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**Committee on the Peaceful  
Uses of Outer Space****Information furnished in conformity with the Convention  
on Registration of Objects Launched into Outer Space****Note verbale dated 20 September 2019 from the Permanent  
Mission of Australia to the United Nations (Vienna) addressed to  
the Secretary-General**

The Permanent Mission of Australia to the United Nations (Vienna), in accordance with article IV of the Convention on Registration of Objects Launched into Outer Space (General Assembly resolution 3235 (XXIX), annex), has the honour to transmit information concerning the space objects Proxima-I, Proxima-II, Centauri-1, Centauri-2, Sirion Pathfinder-2, M1 and ACRUX-1, launched by Australia during the period from November 2018 to June 2019 (see annex I) and additional information concerning the space object Optus-10, launched on 11 September 2014 (see annex II).



## Annex I

### Registration data on space objects launched by Australia\*

#### Proxima-I

##### Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2018-088E
Name of the space object	Proxima-I
State of registry	Australia
National designator/registration number	Proxima-I
Other launching States	New Zealand. The launch services were provided by Rocket Lab from the Mahia Peninsula, New Zealand
Date and territory or location of the launch	11 November 2018 at 0350 hours UTC; Mahia Peninsula, New Zealand
Basic orbital parameters	
Nodal period	94.67 minutes
Inclination	85.03 degrees
Apogee	515 kilometres
Perigee	488 kilometres
General function of the space object	Telecommunications

##### Additional voluntary information for use in the Register of Objects Launched into Outer Space

Space object owner or operator	Fleet Space Technologies Pty Ltd.
Launch vehicle	Electron

#### Proxima-II

##### Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2018-088G
Name of the space object	Proxima-II
State of registry	Australia
National designator/registration number	Proxima-II
Other launching States	New Zealand. The launch services were provided by Rocket Lab from the Mahia Peninsula, New Zealand

\* The information was submitted using the form prepared pursuant to General Assembly resolution [62/101](#) and has been reformatted by the Secretariat.

Date and territory or location of the launch	11 November 2018 at 0350 hours UTC; Mahia Peninsula, New Zealand
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Basic orbital parameters

Nodal period	94.68 minutes
Inclination	85.03 degrees
Apogee	515 kilometres
Perigee	488 kilometres

General function of the space object	Telecommunications
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**Additional voluntary information for use in the Register of Objects Launched into Outer Space**

Space object owner or operator	Fleet Space Technologies Pty Ltd.
Launch vehicle	Electron

**Centauri-1**

**Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space**

Committee on Space Research international designator	2018-096D
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Name of the space object	Centauri-1
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State of registry	Australia
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National designator/registration number	Centauri-1
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Other launching States	India. The launch services were provided by Antrix Corporation Ltd., the commercial arm of the Indian Space Research Organization, from the Satish Dhawan Space Centre, India
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Date and territory or location of the launch	29 November 2018 at 0428 hours UTC; Satish Dhawan Space Centre, India
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Basic orbital parameters

Nodal period	94.38 minutes
Inclination	97.4835 degrees
Apogee	592 kilometres
Perigee	570 kilometres

General function of the space object	Telecommunications
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**Additional voluntary information for use in the Register of Objects Launched into Outer Space**

Space object owner or operator	Fleet Space Technologies Pty Ltd.
Launch vehicle	Indian Polar Satellite Launch Vehicle

## **Centauri-2**

### **Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space**

Committee on Space Research international designator	2018-099BD
Name of the space object	Centauri-2
State of registry	Australia
National designator/registration number	Centauri-2
Other launching States	United States of America. The launch services were provided by SpaceX from Vandenberg Air Force Base, United States
Date and territory or location of the launch	3 December 2018 at 1832 hours UTC; Vandenberg Air Force Base, United States
Basic orbital parameters	
Nodal period	96.3 minutes
Inclination	97.769 degrees
Apogee	498 kilometres
Perigee	473 kilometres
General function of the space object	Telecommunications

