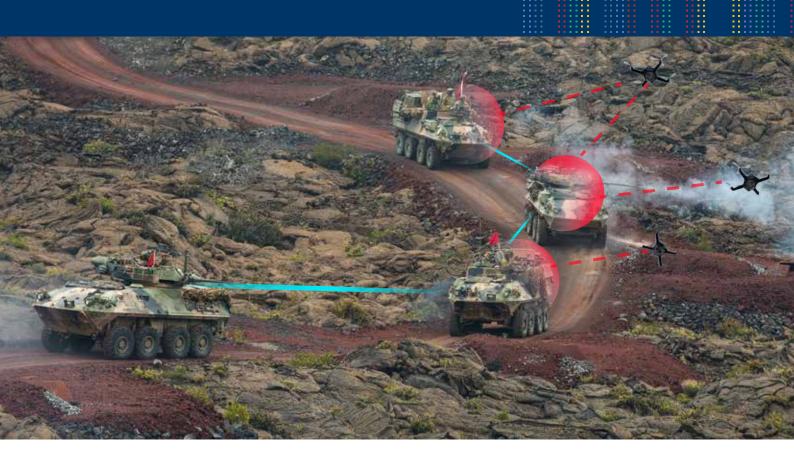




Department of Defence Science and Technology



Ravos

Ravos is a smart autonomous control system that provides intra-vehicle and inter-vehicle coordinated, resilient, adaptable services. Exploiting the heterogeneity of networked tactical systems, it supports vehicle operators in the control of vehicle-hosted mission systems, adapting to dynamic environments and reducing cognitive burden. We seek to integrate Ravos on Australia's future land vehicles through their open electronic architecture.

Ravos:

- Autonomously manages the network of vehicle hosted mission systems to reduce operator cognitive burden
- Implements self-management through self-configuration, self-healing, self-optimisation, and self-protection
- Provides contextually aware resilient and versatile services enabling operation in the highly dynamic contested tactical environment
- Exploits the technologies that are accessible via the vehicle's communication links, realising new capabilities.

Partnership opportunities

Potential partnership opportunities exist in developing demonstrators in the following exemplar applications, including the overarching control mechanism which appropriately coordinates and combines them:

Coordinated Positioning

• Improving resilience of positioning information against electronic warfare through the use of information from other vehicles.

Coordinated Counter UAS

- Multiple platforms coordinating detection, targeting and prosecution of an adversarial UAS swarm
- Resource and task allocation

Coordinated RF Signature Management

· Low probability of detection communications

Coordinated Vehicle Protection

- · Distributed threat analysis
- Intelligent armour orientation
- · Coordinated counter measure management

For more information contact:

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