articles, literature, including Government publications, etc., should be contained or referenced in the proposal and will count toward the page limit.

1. Overall Scientific and Technical Merit

The proposed technical approach is innovative, feasible, achievable, and complete.

Concepts should specifically and clearly address the innovation proposed and the scientific or technical basis of the claims.

The proposed technical team should reflect the expertise and experience to accomplish the proposed tasks. Task descriptions and associated technical elements provided are complete and in a logical sequence with all proposed deliverables clearly defined such that a final outcome that achieves the goal can be expected as a result of award. Sufficient information demonstrating an executable course of research should be provided for reviewers to determine whether it would enable capabilities beyond state-of-the-art. The proposal identifies major technical risks and planned mitigation efforts are clearly defined and feasible. Barriers to implementation should be discussed and addressed.

2. Potential Contribution and Relevance to the SDA Mission

Proposals will also be assessed against the SDA mission and the focus on NDSA enhancements that benefit the warfighter. Specifically, proposals that can clearly and evidentially demonstrate the military utility if fielded in a proliferated space architecture will be evaluated more favorably. SDA is not interested in approaches or technologies that are comparable to the current state of practice, or duplicative of on-going efforts.

Proposals will also be evaluated on the potential for commercial (Government or private sector) application and the benefits expected to accrue from resulting commercialization or commoditization. SDA is interested in technologies that can be rapidly introduced into the proliferated LEO space marketplace in component, subsystem or system form. Specifically, proposals that can clearly and evidentially demonstrate the ability for the technology to be produced, acquired, and integrated at scale will be evaluated more favorably. In addition, technologies which have the potential to become commodity components, subsystems or systems are also of interest and will be evaluated more favorably.

The proposer will be evaluated on their capability to transition the technology to the research, industrial, and/or operational military communities in such a way as to enhance U.S. defense. In addition, this evaluation will take into consideration the extent to which the proposed intellectual property (IP) rights will potentially impact the Government's ability to transition the technology to the research, industrial, and operational military communities.

3. Cost Realism

The proposed costs are realistic for the technical and management approach and accurately reflect the technical goals and objectives of the solicitation. The proposed costs are consistent with the proposer's Statement of Work and reflect a sufficient understanding of the costs and level of effort needed to successfully accomplish the proposed technical approach. The costs for the prime proposer and proposed subawardees are substantiated by the details provided in the proposal (e.g., the type and number of labor hours proposed per task, the types and quantities of materials, equipment and fabrication costs, travel and any other applicable costs and the basis for the

estimates).

It is expected that the effort will leverage all available relevant prior research in order to obtain the maximum benefit from the available funding. For efforts with a likelihood of commercial application, appropriate direct cost sharing may be a positive factor in the evaluation. SDA recognizes that undue emphasis on cost may motivate proposers to offer low-risk ideas with minimum uncertainty and to staff the effort with junior personnel in order to be in a more competitive posture. SDA *strongly* discourages such cost strategies.

4. Realism of Proposed Schedule

The proposed schedule aggressively pursues performance metrics in an efficient time frame that accurately accounts for the anticipated workload. The proposed schedule identifies and mitigates any potential schedule risk.

5. Proposer's Capabilities and/or Related Experience

Proposals will be evaluated based on the qualifications of the proposed principal/key investigators, supporting staff, and consultants. These staff should reflect the expertise and experience to accomplish the proposed tasks. Qualifications include not only the ability to perform the research and development but also the ability to commercialize/commoditize the results. The proposer's prior experience in similar efforts clearly demonstrates an ability to deliver the product proposed, meeting the proposed technical performance within the proposed budget and schedule. The proposed team has the expertise to manage the cost and schedule. Similar efforts completed/ongoing by the proposer in this area are fully described including identification of other Government sponsors.

B. Review of Submissions

1. Review Process

It is the policy of SDA to ensure impartial, equitable, comprehensive evaluations based on the criteria listed in Section VI.A and to select the source (or sources) whose offer is consistent with the Government's technical, policy, and programmatic goals. In order to provide the desired evaluation, qualified Government personnel will conduct reviews and (if necessary) convene panels of experts in the appropriate areas. SDA will conduct a scientific/technical review of each conforming proposal. Conforming proposals comply with all requirements detailed in this BAA; proposals that fail to do so may be deemed non-conforming and may be removed from consideration. Proposals will not be evaluated against each other since they are not submitted in accordance with a common work statement. SDA's intent is to review proposals as soon as possible after they arrive; however, proposals may be reviewed periodically for administrative reasons.

Award(s) will be made to proposers whose proposals are determined to be the most advantageous to the Government, consistent with instructions and evaluation criteria specified in the BAA herein, and availability of funding.

