ARMY APPLICATIONS LABORATORY

ACCELERATED AND AUTOMATED VISUAL VERIFICATION (A2V2)

THE PROBLEM

Currently, real-time video of potential targets is primarily captured by uncrewed air and ground systems and resides locally at their respective ground control station. Transmission of real-time video data from one or several platforms to a command and control platform requires a significant amount of bandwidth that is not available in a complex, contested environment. As a result, response time of targeting missions is delayed due to a lack of real-time, prioritized data.

THE OPPORTUNITY

AAL is seeking a real-time solution that can extract the most critical information from video feeds and transmit the compressed imagery, along with relevant targeting information, to command centers. The solution should improve bandwidth usage and reduce the size of transmitted data.

We will be accepting white papers for an initial evaluation. Based on evaluation results, companies will be selected and asked to submit a full proposal.

Once full proposals are evaluated, AAL expects to issue one or more awards with a total estimated funding of $1.5M across all awards combined. The expected period of performance for this effort is 6 to 18 months.

Solutions for A2V2 should accomplish, but are not limited to:

- Video Input and Processing: Accept, encode, and process video in real time
- Object Detection and Classification: Detect and classify targets in operational environment
- Target Prioritization: Visually differentiate between different priority targets
- Video Verification: Transmit only necessary images and/or video of target for verification
- Network and Communications: Support TAK interface and tactical radio or LTE/5G backhaul
- Form Factor and Deployment: Portable, suitable for austere environments, and includes data access control
- Optional Capabilities: Mountable to surveillance items and output position location information (PLI) using TAK Cursor on Target (CoT) format

IMPORTANT DATE

Applications Close: June 2, 2025 at 11:59AM CDT

A REAL-TIME SOLUTION THAT CAN EXTRACT INFO FROM VIDEO FEEDS AND TRANSMIT THE COMPRESSED IMAGERY, ALONG WITH RELEVANT TARGETING INFO, TO COMMAND CENTERS.

THE SPARTN PROGRAM

Special Program Awards for Required Technology Needs (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.

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.

WHAT MAKES SPARTN DIFFERENT?

- Problems released through SPARTN are tied to the Army's critical needs and other focused modernization efforts

- Faster contracting speed, with businesses typically notified of award 4x faster than the conventional SBIR process

- Potential for millions in total value of follow-on contracts to build a concept or prototype related to the specific problems

- Acquisition teams included early on, with the goal of easing transition and building new tech into recurring Army budgets

- Potential for future high-value contracts by combining SBIR or other government funds, and private investment you secure

To learn more about SPARTN or how to apply for SPARTN topics, visit aal.mil/SPARTN

SPARTN Phases Explained

The objective of Phase I is to establish the technical merit, feasibility, and commercial potential of the proposed effort, and to determine the quality of performance of the awarded companies prior to providing further support in Phase II. Final deliverables will be a concept design presentation, optional proof of technology demonstration, and plans for follow-on Phase II work.

In Phase II, companies are selected for a period of performance to advance their technology into a working prototype with higher federal funding and, on certain projects, matched funds from private investment. Companies receive technical and programmatic feedback from Soldiers, DOD scientists, and engineers. Senior leadership provides guidance on how to move forward.

To make it to Phase III, companies must receive Program Executive Office (PEO) endorsement. Selected companies are then given more funding and the opportunity to continue developing their technology with the goal of transitioning it to an Army program of record.

AAL COHORT MODEL

Our cohort program brings together companies that may not typically work with the DOD and focuses them on solving a specific Army problem. They work side by side with Soldiers, a community of Army experts, and other stakeholders on a shared learning journey. While joining a cohort isn't required, it can provide a deeper level of insight to help refine your solution.

A Different Kind of Cohort

+ Hybrid program with virtual and in-person activities
+ Each cohort focuses on solving a specific SPARTN problem
+ Increased contact with Army stakeholders and Soldiers
+ Visits to military installations where you can see the problem firsthand

Visit aal.mil/cohort-program to learn more about the AAL cohort program and the benefits of participating.