THIS **MEMORANDUM OF UNDERSTANDING** is made on the 30 day of January 2024

between

SMARTSAT CRC LTD (ABN 63 633 923 949) of Level 2, McEwin Building, Lot Fourteen, North Terrace Adelaide SA 5000 ("**SmartSat**")

And

The Sovereign in Right of New Zealand acting by and through Te Tumu Whakarae mō Hikina Whakatutuki, Secretary for Business, Innovation & Employment and Chief Executive of the **Ministry of Business, Innovation & Employment** (or by his or her authorised delegate) ("**MBIE**")

BACKGROUND

A. SmartSat CRC Ltd is a company established to operate the SmartSat Cooperative Research Centre that is a consortium of universities and other research organisations, partnered with industry and government agencies including the Department of Defence that has been funded by the Australian Government under the Cooperative Research Centre's program to develop know-how and technologies in advanced telecommunications and IoT connectivity, intelligent satellite systems and Earth observation next generation data services.

B. MBIE is the government agency which houses the New Zealand Space Agency and is responsible for space policy, regulation and sector development within New Zealand. MBIE supports rocket launches through the administration of a world-leading regulatory regime. It also provides policy advice on advancing R&D, growing New Zealand's space industry and engaging the public on the importance of space. MBIE works closely with international partners to foster research collaboration and address common challenges in space.

C. MBIE and the Australian Space Agency signed an Arrangement in 2019 designed to increase co-operation on space activities between the two countries.

D. The parties have mutual interests and intend to undertake the activities described in, but not limited to, the **Activities Schedule** as part of the intent to establish a Strategic Research Partner Agreement.

E. This Memorandum records the agreement of the parties in relation to the cooperative activities. As and when agreed, the parties may enter into further legally binding agreements for specific activities.

IT IS AGREED:

1. GENERAL PRINCIPLES OF MEMORANDUM

1.1 The following general principles apply to the relationship between the parties under this Memorandum:

(a) the parties will work together to establish and maintain a relationship based on co-operation and partnership;

(b) any issues that a party may have concerning the other party's performance will be discussed with that party in the first instance; and

(c) the parties will communicate with each other openly and freely.

2. PURPOSE

2.1 Through this Memorandum, the parties intend to harness their complementary resources and expertise to work together to develop and pursue cooperative activities considered to be of benefit to each party, specifically those in relation to:

- Contributing to the growth of the space industry in Australia and New Zealand;
- Developing new capability and expertise in the space sector through the advancement of innovation and R&D as well as workforce development.

2.2 The parties intend to further their mutual interests and, so far as they are able to do, make available to the cooperative activities their expertise, resources and information.

2.3 Each party acknowledges that the extent of the cooperative activities will be limited by the resources of each party and the parties agree to work together to identify and, where appropriate, obtain appropriate financial support necessary for pursuit of any cooperative activities.

2.4 The intended activities of the parties are described in, but not limited to, the Activities Schedule. Detailed plans and conditions of all cooperative activities (including any formal agreements in relation to the activities) will be agreed between the parties.

3. JOINT WORKING GROUP

A small joint working group will be established to oversee current activities under this Memorandum and identify future strategic activities to support the objectives of the collaboration. Membership of the Joint Working Group will be:

For SmartSat CRC

- Mr Andrew Beveridge and Dr Carl Seubert, and up to two additional representatives.

For MBIE

- Andrew Johnson, Milena Scott, Tim Searle and Heather Penny.

4. INDEPENDENT OPERATIONS

Notwithstanding this Memorandum, the parties note that each of them have different reporting and funding obligations and nothing in this Memorandum is intended to interfere with those obligations.

5. CONFIDENTIALITY

5.1 Each party agrees to keep confidential all material and information which is disclosed by the party that is by its nature confidential, is designated by the disclosing party as confidential or the receiving party knows or ought to know is confidential ("**Confidential Information**") and, other than as required by law, will not disclose such Confidential Information to any person or use such Confidential Information for any purpose other than to exercise its rights or perform its obligations under this MOU. Confidential Information does not include information which:

(a) is or becomes available in the public domain other than through breach of this Memorandum.

(b) the receiving party can prove was rightly known to it prior to the negotiations leading to this Memorandum; or

(c) has been independently developed or acquired by the receiving party.

