17 April 2024

English only

Committee on the Peaceful Uses of Outer Space Legal Subcommittee Sixty-third session Vienna, 15–26 April 2024 Item 11 of the provisional agenda^{*} General exchange of information on non-legally binding United Nations instruments on outer space

Compendium on mechanisms adopted in relation to non-legally binding United Nations instruments on outer space

Submissions by Argentina, Australia, Brazil, Ghana, Morocco, the Russian Federation and Slovakia

Note by the Secretariat

1. In accordance with the recommendation of the Legal Subcommittee at its sixty-second session, States members of the Committee and international intergovernmental organizations with permanent observer status with the Committee should continue to be invited to submit their responses to the secretariat for inclusion into the compendium on mechanisms adopted in relation to non-legally binding United Nations instruments on outer space (A/AC.105/1285, para. 233).

2. The compendium, as well as the questionnaire on the general exchange of information on non-legally binding United Nations instruments on outer space, containing the templates for collecting information, are located at:

www.unoosa.org/oosa/en/ourwork/spacelaw/nlbcompendium.html

3. The present conference room paper contains replies received from Argentina, Australia, Brazil, Ghana, Morocco, the Russian Federation and Slovakia.

* A/AC.105/C.2/L.326.

V.24-06922 (E)



Argentina

[Original: Spanish] [15 January 2024]

The National Space Activities Commission (CONAE) has taken note of the request for information on this topic and CONAE's plan of activities now includes the consideration and analysis of the matters referred to by the Legal Subcommittee.

Australia

[Original: English] [15 January 2024]

(1) Declaration on International Cooperation in the Exploration and Use of Outer space for the Benefit and in the Interest of All States, Taking into Particular Account the Needs of Developing Countries (Space Benefit Declaration)

National (or International) mechanism(s)

- Space (Launches and Returns) Act 2018
- Space (Launches and Returns) (General) Rules 2019
- Space (Launches and Returns) (Insurance) Rules 2019

Description

The Space (Launches and Returns) Act 2018 (the Act; previously the Space Activities Act 1998) came into effect in 2019. The Act sets out the system for the regulation of space activities carried on either from Australia or by Australian nationals outside Australia, and the launch of high power rockets in Australia. The Act provides for launch facility licences, Australian launch permits, Australian high power rocket permits, overseas payload permits, return authorisations and authorisation certificates.

Under the Act, 'space object' means:

- An object the whole or a part of which is to go into or come back from an area beyond the distance of 100 km above mean sea level; or
- Any part of such an object, even if the part is to go only some of the way towards or back from an area beyond the distance of 100 km above mean sea level.

The Act includes seeking to ensure that a reasonable balance is achieved between:

- The removal of barriers to participation in space activities and the encouragement of innovation and entrepreneurship in the space industry; and
- The safety of space activities, and the risk of damage to persons or property as a result of space activities, regulated by the Act.

The Act also implements certain of Australia's obligations under the United Nations Space Treaties. The Minister may grant a licence, permit or authorisation if the Minister does not consider that, for reasons relevant to the security, defence or international relations of Australia, the licence, permit or authorisation should not be granted (or given).

References

legislation.gov.au/C2004A00391/latest/text legislation.gov.au/F2019L01118/latest/text legislation.gov.au/F2019L01120/asmade/text

(2) Principles Relating to Remote Sensing of the Earth from Outer Space

National (or International) mechanism(s)

Related legislation includes:

- Meteorology Act 1955
- Science and Industry Research Act 1949

Description

The *Meteorology Act 1955* requires the Bureau of Meteorology (the Bureau) to fulfil Australia's international obligations under the Convention of the World Meteorological Organization (WMO) and related international treaties and agreements. As part of the WMO Unified Data Policy (Res 1), the Bureau receives data from over 30 Earth observation satellites, which are used to develop forecast and warning services for the Australian community and in support of sectors such as emergency services, aviation services, the energy sector, transport and defence. Australia does not operate an Earth observation weather satellite, however the Bureau contributes to WMO Res 1 by sharing in-situ observations in near real time, and collaborating internationally on Earth observation science and capacity building activities.

The Bureau's Australian Space Weather Forecasting Centre (ASWFC) is the official source of space weather alerts, warnings, and forecasts in Australia. The ASWFC is an International Civil Aviation Organization-designated Space Weather Advisory Centre, responsible for issuing advisories to the aviation sector on solar activity, and a designated Regional Warning Centre by the International Space Environment Service. The Bureau's space weather products and services support key sectors such as defence, space, aviation, energy, resources and emergency management. The Bureau also operates an expansive network of space weather observation instruments.

The Commonwealth Scientific and Industrial Research Organisation (CSIRO), Australia's national science agency, is a statutory authority within the Australian Government. Under the *Science and Industry Research Act 1949*, CSIRO undertakes a broad range of activities. In space-related areas this includes spacecraft tracking and communications, radioastronomy, Earth observation, and space applications and technologies. CSIRO is a Principal in the international Committee on Earth Observation Satellites (CEOS) and member of the Australian delegation to the intergovernmental Group on Earth Observation (GEO). CSIRO operates a 10 per cent capacity share of the NovaSAR-1 satellite as a national facility for the benefit of the research community, and to support disaster management and response.

