

SMARTSATCRC

Building Australia's Space Industry



NEWS

Welcome to the October issue of the SmartSat CRC Newsletter. As many of you would know, since publication of the last issue we have received exciting news from The Hon. Karen Andrews MP that the Stage 1 application was successful. Writing of the Stage 2 application has commenced and will be submitted in late November followed by interviews with the CRC Advisory Committee in early February.

We would like to welcome Roger Franzen and Tony Wheeler to the SmartSat CRC team as Deputy Bid Coordinators. Both Roger and Tony have extensive experience in spatial science and business administration and will provide comprehensive support for the Stage 2 application.



A fitting place to receive the News of our win of the Stage 1 CRC application. The first ever Australian Space Agency stand at an IAC

CAPITAL CITY WORKSHOPS

SmartSat CRC Workshops have now been held in Brisbane, Sydney, Perth, Melbourne and Adelaide. These workshops have been an excellent opportunity for industry and research partners to come together and share their visions for the CRC.



The group sessions have focused on identifying the 'Grand Challenges' for the Space Industry and developing potential Flagship Projects that fit within the themes of the CRC. The final workshop will be held in Canberra in November. The workshop is open for all to attend however there will be a focus on government and policy. A link for registration and further information will be sent in the coming days.

CRC BID STEERING COMMITTEE

UPDATE

The CRC Bid Steering Committee have continued to meet monthly to discuss the direction and progress of the bid. The SmartSat CRC research will be driven through two important groups, the Research Investment Committee and the Research Leadership Committee.

The Research Leadership Committee (RLC) are now meeting regularly to discuss the CRC research themes, programs and challenges and identify potential program leaders.

SmartSat CRC Flight Missions

The SmartSat CRC if successful will aim to launch three Sovereign Flight Missions throughout its 7-year life as capability demonstrators for the novel technologies developed by the CRC; These will become incrementally more and more intelligent, starting with the first mission of a small satellite in the 30-40 kg range with research payloads and some intelligence and self-healing capabilities.

WRITER'S WORKSHOPS

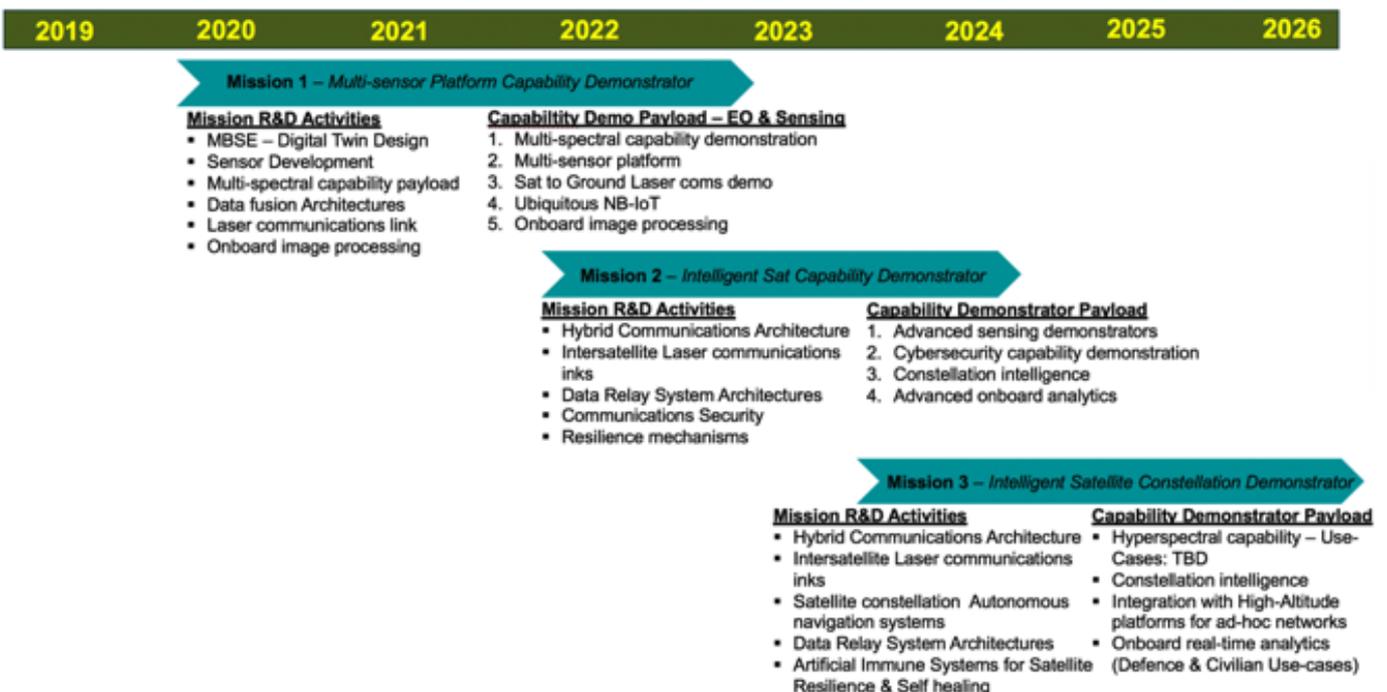


Writer's Workshops for the Stage 2 application have commenced. These meetings have been useful in addressing the feedback received during Stage 1 and incorporating challenges and projects identified in the capital city workshops. We encourage anyone who would like to be involved in the writing or reviewing process to contact emily.white@unisa.edu.au.

