I. Background and Purpose

The U.S. Army would like to invite interested entities to participate in the xTechPacific competition, a forum for eligible small businesses in the U.S. Pacific region to engage with the Army, earn prize money, participate in the accelerator program, and submit for a Phase I SBIR or Direct to Phase II award. xTechPacific offers an opportunity for eligible participants to pitch novel technology solutions directly to the Army addressing tyranny of distance challenges faced by the U.S. Pacific region.

The U.S. Army Combat Capabilities Development Command (DEVCOM)-Pacific, U.S. Army Pacific (USAPAC), and Hawaii Technology Development Corporation (HTDC) in partnership with the Assistant Secretary of the Army (Acquisition, Logistics, and Technology) (ASA(ALT)), recognizes that the Army must enhance engagements with eligible small businesses by: (1) understanding the spectrum of 'world-class' technologies being developed commercially that may benefit the Army; (2) integrating the sector of commercial innovators into the Army's Science and Technology (S&T) ecosystem; and (3) providing mentorship and expertise to accelerate, mature, and transition technologies of interest to the Army.

The xTechPacific competition will consist of three-rounds: (1) Call for concept white papers (2) Virtual Technology Pitch event and (3) Final Pitch event, awarding up to \$800,000 in cash prizes to select eligible entities throughout the competition. Ultimately, up to 20 finalists will be selected from the virtual technology pitch event and will receive a cash prize of \$20,000 each and an invitation to demonstrate their innovative technology solutions to Army challenges during the final pitch event. Up to 10 participants will be selected as the final winners of the competition upon conclusion of the finals pitch event and will receive an additional cash prize of \$25,000 each and the opportunity to submit for a Phase I SBIR award of up to \$250,000 each or a Direct to Phase II worth up to \$1.9M each. Details on the prize structure are listed in this announcement. In addition to non-dilutive cash prizes, participants will have the opportunity to engage with Army partners through information sharing and networking opportunities. Finalists will be entered into the xTech Accelerator to receive intensive mentorship and access to networking events to help grow their companies for Army and commercial users.

The efforts described in this notice are being pursued under the authorities of 10 U.S.C. § 4025 (formerly 2374a, Prizes for Advanced Technology Achievements) and 15 U.S.C. § 638 and 10 U.S.C. § 4003 (Prototype Projects) to award cash prizes and SBIR awards to only those eligible entities as described in this announcement. While the authority of this program is 10 U.S.C. § 4025, the xTechPacific competition may generate interest by another U.S. Army, DOD or USG organization for a funding opportunity outside of this event. The interested organization may contact the participant to provide additional information which may or may not result in partnership opportunities.

II. Eligibility Requirements

The xTechPacific competition is voluntary and open to U.S.-based sole proprietors and small businesses within Alaska, Hawaii or Washington.

The U.S.-based entities allowed to participate in this competition include:

Sole proprietors (someone who owns an unincorporated business by themselves);

- Small businesses in accordance with Small Business Administration guidance under 13 Code of Federal Regulations (CFR) § 121.201; or
- Any entity willing and able to be registered as a small business, meeting the requirements of 13 CFR §121.201, if selected to participate in this competition.

Each eligible entity:

- Shall be incorporated in, and maintain, a primary place of business in Alaska, Hawaii, or Washington;
- Must be less than 500 employees and at least 50% owned or operated by U.S. citizens or permanent residents;
- May not be a federal entity or employ a federal employee acting within the scope of their employment; and
- Is required to register in System for Award Management (SAM) and have or obtain an
 active CAGE code and DUNS number. Instructions on how to obtain a CAGE code can
 be found on the registration page.

III. Topics and Problem Statements

It has been noted that when it comes to conflict, America is often the "away team." The U.S. is often fighting wars in areas thousands of miles from U.S. shores. This fact creates a "tyranny of distance," meaning that, distance lessens military strength and increases the cost of conflicts. The impact of long distances can affect overall strategy, tactics, and logistics. Even with unrivaled capabilities, the ability to collect and understand intelligence can decay over distance. The supply chain is also heavily impacted, as distance increases, the time to provide supplies increases, supply routes can be contested, and even when supplies arrive safely, upkeep and maintenance are still a concern. These are just a few of the ways that distance impacts the effectiveness of our military overseas.

The U.S. Army is interested in enabling technologies that could help overcome the "tyranny of distance". Examples of technologies that address this issue include but are not limited to the following domains:

- Logistics/Supply Chain: To ensure rapid resupply of material and aid.
- **Sustainment and Climate:** To limit the need for resupply across geographically dispersed troops.
- **Communications:** To ensure secured communication in degraded environments over extraordinary distances.
- Internet of Things (IoT)/Sensing: To increase force control and introduce autonomous capabilities in Theater.
- **Information Advantage:** To increase real-time situational awareness through information operations and a commons intelligence picture.

These examples have been identified by U.S. Army experts as being challenge areas of interest, **but submissions** <u>are not limited to the list of provided domains</u>. Each domain is furthered defined in **Appendix A**.

