**Component: AIR FORCE**

**Topic #:** AF201-DCSO1

**Title:** Direct to Phase II Open Topic: Open Call for Innovative Defense-Related Dual-Purpose Technologies/Solutions with a Clear Air Force Stakeholder Need

**Technology Areas:** Info Systems

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**OBJECTIVE:** This is an AF Special Topic, please see the above AF Special Topic instructions for further details. A Phase II may be awarded for a maximum period of 27 months and $1.5M. The objective of this topic is to explore Innovative Defense-Related Dual-Purpose Technologies that may not be covered by any other specific SBIR topic and thus to explore options for solutions that may fall outside the Air Force’s current fields of focus but that may be useful to the US Air Force. This topic will reach companies that can complete a feasibility study and prototype validated concepts in an accelerated II schedule. This topic is specifically aimed at later stage development rather than earlier stage basic science and research.

**DESCRIPTION:** The Air Force is a large and complex organizations that consists of many functions that have similar counterparts in the commercial sector. We are interested in exploring innovative technology domains that have demonstrated clear commercial value in the non-defense sector (i.e., through existing products/solutions) in order to see if they have similar Air Force applications (i.e. Dual-Purpose Technologies/Solutions). We recognize that it is impossible to cover every technological area with the SBIR topics, thus this topic is intended to be a call for open ideas and technologies that cover topics that may not be currently listed (i.e. the unknown-unknown). It is important that any potential solutions have a high probability of keeping pace with the technological change and thus should be closely tied to commercial technologies and solutions that will help support the development of the solution. This topic is meant for innovative non-defense commercial solutions to be adapted in innovative ways to meet DoD stakeholders’ needs in a short timeframe and at a low cost. Solutions for this topic should be focused on the three areas listed below and should try to meet as many of these as possible. 1. Technical feasibility – There should be minimal technical risk to the overall solution. The best solutions will have demonstrated technical feasibility by showing the solution being used broadly by other customers, especially in the non-defense space. 2. Financial Sustainability – The offeror(s) should demonstrate financial sustainability of the solution and the offeror(s). The best solutions will demonstrate this by sales of the solution to non-defense clients and other sources of private investment. 3. Defense Need – The offeror(s) should demonstrate that they have an understanding of the fit between their solution and defense stakeholders. The best solutions will demonstrate this with documentation (i.e. a signed memo) from a specific, empowered end-user and customer (the end-user and customer may not be the same person) in the USAF who is ready and willing to participate in the trial of the proposed prototype solution. This should include specific objectives and measurable (quantitative) key results that the proposed solution can achieve to meet the needs of the AF end-user and customer. In summary - proposals for this topic should demonstrate a product-market fit between an Air Force end-user and the proposed adaptation of an existing non-defense commercial solution. This can be done through a proposal with a mature non-defense technical solution with a clear understanding of how it can be adapted to meet the specific needs of an Air Force Customer along with documentation from a specific motivated and empowered AF end-user and customer who is ready and willing to participate in the trial of the proposed prototype solution. AREAS OF FOCUSED DEFENSE NEED FOR 19.2 OPEN TOPIC For this round of special topics, we have noticed a significant amount of potential AF defense end-users with interest in the topics listed below, meaning that if your solution can help address these problem areas, there are likely to be a good number of AF End-Users and customers that you can interact with in your phase II implementation. If you believe your solution can help address one of the focused defense needs, please note this in your application slide deck. Note that this does not change the requirement to demonstrate the defense need as listed above. This also does not preclude companies who are looking to solve other problems to submit to this topic, it is simply intended to give indications of areas of special focus for the Air Force at this particular point in time. Link to Focus Areas: [afwerx.af.mil/sbir.html](http://afwerx.af.mil/sbir.html)

**PHASE I:** This topic is intended for technology that has proven it can go directly into a Phase II SBIR, and thus will not have a Phase I.

