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SYMPOSIUM ON INTEGRATED APPLICATIONS (B5)
Integrated Applications End-to-End Solutions (2)

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FROM SENSORS TO SOLUTIONS

Abstract

Earth observation data can be used to develop products and services that support government and business activities, which generate economic growth. One of the hurdles to realising the full potential of these activities is connecting the full value chain and translating innovative research into operational products and services.

In Australia, the Australian Capital Territory (ACT) Government funded the Sensors to Solutions project to develop these relationships and leverage existing capability and infrastructure. The intention was to develop an ecosystem that supports long-term sustainability and economic growth in a high value-add sector.

The project brought together government agencies, CSIRO and Geoscience Australia, universities, ANU and UNSW Canberra, and industry Airbus DS with collaborative hubs, Cooperative Research Centre for Spatial Information (CRC-SI) and Canberra Innovation Network (CBRIN). This project leveraged existing capability and infrastructure including the Australian Geoscience Data Cube (AGDC), Canberra Innovation Network (CBRIN), Advanced Instrumentation and Technology Centre (AITC), UNSW Canberra Space, and the presence of Airbus Defence Space, to further develop the space and spatial ecosystem and promote long-term economic growth.

The AGDC provides an integrated gridded data analysis environment for decades of analysis ready earth observation data from multiple satellites and other acquisition systems. The AGDC enables the integration of commercial Airbus data with existing public-good datasets from the Landsat and Sentinel satellite programs. CSIRO, ANU and CRC-SI all have significant expertise in the processing and analysis of Earth Observation data to support the development of innovative products and services. Thanks to the Sensors to Solutions project, one of these applications was chosen by the ACT Government to be further developed for operational use.

This initiative established a framework to create new businesses within ACT's space and spatial sector. It identified an existing need within the ACT Government and matured an existing Earth observation application to support the delivery of an operational service. As new applications and businesses are created around this collaboration, new requirements for Airbus satellite imagery will be generated, which in-turn, will lead to increased data availability, additional applications and further business creativity.

This paper will outline the collaboration framework, the mechanism for engaging with the customer and the outcomes of the project. It will further consider this as a model for ongoing collaboration and

the generation of economic growth along the full Earth Observation fro Space Value Chain.