



# **LETTER OF INTENT**

# **BETWEEN**

# THE AUSTRALIAN SPACE AGENCY

# **AND**

# THE GERMAN AEROSPACE CENTER

# REGARDING SPACE COOPERATION FOR PEACEFUL PURPOSES

## **Background**

The Government of Australia as represented by the Australian Space Agency, part of the Department of Industry, Innovation and Science hereinafter referred to as "the Agency" created 1 July 2018, whose address is 10 Binara Street, Canberra City, Canberra, represented by Dr Megan Clark AC, Head of the Australian Space Agency;

#### and

The Deutsches Zentrum für Luft- und Raumfahrt e. V. - German Aerospace Center; represented by its Executive Board, having its headquarters at Linder Hoehe, 51147 Cologne, Germany (hereafter referred to as the "**DLR**") is, on one side the national aeronautics and space Research Center of the Federal Republic of Germany. Its extensive research and development work in aeronautics, space, energy, transport, digitalisation and security is integrated into national and international cooperative ventures. On the other side, DLR also acts as Germany's Space Agency. In this function, DLR has been given responsibility by the federal government for planning and implementation of the German space programme. In respect of this Letter of Intent, DLR wishes to express its intent as a Space Agency as well as a Research Center,

referred to individually as "Participant" or collectively as "Participants",

**HAVING** regard to the wishes of the Participants to cooperate on space activities for their mutual benefit;

**CONSIDERING** the positive contribution that cooperation in space science, research, technology, services, applications and international governance will bring to promoting relationships and partnerships between the Participants, their respective industry organizations, as well as academic and research institutions;

**RECOGNISING** the advantage to the Australian and German Space Programs resulting from a close cooperation in the fields of science and technology;

**TAKING INTO ACCOUNT** their mutual interest to start bilateral cooperation in the areas of mutual interest set out in Section 2 below;

**WILLING** to establish a general framework to facilitate the continuance of the Participants' mutually beneficial relationship.

#### HAVE REACHED THE FOLLOWING UNDERSTANDINGS:

#### 1 Purpose

- 1.1 The purpose of this Letter of Intent ('LOI') is to:
  - a. Establish a partnership for cooperation between the Participants relating to space cooperation for peaceful purposes;
  - b. provide a framework for collaborative activities and for reviewing areas of common interest in the civil aspects of space;
  - c. facilitate the interchange of information, technology and personnel in areas of mutual interest; and
  - d. nominate relevant points of contact for both Participants.

## 2 Areas of Cooperation

- 2.1 Subject to the laws and regulations applicable to them, the Participants, through consultation, will decide upon the specific items and scope of cooperation within the framework of this LOI.
- 2.2 The proposed collaborative activities are the following:
  - a. Participants are willing to facilitate collaboration as appropriate, including the exchange of information and expertise, in the German and Australian space sectors, including:
    - Space science, transport, technology and applications highlighting:
      - Space based communications technologies and services
      - Position, Navigation and Timing
      - Quantum technologies (quantum communication, quantum sensors)
      - Earth Observation
      - Astronomy (infrared sensors)
      - Space Situational Awareness, Space Surveillance and Tracking
      - Remote Asset Management
      - Biomedical research under space conditions
      - Launch vehicles (including Reusable Launch Vehicle (RLV)), sites and operations, orbital and suborbital
      - Hypersonic research and technology, including aerothermodynamics, air breathing propulsion and flight control
      - High temperature materials and thermal protection strategies
      - Advanced emerging research and development
      - Micro gravity Research

- o Exchange of views on space policy, law and regulation;
- Human capital development in the space field and related areas;
- b. Participants are willing to jointly identify suitable projects of common interest that can be supported and developed in both countries.
- 2.3 Other areas of future cooperation may be identified by mutual consent of the Participants.

## 3 Financial and Legal Provisions

- 3.1 Both Participants acknowledge that any activities covered by this LOI will:
  - a. comply with all relevant export controls on a case-by-case basis; and
  - b. respect intellectual property rights in accordance with all applicable laws.
- 3.2 The Participants also acknowledge that this LOI will place no financial, legal or other type of commitment on either Participant or their Governments. A Participant cannot be held liable to the other for failing to carry out the envisaged relations under this LOI, including where either Participant fails to enter into further negotiations.
- 3.3 The relationship under this LOI is set up by the Participants on a best effort basis.
- 3.4 Nothing in this LOI prevents either Participant from cooperating with other States, Space Agencies or any other entity

#### 4 Point of Contact

4.1 In order to facilitate communication and coordination efforts under this LOI, the Participants hereby designate their respective representatives as point of contact:

For DLR: Mr. Nicolas Peter

Head, DLR International Relations E-Mail: Nicolas.Peter@dlr.de

For the Agency: Mr. Karl Rodrigues

Executive Director, International and National

Engagement

Email: Karl.Rodrigues@space.gov.au

or such other person notified to the other Participant.

4.2 The Participants will arrange meetings by mutual consent to review progress on the implementation of this LOI to monitor the effectiveness and applicability of the present LOI and examine proposals relating to plans for cooperation.

## 5 Potential Future Cooperation

- 5.1 Future cooperative activities carried out and respectively supported by the Participants may take a variety of forms, including, but not limited to:
  - a. joint projects;
  - b. seminars, conferences, symposia, meetings and workshops;
  - c. shared use of facilities for cooperation purposes and the development of new facilities;
  - d. visits and exchanges of Participant representatives and experts;
  - e. exchanges of information and documentation.
- 5.2 Any specific cooperative activity will be subject to the availability of funds, the agreement of both participants and, where applicable, the agreement of collaborating third parties.
- 5.3 For the sake of clarity, separate collaboration agreements have to be negotiated and concluded in order to establish the specific terms of any cooperative activity.
- 5.4 A collaboration agreement will specify at least the area of cooperation, the institutions involved, the financial arrangements, confidentiality, export control and other appropriate matters.

### 6 Amendment

6.1 This LOI may be amended by mutual written consent of the Participants. The Participant wishing to make an amendment will notify the other in writing. Any amendment will take effect when each Participant has notified the other in writing of its consent to the amendment.

## 7 Duration and termination

7.1 This LOI will come into effect on the date of signature by both Participants and will continue in operation until terminated by either Participant giving six months' written notice to the other.

Signed at the International Astronautical Congress 2019 in Washington D.C. on 22 October 2019.

For

the Australian Space Agency:

For

the DLR, German Aerospace Center:

Mr. Anthony Murfett Deputy Head of Agency Prof. Dr. Pascale Ehrenfreund

Chair of the DLR Executive Board

Dr. Walther Pelzer

Member of the DLR Executive Board, Head of the DLR Space Administration

Prof. Dr. Hansjörg Dittus

Member of DLR Executive Board for Space Research and Technology