### **Additional voluntary information for use in the Register of Objects Launched into Outer Space**

Space object owner or operator	Fleet Space Technologies Pty Ltd.
Launch vehicle	SpaceX Falcon 9

## **Sirion Pathfinder-2**

### **Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space**

Committee on Space Research international designator	2018-099B
Name of the space object	Sirion Pathfinder-2
State of registry	Australia
National designator/registration number	Sirion Pathfinder-2
Other launching States	United States. The launch services were provided by SpaceX from Vandenberg Air Force Base, United States
Date and territory or location of the launch	3 December 2018 at 1832 hours UTC; Vandenberg Air Force Base in California, United States
Basic orbital parameters	
Nodal period	96.32 minutes
Inclination	97.76 degrees

Apogee	592 kilometres
Perigee	573 kilometres
General function of the space object	Telecommunications

**Additional voluntary information for use in the Register of Objects Launched into Outer Space**

Space object owner or operator	Sirion Global Pty Ltd.
Launch vehicle	SpaceX Falcon 9

**M1**

**Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space**

Committee on Space Research international designator	2018-099
Name of the space object	M1
State of registry	Australia
National designator/registration number	M1
Other launching States	United States. The launch services were provided by SpaceX from Vandenberg Air Force Base, United States
Date and territory or location of the launch	3 December 2018 at 1832 hours UTC; Vandenberg Air Force Base, United States
Basic orbital parameters	
Nodal period	96.34 minutes
Inclination	97.764 degrees
Apogee	583.529 kilometres
Perigee	581.317 kilometres
General function of the space object	Research satellite equipped with automatic identification system (AIS) and automatic dependent surveillance-broadcast (ADS-B) receivers and a software-defined radio

**Additional voluntary information for use in the Register of Objects Launched into Outer Space**

Change of status in operations	
Date when space object is no longer functional	1 March 2019 UTC
Space object owner or operator	University of New South Wales
Launch vehicle	SpaceX Falcon 9

**ACRUX-1****Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space**

Committee on Space Research international designator	2019-037E
Name of the space object	ACRUX-1
State of registry	Australia
National designator/registration number	ACRUX-1
Other launching States	New Zealand. The launch services were provided by Rocket Lab from the Mahia Peninsula, New Zealand
Date and territory or location of the launch	29 June 2019 at 0430 hours UTC; Mahia Peninsula, New Zealand
Basic orbital parameters	
Nodal period	93.59 minutes
Inclination	45.01 degrees
Apogee	450.2 kilometres
Perigee	449.8 kilometres
General function of the space object	Monitoring health of the satellite subsystems for learning purposes. Validation of a novel attitude control system and capability-building for future missions

**Additional voluntary information for use in the Register of Objects Launched into Outer Space**

Space object owner or operator	Melbourne Space Program Ltd.
Launch vehicle	Electron

## Annex II

### Additional information on a space object previously registered by Australia \*

#### Optus-10

##### Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2014-054A
Name of the space object	Optus-10
State of registry	Australia
Registration document	ST/SG/SER.E/751
National designator/registration number	Optus-10
Other launching States	France. The launch services were provided by Arianespace from French Guiana (Guiana Space Centre)
Date and territory or location of the launch	11 September 2014 at 2205 hours UTC; Guiana Space Centre, Kourou, French Guiana
Basic orbital parameters	
Nodal period	Since the satellite is in geostationary orbit, the concept of a nodal period is not applicable. However, the orbital period is approximately 23 hours 56 minutes 04 seconds
Inclination	0.00 ± 0.05 degrees
Apogee	35,786 kilometres
Perigee	35,786 kilometres
General function of the space object	Commercial telecommunications within Australia, New Zealand and nearby islands

##### Additional voluntary information for use in the Register of Objects Launched into Outer Space

Basic orbital parameters	
Geostationary position	156.00 ± 0.05 degrees East
Change of position of the space object	
Previous orbital position	164.00 ± 0.05 degrees East
New orbital position	156.00 ± 0.05 degrees East

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