

DEPARTMENT OF THE ARMY
SMALL BUSINESS INNOVATION RESEARCH (SBIR) PROGRAM
SBIR 21.4 Broad Agency Announcement (BAA)
Small Business Opportunity (SBO) Announcement

November 24, 2020: SBO issued for pre-release

December 8, 2020: Army begins accepting proposals

January 12, 2021: Deadline for receipt of proposals no later than **12:00 p.m. ET**

IMPORTANT

Deadline for Receipt: Proposals must be **completely** submitted no later than **12:00 p.m. ET**, January 12, 2021. Proposals submitted after 12:00 p.m. will not be evaluated. The final proposal submission includes successful completion of all firm level forms, all required volumes, and electronic corporate official certification.

Classified proposals will not be accepted under the DoD SBIR Program.

This BAA and the Defense SBIR/STTR Innovation Portal (DSIP) sites are designed to reduce the time and cost required to prepare a formal proposal. The DSIP is the official portal for DoD SBIR/STTR proposal submission. Proposers are required to submit proposals via DSIP; proposals submitted by any other means will be disregarded. Proposers submitting through this site for the first time will be asked to register. Effective with this announcement, firms are required to register for a login.gov account and link it to their DSIP account. See section 4.14 for more information regarding registration.

The Small Business Administration, through its SBIR/STTR Policy Directive, purposely departs from normal Government solicitation formats and requirements and authorizes agencies to simplify the SBIR/STTR award process and minimize the regulatory burden on small business. Therefore, consistent with the SBA SBIR/STTR Policy Directive, the Department of Defense is soliciting proposals as a Broad Agency Announcement.

SBIR/STTR Updates and Notices: To be notified of SBIR/STTR opportunities and to receive e-mail updates on the DoD SBIR and STTR Programs, you are invited to subscribe to our Listserv by emailing DoDSBIRSupport@reisystems.com.

Help Desk: If you have questions about the Defense Department's SBIR or STTR Programs, please call the DoD SBIR/STTR Help Desk at 1-703-214-1333, or email to DoDSBIRSupport@reisystems.com.

Topic Q&A: The Topic Q&A for this BAA opens on November 24, 2020 and closes to new questions on December 23, 2020 at 12:00 PM ET. Proposers may submit written questions through Topic Q&A at <https://www.dodsbirsttr.mil/submissions/login>. In Topic Q&A, the questioner and respondent remain anonymous and all questions and answers are posted electronically for general viewing. Once the BAA closes to proposal submission, no communication of any kind with the topic author or through Topic Q&A regarding your submitted proposal is allowed.

Questions should be limited to specific information related to improving the understanding of a particular topic's requirements. Proposing firms may not ask for advice or guidance on solution approach and you may not submit additional material to the topic author. If information provided during an exchange with the topic author is deemed necessary for proposal preparation, that information will be made available to all parties through Topic Q&A. Proposing firms are advised to monitor Topic Q&A during the BAA period for questions and answers. Proposing firms should also frequently monitor DSIP for updates and amendments to the topics.

This Small Business Opportunity (SBO) is issued under the Army Broad Agency Announcement (BAA) for SBIR/STTR 21.4. All proposals in response to the technical area(s) described herein will be submitted in accordance with the instructions provided under 21.4, found here:

https://beta.sam.gov/opp/b79ded14dcf54451bcfb11bddf5cd259/view?keywords=%22army%20sbir%22&sort=-relevance&index=opp&is_active=true&page=1.

a. Eligibility

The eligibility requirements for the SBIR/STTR programs are unique and do not correspond to those of other small business programs. Please refer to Section 3.1, Eligible Applicants, of BAA 21.4 for full eligibility requirements.

b. Anticipated Structure/Award Information

Please refer to Section 1, Funding Opportunity Description, provided in BAA 21.4 for detailed information regarding SBIR/STTR phase structure and flexibility. For this BAA, Department of the Army will accept Phase I proposals for the cost of up to \$256,000 for a 4-month period of performance. Proposers should refer to Section 4, Application and Submission information, of BAA 21.4 for detailed proposal preparation instructions. Proposals that do not comply with the requirements detailed in BAA 21.4 and the research objectives of this SBO are considered non-conforming and therefore are not evaluated nor considered for award.

