

Australian Government Department of Defence Science and Technology



## **Intelligent Automated Decision Superiority**

To enable decision superiority over Australia's adversaries, our commanders require enhanced situational awareness and timely intelligence. The processing, fusion, exploitation and integration of Intelligence, Surveillance and Reconnaissance (ISR) collection is required to extract high value intelligence. However with the current human-centric approaches, much of any ISR collection is never used. Defence acquisition of next generation ISR platforms and systems will further increase the volume collected and amplify the proportion that is never used.

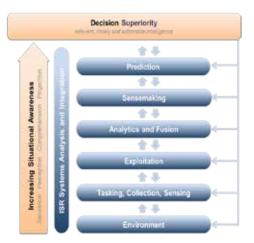
DST established an Integrated ISR theme under the Next Generation Technologies Fund to address this problem by undertaking research and development in ISR automation concepts, techniques and technologies that span the functional elements of the ISR stack diagram. Through the use of real-time automation, more ISR collection will be used to generate intelligence to enhance situational awareness and understanding, leading to decision superiority. This proposal is called Intelligent Automated Decision Superiority (i-ADS).

The outcomes of this proposal will be applied to real ADF environments and validated through a campaign of trials, working towards a demonstration in 2024.

## **Partnering Opportunities**

DST is seeking to establish collaborative partnerships with industry and academia, which are already undertaking R&D in areas relating to realtime automation that may contribute to decision superiority. Key skill areas of interest include:

- · ISR automation and integration
- · Soft and hard data and information fusion
- Big data analytics
- Computer vision, machine learning, artificial intelligence and similar.



For more information contact: PartnerWithDST@dst.defence.gov.au