



INVENTORY, EVOLVED

SPARTN SBIR TOPIC // #A214-037

VISION-BASED INVENTORY MANAGEMENT

THE PROBLEM

Inventory management in the U.S. Army is still a lengthy pen-and-paper process. This greatly slows the rate at which important assets can be transferred, and can needlessly expose Soldiers to dangerous materiel during inventory management.

To solve this problem, the Army has launched **Vision-Based Inventory Management (VBIM)** to find inventory management software that can analyze and identify a wide variety of field artillery munitions using machine and computer vision.

THE OPPORTUNITY

We are inviting businesses that develop inventory management software to apply. As many as two businesses will be selected to receive up to **\$1.6 million** each for a 12-month period of performance.

This is a Direct to Phase II SPARTN SBIR opportunity, which means you can skip the proof-of-concept phase and go straight to the prototyping phase — where funding is much greater.

Examples of successful technology features could include the ability to:

- Distinguish between a wide variety of fuzes, propellant, and projectiles based on materiel markings or packaging
- Identify inventory using object recognition algorithms
- Evaluate identified data from stenciling to classify and prioritize inventory counts
- Function compatibly with the [Android Tactical Assault Kit \(ATAK\)](#) or [Nett Warrior](#) (NW) system
- Categorize by standards, e.g., designation, lot number, square weight, or Department of Defense Identification Code (DODIC)
- Display an intuitive interface with user-friendly workflows and a flat learning curve

The VBIM application window opens June 16 and closes July 7 at 11:00am CT. Learn more at aal.army/SPARTN.



ANDROID TACTICAL ASSAULT KIT

The Android Tactical Assault Kit (ATAK) is a Government-off-the-Shelf (GOTS) application that allows software to be used across a wide range of Android devices.

Technology created for VBIM does not necessarily need to use ATAK for this 12-month period of performance, but ATAK compatibility will be a requirement for any businesses that are selected to progress to a potential Phase III opportunity.

So, whether your solution has a Soldier equipped with augmented reality goggles, a tablet, or a smartphone, VBIM solutions should be designed to be compatible with as many Android devices as possible.

BACKGROUND ON THE NEW SPARTN PROGRAM

Special Program Awards for Required Technology Needs (SPARTN) is a new program for the Army — and for the small businesses that want to work with us — led by the Army ASA(ALT) Small Business Innovation Research (SBIR) team and bolstered by AAL models and outreach.

SPARTN blends government and industry best practices to introduce a new whole-of-Army, collaborative approach to solution innovation. The result is a way to solve Army problems faster and to accelerate the process by which successful technology is purchased by the Army.

WHAT MAKES SPARTN DIFFERENT?

- 1 Problems released through SPARTN are tied to the Army's critical needs and other focused modernization efforts
- 2 Faster contracting speed, with businesses typically notified of award 4x faster than the conventional SBIR process
- 3 Potential for millions in total value follow-on contract to build a concept or prototype related to the specific problem
- 4 Acquisition teams included early with the goal of easing transition and building new tech into recurring Army budgets
- 5 Potential for future high-value contracts via SBIR, other government funds, and private investment you secure

All topics released through SPARTN feature challenging and important problem statements from problem owners across the Army. These represent some of our biggest challenges and the ones we want to work closely with industry to solve.

To learn more about SPARTN or how to apply for a SPARTN topic, visit aal.army/SPARTN.



POINT CHALLENGE



“WE KNOW WHAT WE WANT.”
We need a specific solution, tailored to meet a detailed problem statement.

TIMEFRAME	1–2 years
PARTICIPANTS	Potential for multiple businesses
FORMAT	Businesses are separately tasked to develop technology tailored to a distinct problem
EXAMPLE PROBLEM STATEMENT	“How can we create a specific radio to transmit and receive on the same frequency?”
FUNDING DETAILS	Funding and periods of performance are determined by topic requirements
SBIR PHASE DETAILS	Can invest across different tech development stages Depending on the topic, both Phase I and Direct to Phase II awards may be possible



ABOUT THE ARMY APPLICATIONS LABORATORY

We're not a laboratory in the traditional sense of the word. As the U.S. Army's innovation unit, we don't make things — we make things possible. The Army Applications Laboratory (AAL) is fundamentally reshaping how the Army works with industry to reunite American innovation and national security. Together, we question *why* and deliver *what if*. Learn how we do it at aal.army.