**PHASE II:** Develop, install, integrate and demonstrate the proposed solution prototype system. This demonstration should focus specifically on: 1. Evaluating the proposed solution against the proposed objectives and measurable key results. 2. Describing in detail how the installed solution differs from the non-defense commercial offering to solve the Air Force need and how it can be scaled to be adopted widely (i.e. how can it be modified for scale) 3. A clear transition path for the proposed solution that takes into account input from all affected stakeholders including but not limited to: end users, engineering, sustainment, contracting, finance, legal, and cyber security. 4. Specific details about how the solution can integrate with other current and potential future solutions. 5. How the solution can be sustainable (i.e. supportability) 6. Clearly identify other specific DoD or governmental customers who want to use the solution.
PHASE III DUAL-USE APPLICATIONS: This is the main goal of this topic, we intend for many of the solutions to go straight from Phase II to Phase III as soon as the product-market fit has been verified. The contractor will transition the adapted non-defense commercial solution to provide expanded mission capability to a broad range of potential government and civilian users and alternate mission applications.

NOTES:

a. Due to the large amount of expected interest in this topic, we will not be answering individual questions through e-mail, except in rare cases. Instead we will be holding a teleconference to address all questions in an efficient manner. This topic will be updated with the final call-in details as soon as the date is finalized. In the meantime, feel free to use the SITIS Q&A system.

b. This SBIR is NOT awarding grants, and is awarding contracts, when registering in SAM.gov, be sure to select ‘YES’ to the question ‘Do you wish to bid on contracts?’ in order to be able to compete for this SBIR topic. If you are only registered to compete for grants, you will be ineligible for this topic. For more information please visit afwerx.af.mil/sbir.html

c. We are working to move fast, please register in SAMs and if already registered please double check your CAGE codes, company name, address information, DUNS numbers, etc., if they are not correct at time of submission, you will be ineligible for this topic. In order to ensure this, please include, in your 15-slide deck, a screenshot from SAM.gov as validation of your correct CAGE code, DUNS number and current business address along with the verification that you are registered to compete for All Contracts. It is the responsibility of the contractor to ensure that the data in the proposal and the data in SAM.gov are aligned. For more information please visit afwerx.af.mil/sbir.html

d. In order to keep pace with the fast timeline, if the purchase orders are not signed and returned to the contracting office within 5 business days of receipt, a Phase I award will not be issued.

e. Please note that each company may only have one active ‘Open Topic’ award at a time. If a company submits multiple technically acceptable proposals, only the proposal with the highest evaluation will be awarded. If multiple proposals are evaluated to be equal, the government will decide which proposal to award based upon the needs of the Air Force. If a contractor is currently executing a Phase II award under the previous ‘Open’ topics (18.2-005, 18.3-005, 18.3-006, 19.1-004, 19.1-005), the company is ineligible for this topic. If the company applies for both the Direct to Phase II ‘Open Topic’ (192-D001) and this topic, and the company is selected for award for both topics, only the Direct to Phase II (192-D001) proposal will be awarded. All awards are subject to the availability of funds and contracting negotiations.

f. The ‘DoD SBIR/STTR Programs Funding Agreement Certification’ form must be completed and signed at the time of *Proposal Submission* and can be found at afsbirsttr.af.mil/Program/Phase-I-and-II.

g. It is the responsibility of the contractor to answer the questions in the SBIR Cover Sheet and on the ‘DoD SBIR/STTR Programs Funding Agreement Certification’ accurately.

h. While these are firm fixed price contracts, it is important for the companies to include the cost volume in the SBIR online application with reasonable fidelity in order to determine the reasonableness of the proposed effort.

*****Proposals submitted under this topic may relate to technologies restricted under the International Traffic in Arms Regulation (ITAR) which controls defense-related materials/services import/export, or the Export Administration Regulation (EAR) which controls dual use items. Foreign National is defined in 22 CFR 120.16 as a natural person who is neither a lawful permanent resident (8 U.S.C. § 1101(a)(20)), nor a protected individual (8 U.S.C. § 1324b(a)(3)). It also includes foreign corporations, business associations, partnerships, trusts, societies, other entities/groups not incorporated/organized to do business in the United States, international organizations, foreign governments, and their agencies/subdivisions.

Offerors must identify Foreign National team members, countries of origin, visa/work permits possessed, and Work Plan tasks assigned. Additional information may be required during negotiations to verify eligibility. Even if eligible, participation may be restricted due to U.S. Export Control Laws.

NOTE: Export control compliance statements are not all-inclusive and do not remove submitters’ liability to 1) comply with applicable ITAR/EAR export control restrictions or 2) inform the Government of potential export restrictions as efforts proceed.*****

REFERENCES:


KEYWORDS: Open, Other, Disruptive, Radical, Dual-Use, Commercial