Australian Government



**Department of Defence** Science and Technology



## **Resilient multi-satellite MIMO communications**

Satellite Communication (SATCOM) plays a vital role in delivering global communications access to both military and civil users.

SATCOM can be subject to interference and satellites themselves are becoming increasingly vulnerable to a range of threats.

Multi-Satellite Multiple Input Multiple Output (MS-MIMO) is a novel concept in SATCOM that leverages advanced signal processing techniques, multi-beam antenna array technology and complexity management.

The concept aims to break the historical paradigm of single satellite operation. It has the potential to transform the next generation military SATCOM architecture to deliver a more resilient, secure satellite capability.

## **Partnering opportunities**

- Are you a satellite operator or an associated research agency with an interest in increasing the communications capacity you can deliver per satellite in orbit?
- Is satellite communications resilience important to you and your customers?

DST is seeking to collaborate with satellite operators and associated research agencies, with an interest in increasing their per-satellite communications capacity and resilience, to jointly demonstrate this new approach.



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