ARMY APPLICATIONS LABORATORY

MODULAR PAYLOADS
FOR UAS

THE PROBLEM

Current unmanned aircraft systems (UAS) and payloads are often proprietary and designed to be mission-specific. Some systems offer swappable payloads; however, these payloads aren't interchangeable across UAS manufacturers, and additional capabilities depend on the same manufacturer developing new payloads. To maximize battlefield usability, the Army wants the ability to swap payloads on the fly via common connections.

THE OPPORTUNITY

For this Phase I SBIR effort, the selected companies can receive up to $250,000 each for a 3-month period of performance. Awardees will collaborate with government stakeholders and UAS vendors to plan for the integration of their payloads using Picatinny Common Lethality Interface Kit (CLIK), along with developing plans for technology improvements to their payloads. The intent of this project is to explore, test, refine, and advance modular payload technologies as an industry-government team, experimenting iteratively through Soldier touchpoints.

We are interested in the following types of modular payloads:

- Technical designs for the integration of the awardee's payload with one or more government-provided UAS and for technology improvements to the payload
- Initial Safety Assessment Report (SAR), technical documentation, test plans, and other information required to obtain approval for hands-on Soldier touchpoints and experimentation
- Participation in an in-person kickoff and final presentation, along with virtual touchpoints
- Monthly reports that document technical progress
- A Phase II proposal, if desired by the vendor

IMPORTANT DATES

Applications Open: October 22
Applications Close: November 19

DEVELOP & INTEGRATE UAS PAYLOADS FOR THE PICATINNY COMMON LETHALITY INTERFACE KIT (CLIK) SPECIFICATION

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, DOW 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 DOW 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.