

Department of the Navy SBIR/STTR Transition Program

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NAVSEA #2021-0438

Topic # N191-034

ACT: An Artificial Intelligence based Course of Action Tool
Intelligent Automation, Inc.

WHO

SYSCOM: NAVSEA

Sponsoring Program: PEO IWS 1.0

Transition Target: Navy Weapon Systems Mission Planning Systems

TPOC:

(540)653-1240

Other transition opportunities: Navy Weapon System

Notes: ACT leverages new technologies to benefit Navy weapon systems.



ACT System OV-1

WHAT

Operational Need and Improvement: ACT as an AI-based COA solution will be a scalable, composable, timely and effective automated decision aid that will provide COA recommendations to mission planners for consideration and action.

Specifications Required: ACT is designed and developed as a software enhancement to the Navy mission planning process. The virtual assistant provided by ACT provides potential improvement over an unassisted operator (on average). The proposed effort will comply with Navy mission planning system requirements

Technology Developed: The technology developed will include:

- 1) Identify Navy operational scenarios
- 2) Represent mission planners' knowledge and experiences for COA planning and recommendation
- 3) Monitor COA progress
- 4) Support diversified data sources
- 5) Generate optimal COAs with much less labor intensity, time, and complexity.

ACT will be an integrated set of AI-enabled services that support tactical operations and mission planning and execution.

Warfighter Value: The key goals will be reducing human cognitive burden, aiding decision making, and increasing decision making accuracy. This will improve the Navy mission planning capability in a variety of combat environments.

WHEN

Contract Number: N68335-21-C-0030

Milestone	Risk Level	Measure of Success	Ending TRL	Date
Interim subsystems demonstration	Low	Demo ACT subsystems' capabilities.	4-5	October 2021
Initial prototype system integration	Med	Demo initial integrated ACT system .	5-6	October 2022
Integrated prototype system demo for the Navy	Med	Demo integrated prototype system.	6-7	September 2023

HOW

Projected Business Model: We plan to transition the ACT technology to a Navy program of record. We can also licensing core technology to other commercial/government customers, and commercialize the software tool. We will develop and maintain ACT analytic modules, subsystems, and the system, to make them available for other tactical and commercial applications through contract engineering and licensing agreements.

Company Objectives: We plan to develop and license the technology to prime contractors and/or transition it to government programs. We will identify DoD mission planning system stakeholders for opportunities of additional ACT system evaluation and integration.

Potential Commercial Applications: ACT has the potential to address commercial market needs that require applications in the areas of intelligent process, automation, and AI. ACT has potential to market its capabilities to emerging commercial and military applications and platforms, emergency responders, and environmental monitoring systems.

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