5.2 Each party receiving Confidential Information agrees that it:

(a) will be kept strictly confidential;

(b) will remain the absolute and exclusive property of the disclosing party and will be returned to the disclosing party on request;

(c) will not, without prior written consent, be disclosed or divulged to any third party; and

(d) will not, without prior written consent, be used other than for the purpose of activities agreed by the parties pursuant to this Memorandum.

6. PUBLIC ANNOUNCEMENTS

The parties agree that any public announcement made by any of them which refers to the proposed strategic research partnership or in relation to the activities considered in this Memorandum will not be made without the consent of the other parties, unless required by law.

7. INTELLECTUAL PROPERTY

7.1 The parties agree that each party (or its licensors) will retain all intellectual property rights in any intellectual property that is used for the purposes of this Memorandum but is not developed or created under or in connection with this Memorandum. Each party creating any new Intellectual Property Rights (IPR) under or in connection with this Memorandum will be the owner of such IPR.

7.2 Each party providing any materials or other form of IPR to another party grants the other party a non-exclusive royalty free licence to use such IPR for the purposes of this Memorandum for the duration of this Memorandum.

7.3 Other than as expressly provided in this Memorandum, nothing in this Memorandum otherwise amounts to a licence or transfer of any IPR or information disclosed.

8. DURATION

8.1 This Memorandum will become effective upon signature by all parties and will remain effective for a duration of three (3) years.

8.2 A party may terminate this Memorandum by notice in writing to the other party. In the event of termination, activities already in progress will cease or be finalised in a prompt and efficient manner.

9. MISCELLANEOUS

9.1 This Memorandum does not create any partnership, joint venture, agency or employment relationship between the parties.

9.2 Where any cooperative activities give rise to a legally binding relationship between the parties, a separate legally binding agreement shall be entered into for those cooperative activities. No undertaking of a party shall be considered as legally binding unless such agreement is entered into.

9.3 This Memorandum does not create any legally binding obligations save for those contained Sections 3, 4, 5, 6, 7, 8 and 9 herein and does not constitute an agreement or commitment by either party to enter into further agreement(s) and/or commitment(s) and/or provide support and/or to grant right for any specific activity, unless specifically agreed in writing by the parties and subject to decisions and establishment of appropriate instruments in accordance with each parties respective rules and procedures.

9.4 In case of a disagreement between the parties arising out of, or relating to, any collaborative activity undertaken pursuant to this Memorandum, the parties shall attempt to reach an amicable resolution in good faith. Any such disagreement may be referred to the Points of Contact, listed in section 10, for final determination.

9.5 The parties may agree to vary any of the requirements of this Memorandum. Such agreement must be in writing and signed by both parties.

9.6 Following termination or expiry of this Memorandum clauses which by their nature survive termination, including clauses 5 (Confidential Information) and 7(Intellectual Property) will remain in effect.

9.7 This Memorandum may be signed in counterparts and may be signed physically or electronically.

9.8 This Memorandum is governed by the laws of New South Wales (Australia) and the parties submit to the non-exclusive jurisdiction of the New South Wales courts.

10. POINTS OF CONTACT

10.1 The points of contact for conducting the activities under this Memorandum are as follows:

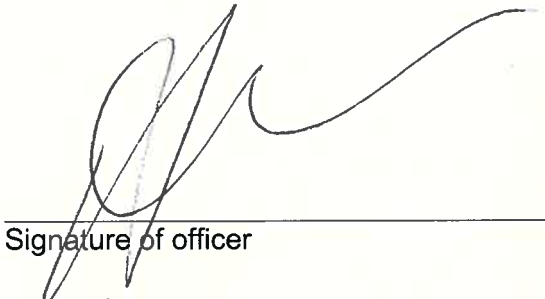
SmartSat
Professor Andy Koronios
Chief Executive Officer & Managing Director
McEwin Building, Lot Fourteen, North Terrace Adelaide SA 5000
E: Andy.Koronios@smartsatcrc.com

MBIE
Andrew Johnson
Manager, Space Policy and Sector Development
Science, Innovation and International
Ministry of Business, Innovation and Employment
15 Stout Street, Wellington, New Zealand 6011
E: Andrew.Johnson@mbie.govt.nz

