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## Autonomy for Large Teams of Collaborating Systems Program

There is currently a wide range of research efforts examining the control of groups of unmanned vehicles to carry out cooperative or collaborative missions. However, many of the approaches used in these efforts are highly centralized, designed for a narrow set of requirements, and have significant scalability limitations. Because of the threat that improvised explosive devices have posed to troops in Iraq, and the importance that urban and littoral operations have assumed in recent conflicts, unmanned systems are being rushed into service in large numbers. Current systems lack sufficient autonomy and require close human supervision. Moreover, there is very limited capability to share resources or use these systems collaboratively.

ONR's Autonomy for Large Teams of Collaborating Systems Program researches biological models of social and collaborative behavior by intelligent predators, as well as physics-based (potential fields) models for experimentation and development of principles and methodologies.

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### Program Funding

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#### Long-Range Broad Agency Announcement for Navy and Marine Corps Science and Technology 12-001

[12-001](#) (PDF - 209.78 KB)

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