CSIRO develops Earth observation data analytics platforms based on Open Data Cube technology to enable greater access to and use of Earth observation data for numerous applications, and to help build the capabilities of regional neighbours to use Earth observation data to assist in climate-smart innovation and their ability to prepare for the effects of climate change. CSIRO also undertakes ground-based calibration and validation to support the operation of international partners' Earth observation satellites. CSIRO, with partners, is aiming to establish the AquaWatch Australia water quality information system, which will combine remote sensing data from various international Earth observation satellites as well as in-situ sensor data and water quality forecast models, with applicability both nationally and internationally.

References

legislation.gov.au/C1955A00006/latest/text legislation.gov.au/C1949A00013/latest/text

(3) Principles Relevant to the Use of Nuclear Power Sources in Outer Space

National (or International) mechanism(s)

- Space (Launches and Returns) Act 2018
- Space (Launches and Returns) (General) Rules 2019

Description

Under section 30 of the *Space (Launches and Returns) Act 2018*, it is a standard condition of an Australian launch permit, except to the extent that the permit otherwise specifies, that the space object or objects must not contain a nuclear power source unless written approval has first been obtained from the Minister for Industry and Science.

Under section 46B of the Act and section 71 of the *Space (Launches and Returns) (General) Rules 2019*, criteria for grant of an overseas payload permit include that any part of the space object, or objects, owned by the applicant (or the whole object if the applicant owns the whole object) does not contain a nuclear power source unless the Minister's written approval has first been obtained.

Additionally, under section 46M of the Act, a person commits an offence if the person returns a space object purportedly in accordance with a return authorisation and the space object contains a nuclear power source and the Minister's written approval for this has not first been obtained.

References

legislation.gov.au/C2004A00391/latest/text

legislation.gov.au/F2019L01118/latest/text

(4) Resolution 1721 B (XVI) of 20 December 1961 ((registration of launchings) International Cooperation in the peaceful uses of outer space)

National (or International) mechanism(s)

- Space (Launches and Returns) Act 2018
- Space (Launches and Returns) (General) Rules 2019

Description

Under the *Space (Launches and Returns) Act 2018*, the Minister must keep a Register of Space Objects and must enter in the Register particulars for a space object that is launched into Earth orbit or beyond under an Australian launch permit, overseas payload permit or authorization certificate (section 76). In keeping the Register, the Minister must have regard to the Registration Convention and any other international agreement or arrangement relating to the registration of space objects to which Australia is a party. The Minister must cause the Register to be made publicly available on the Department's website (section 76(5)).

The *Space (Launches and Returns) (General Rules) 2019* (the General Rules) indicate that an application for the grant of an Australian launch permit requires information for each payload, including the proposed trajectory and (if applicable) orbit of the payload (section 50(g)).

The General Rules (section 39) require the holder of an Australian launch permit to, among other things, provide as soon as practicable after the launch of a space object authorised by the permit:

• The information about the orbital parameters of the space object mentioned in paragraph 1(d) of Article IV of the Registration Convention; and

• If a country other than Australia is a launching state for the space object – whether the other launching state has indicated it wishes to register the space object.

Under the Act (section 8), 'launching State' has the same meaning as in the Liability Convention (Art I) – that is, a launching State means:

- A State which launches or procures the launching of a space object;
- A State from whose territory or facility a space object is launched.

The General Rules (section 77) require that an application for the grant of an overseas payload permit include:

- The proposed trajectory and (if applicable) orbit of the payload (section 77(1)(c)); and
- The information required for the registration of the payload under paragraph 1 of Article IV of the Registration Convention (section 77(1)(e));
- Additionally, as a condition of an overseas payload permit, the permit holder is required to provide, as soon as practicable after the launch of the object, the information about the orbital parameters of the space object mentioned in paragraph 1(d) Article IV of the Registration Convention;
- The permit holder is also required to inform, as soon as practicable, of any change that is proposed to the orbital parameters of the space object. The permit holder must notify the responsible Minister within 1 month of the change.

References

legislation.gov.au/C2004A00391/latest/text

legislation.gov.au/F2019L01118/latest/text

space.gov.au/register-space-objects

Brazil

[Original: English] [23 February 2024]

(4) Resolution 1721 B (XVI) of 20 December 1961 ((registration of launchings) International Cooperation in the peaceful uses of outer space)

National (or International) mechanism(s)

AEB Ordinance No. 96 of November 30, 2011, Regulation on the procedures to be adopted for the implementation and operation of the Registry of space objects launched into outer space, under the responsibility of the Brazilian State.