IV. Program Submission

The xTechPacific competition is voluntary and open to all entities that meet the eligibility requirements. You may submit more than one proposal for each topic area, but solutions must be separate with no overlap in order to be considered for a SBIR award if selected as a final winner. The registration information and submission upload must be received by 5:00 PM ET on April 20, 2023. Submissions received after the deadline will not be considered.

Register now by selecting the xTechPacific competition tile at: https://www.xtech.army.mil/

All xTechPacific competition submissions are treated as privileged information and contents are disclosed to government employees or designated support contractors only for the purpose of evaluation and program support.

Detailed feedback from the judges panel will be provided to the participants throughout each phase of the competition. The purpose of providing this feedback is to help accelerate transition of the technology to an Army end-user by providing insight on best applications for the technology, suggestions for product improvement for Army use and recommended next steps for development. However, the government will not respond to questions or inquiries regarding this feedback.

V. xTechPacific Competition Structure

Part 1: Concept White Paper

All eligible entities shall submit a short three-page concept white paper on their technology, alignment with army capability gap(s), the potential impact on the Army, technology and concept viability, dual use capabilities and supply chain. Each concept white paper will be reviewed by DOD partners including user, program acquisition, and research and development subject matter experts.

All concept white papers must adhere to the following requirements:

- All concept white papers must be submitted using the template found on the registration page, "xTechPacific Competition_WhitePaper_Template.doc." Any proposals submitted in a format other than that provided will not be reviewed.
- Please list your company name and proposal title EXACTLY how you would like them
 to appear on any contest marketing materials. Use a clear and concise proposal title
 to give readers and potential stakeholders an understanding of how your technology
 would benefit the Army.

Concept white papers be evaluated and ranked using the following scoring criteria (further details on each scoring dimension can be found on the xTechPacific registration page):

- Abstract 5%
- Army Capability Gap(s) 10%
- Potential for Impact 30%
- Technology and Concept Viability 20%
- Dual Use 15%
- Supply Chain 10%
- Proposal Quality 10%

Overall Impression – 0%

Upon conclusion of the concept white paper evaluation period, up to 50 applicants will be selected to receive a prize of \$5,000 each and an invitation to Part 2: Virtual Technology Pitches.

Part 2: Virtual Technology Pitches

Selected participants from Part 1 will be invited to conduct a virtual pitch on their technology concept and team ability to a panel of Army and DOD SMEs. The dates are tentatively scheduled from July 10-21, 2023 (dates will be finalized with participants) and are subject to change. Each participant will have 15 minutes to pitch, followed by 10 minutes for questions and answers with a judging panel.

Detailed instructions and evaluation criteria will be provided to the participants selected for Part 2 of the competition. Up to 20 participants will be selected to receive a prize of \$15,000 each and an invitation to participate in the xTechPacific finals.

xTech Pacific Accelerator

In addition to the prize money and invitation to the finals, selected participants from Part 2 will have the opportunity to participate in the xTech Pacific Accelerator, a 6-week cohort-based program designed to help develop the finalists through educational programming, diverse mentorship, venture building consultation, community building and strategic exposure. Additional details on the Accelerator will be provided to the selected participants.

Part 3: Finals

Selected participants from Part 2 will be invited to conduct a final presentation on their technology concept, transition plans, and technical volume being proposed for a potential Phase I or Direct to Phase II SBIR award to a panel of Army and DOD SMEs, tentatively scheduled for September 2023 in Hawaii. Each participant will have 20 minutes to pitch, followed by 10 minutes for questions and answers with the judging panel.

Participants may be asked to submit supplemental information aligning to the SBIR announce which will include the cost volume, company commercialization report and any additional supporting documents outlined in the SBIR announcement. Detailed instructions and scoring criteria will be provided to the finalists.

Up to 10 winners will be selected as the final winners of the competition and will receive an additional prize of \$25,000 each in addition to the opportunity to submit for a Phase I SBIR award of up to \$250,000 each or a Direct to Phase II of up to \$1.9M each.

The exact location and final dates of the event will be provided to the finalists closer to the event. Dates and location are subject to change.

Part 4: Request for Phase I or Direct to Phase II SBIR Proposal

A separate SBIR announcement, open to all U.S. based small businesses, will be issued concurrent with this prize competition with detailed instructions on how to submit the SBIR proposal materials.

Participants that are selected and awarded a Phase I SBIR will have an opportunity to submit a Phase II SBIR proposal at the conclusion of their Phase I contract. Only firms that were awarded a Phase I SBIR under this announcement will be eligible for a Phase II

SBIR. Additional instructions and details will be provided to the eligible firms. Phase I or Direct to Phase II SBIR awards are not guaranteed.

VI. Prizes and Incentives

Prizes will be offered under 10 U.S.C. §4025 (Prize competitions). The total prize pool is \$800,000. The SBIR contract awards will be offered under 15 U.S.C. 638; each Phase I SBIR award shall be up to \$250,000 and each SBIR Phase II award shall be up to \$1.9M. Other non-monetary incentives are provided through the xTechPacific competition to help small businesses engage and stay engaged with the Army.