10.2 Any change in a party's respective contact information shall be communicated in writing to the other party.

EXECUTED BY THE PARTIES:

Signed for **SMARTSAT CRC LIMITED** by an authorised officer in the presence of



Signature of officer

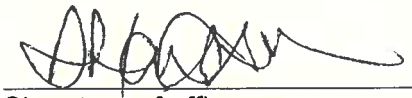
Andy KORONIOS

Name of officer (print)

CEO & MD

Office held

Signed for the **MBIE** by an authorised officer in the presence of



Signature of officer

Robyn Henderson

Name of officer (print)

Acting Head of NZSA.

Office held

ACTIVITIES SCHEDULE

It is intended that the parties will jointly support the following initial activities as part of this Memorandum including but not limited to:

Thematic	Sub-topic	Examples/explanation	Link to original ASA arrangement	Links to NZ Aerospace Strategy goals	Links to SmartSat Programs
Earth Observation	**Natural Capital**	To advance map and monitor natural capital on agricultural and pastoral lands using a combination of Earth observation data sources, track impacts of human action over time, and identify environmental challenges. **Environmental Ag Example:** biodiversity from space: monitoring of biodiversity and comparison to regional standards for assessment of farm level biodiversity values. The level of natural capital and management should be communicated as part of the project in ways that will credential farm and regional level sustainability practises for the industry I.e. viticulture, dairy etc to help provide improved sustainability marketing opportunities.	Earth Observation Remote asset management **Requirements:** 1. Project proposal requires industry link and impact statement 2. User engagement work package: to design prototype product delivery mechanism. End point TRL 6-7 for Phase 2 projects	Enhance decision making using aerospace-enabled data	Maya Nula
	Biosecurity	To improve the understanding of biosecurity risk for decision-making, using commercial multispectral, thermal or hyperspectral imagery and/or available commercial product of super-resolution (new emerging AI approach to improve the resolution of Sentinel-2 imagery from 10m to 1m) for: **Environment Example:** Early detection and mapping of Myrtle Rust with remote sensing. **Ag Example:** Cereal crop disease detection			
	Crop health	To improve crop yield/health by using modelling i.e. APSIM in combination with EO imagery to identify anomalies (yield gaps) and convert these to commercial/management insights for agribusiness and farmers at both the farm and regional scales			
	Pasture condition	To improve pasture condition mapping through a combination of SAR and multispectral EO imagery, designed to work in cloudy conditions and with high biomass pastures.			

		Example: Develop a prototype pasture biomass product, tested with farmers, for animal feed calculation and allocation.			
	Emission Monitoring	Leveraging the emerging launch of MethaneSat and its data (directly monitor regional-scale emissions from oil, gas and agricultural sectors) to produce decision making information for stakeholders and policy makers.			
	South Pacific Synthetic Aperture Radar	Explore mission concepts for dedicated SAR mission for the south pacific. On top of Land/Sea Science, it includes applications of Search & Rescue for Civil and Defence, Meteorological and ocean monitoring, Antarctica and sea ice monitoring, and extreme weather responses for floods and fires.			IPC/Maya Nula
	Maritime Domain awareness	Advance the ability to detect ability in our maritime environment I.e illegal fishing. **Example:** SAR processing or spectrum sensing from space			IPC
Space Situational awareness	**Novel techniques for SSA monitoring**	Develop new techniques that enable better monitoring of the orbital environment, **Example:** Satping – spacecraft position and velocity and ID *from* the spacecraft. Develop a flight model to demo in space. **Example:** Space-based proximity sensing and image processing **Example:** Ground-sensor data processing and visualisations for anomalies and maneuver detections	Space Situational Awareness (SSA)	Be at the forefront of global sustainable space activities	Scarlet
Optical communications	**Australasian network of optical ground stations**	Use joint science work on adaptive optics to determine if there is a way to co-ordinate an Australia science network – this might also cross with the SSA topics above. **Example:** Develop what the network needs in regards to standardising, connectivity and common infrastructure, development and test programs with space assets, as well as use and business cases, even governance.	Expanding ground segment networks Communications technologies and services	Actively support exploration in space	IPC/Comms