Phase I proposals shall not exceed 5 pages. Phase I commercialization strategy shall not exceed 2 pages. This should be the last section of the Technical Volume and will not count against the 5-page limit. Please refer to Appendix A of BAA 21.4 for detailed instructions on Phase I proposal preparation.

c. Evaluation of Proposals

Section 5, Evaluation of Proposals, in BAA 21.4 provides detailed information on proposal evaluation and the selection process for this SBO.

d. Due Date/Time

Full proposal packages (Proposal Cover Sheet, Technical Volume, and Price/Cost Volume inclusive of supporting documentation) must be submitted via the DoD SBIR/STTR Proposal Submission website per the instructions outlined in BAA 21.4 Section 4.3 Electronic Submission no later than **12:00 p.m. ET, January 12, 2021**.

Army SBIR 21.4 Topic Index

A214-001 Identifying and Enabling Emerging Technology Leaders

A214-001

TITLE: Identifying and Enabling Emerging Technology Leaders

OBJECTIVE:

The Army is supporting the identification and development of a new class of “Emerging Technology Leaders” (ETLs). An ETL is a uniformed expert who serves as the interface between the Army's operational community and the technical community (i.e. scientists, engineers, and technologists). The Army seeks research solutions leveraging data science and/or machine learning techniques that will revolutionize how the Army recruits, develops, selects, and distributes talent across the force.

DESCRIPTION:

The Army seeks a software and/or data analytics tool that provides robust recommendations for critical ETL selection and recommendation criteria, including:

- Skill identification: Unbiased identification and estimation of an individual's skills based on standard CV/resume input; Identification and estimation of a job's required skills based on a job description.
- Talent Recruitment: Strategies for targeting specific workforce sectors with prescribed sectors of elite talent.
- Talent Selection: Unbiased assessment and comparison regarding applicability of certain skillsets as compared to workforce requirements.
- Talent Development: Tell individuals what their skill deficiencies are and what jobs/opportunities would increase those skills; and
- Talent Distribution: Predictive analytics for optimizing distribution of civilian/military/contractor talent across the force.

Any submissions should be able to explain (in math, code, and/or theory) how skill identification and career planning capabilities work, demonstrate these functions with novel data, and identify limitations of the product (technical or data related).

PHASE I:

Develop operational concept and construct for theory, mathematics, and/or algorithms that inform Emerging Technology Leader (ETL) identification, recruitment, selection, development and deployment/distribution. The Phase I deliverable should explain the algorithms, software concepts, potential use cases, and potential limitations for applicability within the Army.

PHASE II:

Develop and demonstrate a technically feasible software prototype that showcases how the solution addresses the challenges described in the DESCRIPTION of this topic and meets or exceeds the OBJECTIVE of this topic. The demonstration shall show the prototype as a proof-of-concept in a form-factor compatible with Army uniformed officer staffing and deployment decisions.

PHASE III: This SBIR would integrate software analytics and machine learning algorithms as a pathfinder initiative, highlighting the reduction of workload requirements for manual staffing decisions enabled by integrated machine learning, neural network algorithms, and/or other data analytic techniques. Dual-use should consider applications in the hi-tech business sector.

KEYWORDS: Leader recruitment; Talent Management; Machine Learning; Skill Development;

REFERENCES:

- US Army. (2020). US Army Talent Management Strategy. Retrieved From: <https://talent.army.mil>

- US Army. (2019). 2019 Army Modernization Strategy: Investing in the Future. Retrieved from: https://www.army.mil/e2/downloads/rv7/2019_army_modernization_strategy_final.pdf
- US Department of Defense. (2018). 2018 National Defense Strategy of the United States Summary, 11. Retrieved from: <https://www.defense.gov/Portals/1/Documents/pubs/2018-National-Defense-Strategy-Summary.pdf>