IN THE NEWS

We invite our industry partners to submit a 200-400 word profile and image of their company to emily.white@unisa.edu.au for inclusion in future editions. This is an opportunity to find out more about the SmartSat CRC partners.

SmartSat Sovereign Flight Experimental Missions



Company Profile- Saber Astronautics

Saber Astronautics produces 21st Century space mission control software, which uses machine learning and gaming graphics to greatly reduce the challenge of operating spacecraft. We make space more accessible, enabling new entrants to enter the field. Saber sells flight software and we also sell our operations centre as a service to companies in Australia and the USA.

Our customers include fortune 500 companies, NewSpace, military, and government satellite owners. We specialise in large constellations and fleet control (100+ satellite).



A photo taken from one of our many parabolic flight tests in Cape Canaveral

Our founders have world class flight heritage which includes large missions such as Hubble Space Telescope and the International Space Station as well as microsattellites and CubeSats (i.e., Fleet Space, SkyBox, HyperCubes, Terra Bella and others).



A screenshot of Saber Astronautics main product ("PIGI") tracking the iridium constellation



Photo taken at the Colorado Space Symposium where the winner of the Lockheed orbital mechanics competition used PIGI software to win an overpass calculation competition

Our operations experts include senior instructors from the US military space school and seasoned operators from USSTRATCOM. Two of our founders have PhDs from the Australian Centre for Field Robotics and founded the University of Sydney Space Engineering Laboratory. We are the only Australian SME with microgravity flight test experience with nearly 1000 parabolas logged on commercial and NASA providers.

Saber Astronautics is the first company to prove machine learning application for space in 2012 using spacecraft from NASA GSFC and NASA Ames.

Company Profile- Thales



Thales is a global leader in Aerospace, Defence, Transport, Security & Space.

In Australia Thales has a major presence in the defence, aerospace, security, and transport markets, with aspirations to grow into the Space sector through close alignment with Thales Alenia Space, and in collaboration with local innovators in the Australian space sector.

Our current Australian expertise ranges across protected mobility vehicles, naval support services and integrated communications solutions for defence through to air traffic management systems, cyber security solutions and transport systems for the commercial sector.



Our capabilities are recognised by customers who not only require superior equipment, but the systems integration, prime contracting and through life support expertise that boost their competitive edge. Employing around 3,600 people, Thales in Australia recorded revenues of more than A \$1.2 billion in 2017 and export revenue of over A\$1.6 billion in the past 10 years.

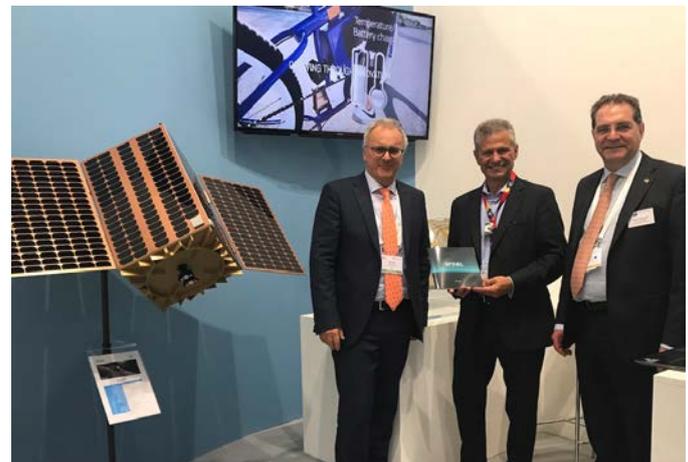


Thales is one of the Australian Defence Force's most trusted partners and is one of Australia's leaders in research and development. We have strong affiliations with the Defence Science and Technology (DST) Group and the Commonwealth Scientific and Industrial Research Organisation (CSIRO) as well as leading tertiary institutions in Australia. Research and development is our company's lifeblood, and we build on that to create, manufacture and support a wide range of truly innovative products.

Thales has access to local skills and resources, and a global reach to a parent company with vast international capabilities. At every step of the value chain, Thales plays a pivotal role in making the world a safer place.



Whilst in Germany we met with some existing and potential partners



NEW PARTNERS

We would like to welcome the following new partners who have joined the SmartSat CRC since the last edition:

- **Northrop Grumman**
- **CyberOps Pty Ltd**
- **Melbourne Space Program Ltd**
- **Akuna Consulting**
- **DEWC Systems Pty Ltd**
- **Rice Satcom Pty Ltd**

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