Description

According to the AEB Ordinance No. 96, of November 30, 2011, published in the Official Gazette of the Union (D.O.U.) on December 2, 2011, the Brazilian Space Agency (AEB) is in charge of "implementing and operating the National Registry of objects space." Such registration is updated every time Brazil acts as a "launching state", as defined in the Convention Relating to the Registration of Objects Launched into Outer Space" or "Registration Convention" dated January 14, 1975 (General Assembly Resolution 3235 (XXIX)). Internally, maintaining the registry is the responsibility of the International Cooperation Office (ACI). Chapter II, Art. 6 of the aforementioned ordinance establishes that the "Brazilian space objects" to be registered are:

• Space objects developed in Brazil by a Brazilian government entity or the private sector, by a foreign entity duly authorized to operate in the sector or

through a bilateral initiative, whose launch takes place in the Brazilian territory or in another country.

- Space objects developed by a Brazilian entity abroad, with or without the participation of a foreign entity, that may be launched from Brazilian territory or another country.
- Space objects developed abroad by a foreign entity, as a result of an order by a Brazilian entity, whose launch takes place from Brazilian territory or another country.
- Space objects developed abroad by a foreign entity, without the participation of a Brazilian entity and without having been ordered by a Brazilian entity, whose launch takes place from Brazilian territory.

References

https://www.gov.br/aeb/pt-br/programa-espacial-brasileiro/objetos-espaciaisbrasileiros (Portuguese)

Ghana

[Original: English] [7 February 2024]

Ghana generally supports efforts to promote responsible and sustainable space activities through non-legally binding instruments.

Morocco

[Original: French] [18 January 2024]

To date, Morocco has not adopted any mechanisms in relation to non-legally binding United Nations instruments on outer space.

Russian Federation

[Original: English] [15 January 2024]

National mechanisms for the implementation of the non-legally binding United Nations instruments on outer space in the Russian Federation are the following:

- Law No. 5663-I of the Russian Federation of 20 August 1993 "On Space Activities";
- Federal Law No. 215-FZ of the Russian Federation of 13 July 2015 "On the State Corporation for Space Activities (Roscosmos)";
- Decision No. 1087 of the Government of the Russian Federation "On Approval of the Regulations on the Procedure and Features of Providing Earth Remote Sensing Data from Space Obtained from Outer Space Vehicles" of 24 August 2019;
- Decision No. 370 of the Government of the Russian Federation "On Approval of the Regulations on Planning Space Imaging, Receipt, Processing, Storage and Dissemination of Earth Remote Sensing Data from High Resolution (less than two meters) Civil Outer Space Vehicles" of 10 June 2005;
- Resolution No. 298 of the Government of the Russian Federation on Licensing of Space Activities (together with the Regulations on Licensing of Space Activities) of 18 March 2020; and

- Order No. 44 of the Federal Space Agency on Approval of the Administrative Regulations of the Federal Space Agency for the Execution of the State Function of Maintaining the Register of Space Objects Launched by the Russian Federation into Outer Space of 22 March 2010.
- The national mechanisms for the implementation of the non-legally binding United Nations instruments on outer space debris mitigation measures in the Russian Federation are the following:
- GOST R 52925-2018 "National standard of the Russian Federation. Space technology items. General requirements for space vehicles to reduce technogenic pollution in near-Earth space" (entered into force on 1 January 2019); and
- GOST R 25645.167-2022 "National Standard of the Russian Federation. Space environment (natural and artificial). Model of the space-time distribution of the flux density of man-made substances in near-Earth Space" (entered into force on 1 June 2022).
- The regulatory and legal framework existing in the Russian Federation for activities related to the development and operation of spacecraft carrying nuclear power units for various purposes sufficiently regulates activities related to the development and use of spacecraft carrying nuclear power units. It takes into account the provisions and requirements of adopted international (United Nations, IAEA, and ICRP) instruments.
- The national mechanisms for the implementation of the non-legally binding United Nations instruments on the use of nuclear power sources in outer space in the Russian Federation are the following:
- Law No. 5663-I of the Russian Federation "On Space Activities" of 20 August 1993;
- Federal Law No. 170-FZ of the Russian Federation "On the Use of Nuclear Energy" of 21 November 1995;
- Federal Law No. 3-FZ of the Russian Federation "On Radiation Safety of the Population" of 9 January 1996;
- Federal Law No. 7-FZ of the Russian Federation "On Environmental Protection" of 10 January 2002;
- Federal Law No. 174-FZ of the Russian Federation "On Environmental Expertise" of 23 November 1995; and
- Federal rules and regulations in the field of atomic energy use "General provisions of safety assurance for spacecraft with nuclear reactors" (NP-101-17).
- Besides, the State Corporation for Space Activities (Roscosmos) maintains the Register of Space Objects Launched by the Russian Federation into Outer Space. The national mechanism includes a regularly updated electronic collection of instructional, methodological, regulatory, reference, organizational and analytical materials on further improving the procedure for maintaining the Register of Space Objects Launched by the Russian Federation, taking into account the recommendations of United Nations General Assembly resolutions.

Slovakia

[Original: English] [15 January 2024]

Non-legally binding mechanisms of the United Nations, such as, for example, the Space Debris Mitigation Guidelines of the Committee on the Peaceful Uses of Outer Space; Guidelines on the Long-Term Sustainability of Outer Space Activities of the Committee, are considered and taken into account in the draft of the "Act regulating Space Activities in Slovakia".