



DIU Summit Primer for Collaborative Autonomy and Vehicle Standards Breakout

On February 13, 2024, the Defense Innovation Unit (DIU) will host a summit in Mountain View, CA. The purpose of the event is to deepen the linkages between DIU, the commercial sector, and other DoD entities through dialogue on use-cases and needs across key technology areas underpinning autonomous systems and other priorities for USINDOPACOM, with implications for the force worldwide. The Summit aims to produce insights and deepen relationships that DIU/DoD can use to shape thinking on efforts to close capability gaps.

One of the scheduled breakout sessions during this event is focused on *Architecture and Collaborative Autonomy for ADA2*. In preparation for this session, DIU is seeking inputs from the commercial sector on implemented standards and demonstrated performance with multi-agent and/or cross-platform autonomy that could be adopted into a government reference design for future developments. This could include interface documentation, standards, and protocols from industry and academia demonstrating effective multi-vehicle, collaborative autonomy for various modalities of uncrewed systems. This call for input is not currently tied to any specific contract activity.

The requested data will help DIU frame the *Architecture and Collaborative Autonomy for ADA2* breakout session as well as inform the initial set of attributes for building an industry-informed government reference design for collaborative autonomy.

Call for Inputs

The primary focus is to aggregate and leverage data on systems that have demonstrated performance with collaborative autonomy. As such, please share the types of test events, exercises, or demonstrations that the system(s) have been involved with. If still in concept phase, please share any plans for operationalizing the capabilities discussed.

Some specific areas of interest include:

- Architecture technical description
- Multi-vehicle command and control protocols

- Other protocols used in data streams (i.e. video, key-length-value (KLV) or imagery)
- Network topology for multi-agent comms and other data handoff
- Examples of components (sensors, effectors, algorithms, user interfaces) already integrated into the architecture
- Assessment of Tech Readiness Levels (TRL) of the system and its core elements
- Data or evidence of participation from past test or demo events
- Examples of any operational deployments or exercises
- Open Topics: Other considerations not explicitly described above that would benefit the government's understanding of collaborative autonomy capabilities

Submission

Please keep your responses limited to a 5-page maximum and please clearly mark responses with releasability (open source, government purpose, proprietary, etc.).

We are requesting responses by Feb 12th, 2024, to inform discussion at the DIU Summit, but the opportunity for input will remain open after the Summit.

Email all responses to [autonomytechsummit2024 \[at\] diu.mil](mailto:autonomytechsummit2024@diu.mil). Please also use this inbox for questions, clarifications, feedback or suggestions.

Additional information

Submissions will be used to inform DIU's approaches to this issue set, frame the discussion at the upcoming DIU Summit, and may lead to individual, follow-up discussions that could be proprietary in nature. Please note that this call for input is not currently tied to any specific contract activity.

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