Phase	Winners	Prize	Phase I SBIR Award	Direct to Phase II SBIR Award
Part 1: Concept White Paper	Up to 50	\$5,000 each		
Part 2: Technology Pitches	Up to 20	\$15,000 each		
Part 3: Finals	Up to 10	\$25,000 each		
Part 4: Request for Phase I or Direct to Phase II SBIR Proposal	Up to 10		Up to \$250,000 each	Up to \$1.9M each
	Total	\$800,000	Up to \$2.5M	TBD

VII. Proposed Schedule

The proposed schedule is outlined below and subject to change without notice.

Date	Activity	
March 9 - April 20, 2023	Application Part 1: Concept white paper submission period	
February 27 – March 8, 2023	SBIR DSIP Open Period	
March 9 – 22, 2023	SBIR Pre-Release Period	
May 31, 2023	Semifinalists Announced	
July 10-21, 2023	Technology Pitches	
July 28, 2023	Finalists Announced	
August – September 2023	xTechPacific Accelerator	
September 11-15, 2023	Finals	
September 19, 2023	Winners Announced	
September 12, 2023	SBIR Phase I or Direct to Phase II Submission Period Open	
September 26, 2023	SBIR Phase I or Direct to Phase II Closed	
October 2023	SBIR Phase I Award Notification	

VII. Disclaimers

Registered participants shall be required to assume any and all risks and waive claims against the Federal Government and its related entities, except in the case of willful misconduct, for any injury, death, damage, or loss of property, revenue, or profits, whether direct, indirect, or consequential, arising from their participation in this prize competition, whether the injury, death, damage, or loss arises through negligence or otherwise.

VIII. Intellectual Property

The Army is a strong proponent of deliberate intellectual property (IP) rights and management by the private sector and the DOD.

For the xTechPacific competition:

- The Federal Government may not gain an interest in IP developed by a participant without the written consent of the participant;
- Nothing in this xTechPacific prize competition shall diminish the Government's rights in patents, technical data, technical information, computer software, computer databases, and computer software documentation that the Government had prior to this xTechPacific prize competition, or is entitled to, under any other Government agreement or contract, or is otherwise entitled to under law; and
- The Federal Government may negotiate a license for the use of IP developed by a registered participant in the prize competition.

IX. Reimbursement of Costs

The U.S. Army will not reimburse participants for any costs associated with preparing or submitting responses to any portion of the xTechPacific competition (Part 1. Part 2, Part 3 or Part 4). Participation is voluntary. This announcement/competition and/or the information presented herein will not obligate the U.S. Army in any manner.

Register now by selecting the xTechPacific competition tile at: https://www.xtech.army.mil/

X. Point of Contact

The xTech Program Office

Office of the Deputy Assistant Secretary of the Army, Research and Technology

Email: usarmy.pentagon.hqda-asa-alt.mbx.xtechsearch@army.mil

Website: https://www.xtech.army.mil

APPENDIX A – xTechPacific Topic Areas of Interest

Topic 1: Logistics/Supply Chain. The moving, housing and supplying of troops and equipment. The U.S. Army is looking for solutions that can establish and maintain access to forces and supplies across the conflict spectrum. Capabilities identified will mitigate the impact of a naval blockade, a robust anti-access/area denial (A2/AD) bubble, and a degraded communications environment.

Topic 2: Sustainment and Climate. Technologies that enable short-to-medium term operation under conditions restricting resupply, including:

- Additive Manufacturing;
- Advanced Materials;
- Batteries: and
- Climate/Clean Tech.

The U.S. Army is looking for solutions that can support force survivability. Capabilities identified will act as force multipliers, ensuring combat readiness in austere environments.

Topic 3: Communications. The means of sending or receiving secure information. The U.S. Army is looking for solutions that will support real-time Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) in support of Common Intelligence Picture/Common Operations Picture (CIP/COP), ensuring accurate battle-tracking and control. Capabilities identified will mitigate the impact of a degraded communications environment and advanced cyber, space, and electronic warfare interference.

Topic 4: Internet of Things (IoT)/Sensing. Technologies that increase connectivity through sensors and chips that enable internet connectivity and data capture, including:

- Aerial Imaging;
- Data Analytics;
- Fiber Optics Cables; and
- Predictive Intelligence.

The U.S. Army is looking for solutions that can enable autonomous systems across Areas of Responsibilities. Capabilities identified will speed up the sensor-to-shooter kill chain.

Topic 5: Information Advantage. Technologies that collect, process and disseminate information while denying adversary ability to do the same, including:

- Artificial Intelligence / Machine Learning;
- Automation;
- Cloud-based Communication; and
- Big Data Analysis.

The U.S. Army is looking for solutions that will increase efficiency and enable timely decisions. Capabilities identified will automate the intelligence cycle.