



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:
 - o 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

- 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:



Mr. Anthony Murfett
Deputy Head of Agency

For
the DLR, German Aerospace Center:



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