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Coordinating a Multi-Organization Research and Development Program to Enable MDUSV Acquisition

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DARPA

Coordinating a Multi-Organization Research and Development Program to Enable MDUSV Acquisition

Problem Statement

- A number of naval and commercial organizations are working towards a synthesis of artificial intelligence enabled autonomous behaviors involving unmanned vessels. Some are working on:
  - simulations (GTRI, Dahlgren, Leidos)
  - hardware (Leidos, Boeing, SPAWAR)
  - AI algorithms and processes (Leidos, IBM, ONR)
  - value of unmanned systems to operational needs (NPS, N2/N6, N96, ONR).
- The Problem: The Navy is unable to acquire MDUSV because the operational community has not settled on a specific mission for the vessel. The overall effort lacks organization, strategic alignment and an understanding of the inherent roles each organization must play to bring a MDUSV concept to fruition.

Project Description

- Create a SECNAV approved consortium of organizations, cross-functionally responsible for conducting research and development activities. Each is responsible for solving an essential element necessary to make MDUSV operational.
- Conduct meetings, fund research, provide a timeline plan of deliverables
- Report progress and make recommendations to support development, test/eval, and procurement

Objectives

- Conduct studies on specific elements required to make MDUSV operational
  - Determine the mission
  - Select operational performance KPPs
  - Determine supporting mission elements
  - Conduct software and hardware research to meet KPPs
  - Identify long and short term issues and estimate time and funding necessary to overcome them.

Partners

- A SECNAV level office should lead with the following organizations participating:

- N96, N2/N6, ONR, SPAWAR, NPS, Naval War College, NRL, SCO, and universities. The coordinating office at SECNAV would grant authority member organizations to use “other transaction authority” to secure contracts with commercial vendors