2. Handling of Source Selection Information

SDA policy is to treat all submissions as source selection information (see FAR 2.101 and 3.104), and to disclose their contents only for the purpose of evaluation. Restrictive notices notwithstanding, during the evaluation process, submissions may be handled by support contractors for administrative purposes and/or to assist with technical evaluation. All SDA support contractors performing this role are expressly prohibited from performing SDA-sponsored technical research and are bound by appropriate nondisclosure agreements. Subject to the restrictions set forth in FAR 37.203(d), input on technical aspects of the proposals may be solicited by SDA from non-Government consultants/experts who are strictly bound by the appropriate nondisclosure requirements.

3. Federal Awardee Performance and Integrity Information (FAPIIS)

Per 41 U.S.C. 2313, as implemented by FAR 9.103 and 2 CFR § 200.205, prior to making an award above the simplified acquisition threshold, SDA is required to review and consider any information available through the designated integrity and performance system (currently FAPIIS). Awardees have the opportunity to comment on any information about themselves entered in the database, and SDA will consider any comments, along with other information in FAPIIS or other systems prior to making an award.

VII. Award Administration Information

A. Selection Notices and Notifications

All official notifications will be sent via email to the Technical and/or Administrative POC identified within the submission. SDA will attempt to reply to executive summaries in writing within thirty (30) calendar days. SDA will attempt to reply to proposal abstracts and full proposals via the same method within forty-five (45) and sixty (60) days, respectively.

1. Executive Summaries

SDA will respond to executive summaries with a statement as to whether SDA is interested in the idea. A letter of interest will encourage the submission of a proposal abstract. Regardless of SDA's response to an executive summary, proposers may submit a proposal abstract or a full proposal but do so with the understanding that funding or interest levels may not support selection for award. SDA will review all submissions submitted using the published evaluation criteria and without regard to any comments resulting from the review of an executive summary.

2. Proposal Abstracts

SDA will respond to abstracts with a statement as to whether SDA is interested in the idea. If SDA does not recommend the proposer submit a full proposal, SDA will provide feedback to the proposer regarding the rationale for this decision. Regardless of SDA's response to an abstract, proposers may submit a full proposal but do so with the understanding that funding or interest levels may not support selection for award. SDA will review all conforming full proposals using the published evaluation criteria and without regard to any comments resulting from the review of an abstract.

A favorable response to a proposal abstract *is not* an assurance that a full proposal on the proposal abstract's topic will ultimately be selected for award.

3. Full Proposals

All full proposals must be determined to be conforming in order to receive an evaluation. Proposals that are determined to be "Non-Conforming" will receive a "Non-Conforming" letter.

After the evaluation of a proposal is complete, the proposer will be notified that (1) the proposal has been selected for funding pending award negotiations, in whole or in part, or (2) the proposal has not been selected.

B. Administrative and National Policy Requirements

1. Meeting and Travel Requirements

There will be a program kickoff meeting and all key participants are required to attend. Performers should also anticipate regular program-wide PI Meetings and periodic site visits at the Program Manager's discretion.

2. FAR and DFARS Clauses

Solicitation clauses in the FAR and DFARS relevant to procurement contracts and FAR and DFARS clauses that may be included in any resultant procurement contracts are incorporated herein and can be found at <https://www.acquisition.gov/browse/index/far>.

3. Controlled Unclassified Information (CUI) on Non-DoD Information Systems

Further information on Controlled Unclassified Information on Non-DoD Information Systems is incorporated herein and can be found in DoD 5200.48 "Controlled Unclassified Information (CUI)" at:

<https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodi/520048p.PDF>

4. Representations and Certifications

In accordance with FAR 4.1102 and 4.1201, proposers requesting a procurement contract must complete electronic annual representations and certifications at <https://www.sam.gov/>. In addition, resultant procurement contracts may require supplementary SDA-specific representations and certifications.

C. Reporting

The number and types of reports will be specified in the award document, but will include as a minimum monthly technical and financial status reports. The reports shall be prepared and submitted in accordance with the procedures contained in the award document and mutually agreed on before award. Reports and briefing material will also be required as appropriate to document

progress in accomplishing program metrics. A Final Report that summarizes the project and tasks will be required at the conclusion of the performance period for the award, notwithstanding the fact that the research may be continued under a follow-on vehicle. At least one copy of each report will be delivered to SDA and not merely placed on a SharePoint site.

D. Electronic Systems

1. Wide Area Work Flow (WAWF)

Performers will be required to submit invoices for payment directly to <https://wawf.eb.mil>, unless an exception applies. Performers must register in WAWF prior to any award under this BAA.

VIII. Agency Contacts

Administrative, technical, or contractual questions should be sent via e-mail to osd.pentagon.ousd-r-e.mbx.hq085021s0002@mail.mil. All requests must include a name, e-mail address, and phone number of an organizational point of contact.

IX. Other Information

N/A