National Interest Analysis: United Nations Convention on Registration of Objects launched into Outer Space

1. **Executive Summary**

The Government wants to facilitate the development of a safe, secure, responsible and internationally credible New Zealand based space industry. This requires New Zealand to consider its participation in the international space regulatory framework.

The United Nations Convention on Registration of Objects launched into Outer Space (the Registration Convention) is one of five United Nations (UN) space treaties that provide the underpinning international regulatory framework for State Parties' space related activities. It also forms the basis for domestic regulatory systems.

New Zealand's accession to the Registration Convention is not necessary for space objects to be launched from New Zealand. However, accession is consistent with New Zealand's position as a responsible launching State. Currently there are 62 Parties to the Registration Convention.

The main new obligation arising from accession is the requirement for New Zealand as a launching State to establish and maintain a register for space objects (including launch vehicles and payloads) launched into outer space. The establishment and maintenance of a registry is a simple and effective way for the Government to maintain oversight of space objects launched, share registration data when needed (e.g. to ensure national security, prevent collisions and space debris clean-up initiatives), and use the data to give effect to other treaties (such as the International Telecommunication Union (ITU) treaty).¹

The Registration Convention also provides a mechanism within which to agree with other State Parties on who should register, and retain jurisdiction and control, over a space object. It provides that a launching State on whose registry a space object is registered, is the State of registry for the purposes of the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies (the "Outer Space Treaty"), to which New Zealand has been a Party since 1968. The Outer Space Treaty provides that a State of registry retains jurisdiction and control over the space object. In practice, this means that the space object would be subject to New Zealand law, and that New Zealand would have a responsibility to exercise ongoing control and supervision over such objects. Under the Registration Convention, when there is more than one State involved, the States must determine between themselves who will register the space object, and can also make arrangements concerning jurisdiction and control over that space object.

Accession would have no bearing on liability, which is governed by the UN Convention on International Liability for Damage Caused by Space Objects (the "Liability Convention") to which New Zealand has been a Party since 1974.

2. Nature and timing of the proposed treaty action

The Registration Convention, adopted by the General Assembly in its resolution 3235 (XXIX), opened for signature on 14 January 1975, entered into force on 15 September 1976. It establishes a mandatory system of registering objects launched into outer space. There are 62 Parties to the Registration Convention.

Accession is proposed following the completion of New Zealand's domestic treaty process. This includes the passage of legislation necessary to comply with the obligations in the Registration Convention, currently scheduled to be passed by the end of 2016.

¹ The ITU treaty regulates the use of satellite orbital slots and frequencies (requiring Member States to register and coordinate their satellites).

As the Registration Convention is already in force, New Zealand may accede to it at any time by depositing an instrument of accession with the Secretary-General of the United Nations (Article VIII (2)). The Registration Convention would enter into force for New Zealand on the date of the deposit of its instrument of accession (Article VIII (4)).

Tokelau has been informed of New Zealand's intended accession to the Registration Convention. It is not proposed that the Registration Convention be extended to Tokelau as officials do not consider the obligations under the Registration Convention are of relevance to Tokelau at this time.

3. Reasons for New Zealand becoming party to the Treaty

The Government wants to facilitate the development of a safe, secure, responsible and internationally credible New Zealand based space industry. This requires New Zealand to consider its participation in the international space regulatory framework.

International space law comprises the UN space treaties and a body of principles developed by the UN Committee on the Peaceful Uses of Outer Space (COPUOS), UN General Assembly (UNGA) resolutions, and other international agreements between states, as well as rules and regulations of international organisations.

Within this body of international space law, the UN space treaties provide the underpinning international regulatory framework for State Parties' space related activities, and also form the basis for domestic regulatory systems. The UN principles and other UNGA resolutions set guidelines, but are not binding in nature.

There are five UN space treaties. New Zealand is already party to three, namely:

- Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies, entered into force on 10 October 1967 (the "Outer Space Treaty"), ratified by New Zealand on 31 May 1968;
- Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space, entered into force on 3 December 1968 (the "Rescue Agreement") ratified by New Zealand on 8 July 1969; and,
- Convention on International Liability for Damage Caused by Space Objects, entered into force on 1 September 1972 (the "Liability Convention") ratified by New Zealand on 30 October 1974.

New Zealand has yet to accede to the:

- Registration Convention, entered into force on 15 September 1976; and,
- Agreement Governing the Activities of States on the Moon and Other Celestial Bodies, entered into force on 11 July 1984 (the "Moon Agreement").

Currently there are 62 Parties to the Registration Convention (including for example, Canada, Australia, the US and the United Kingdom). Accession to the Registration Convention would be an indication that New Zealand is a responsible launching State. This will, in turn, facilitate the development and maintenance of an internationally credible New Zealand-based space industry.

4. Advantages and disadvantages to New Zealand of the treaty entering into force and not entering into force for New Zealand

UN space treaties do not preclude a non-Party State from launching a space object. New Zealand's accession to the Registration Convention is therefore technically not necessary to launch an object into space.

Notwithstanding this, like-minded countries with advanced space industries (e.g. UK and US) are Party to the Registration Convention; and the annual UN General Assembly resolution on International Cooperation in the Peaceful Use of Outer Space (most recently resolution 69/85 of 5 December 2014) "urges States that have not yet become parties to the international treaties governing the uses of outer space to give consideration to ratifying or acceding to those treaties in accordance with their national law, as well as incorporating them into their national legislation".

New Zealand's accession would facilitate the development and maintenance of our international relationships as a responsible launching State, consistent with New Zealand's stated position of promoting a rules-based approach to the responsible use of space.

As outlined in more detail below, the main new obligation that would result from accession would be to (Article II(1)):

- establish and maintain a central register of space objects launched into orbit or into outer space;
- register each space object; and,
- inform the UN Secretary-General of the establishment of such a registry.

Should the Government not accede to the Registration Convention, we would not be obliged to establish and maintain a register of space objects.

A registration mechanism for space objects would be needed, in any case, for the development of a New Zealand based space industry, and growth of a wider space economy. Systematic registration of space objects is consistent with the Government's objectives to create a responsible and internationally credible New Zealand space regulatory framework that enables the Government and businesses to effectively engage with other jurisdictions and overseas businesses (e.g. US, UK and Australia).

The establishment and maintenance of a registry is a simple and effective way for the Government to maintain oversight of space objects launched from New Zealand, collect information about these objects consistently, share registration data as and when desired and/or needed (e.g. to ensure national security, prevent collisions and facilitate space debris clean-up initiatives), and use registration data to to give effect to other treaties (such as the International Telecommunication Union (ITU) treaty).

Should the Government not accede to the Registration Convention, the Government would also not need to inform the UN Secretary-General of the launch of a space objects. However, for the reasons outlined above, the Government considers that would be in the interest of New Zealand as a responsible and credible launching State to register space objects. In the case that launches were to occur for which New Zealand is a launching State, New Zealand could register the space object from with the UN pursuant to UNGA Resolution 1721 B (XVI) of 1961, as recommended by UNGA Resolution 62/101 (2007), OP1(a). This would provide a satisfactory interim measure pending NZ's accession to the Convention. Italy registered its launches under this resolution prior to its accession to the Registration Convention in 2005.

In the long-term, however, accession to the Registration Convention would be more consistent

with international practice and the Government's objectives to create a responsible and internationally credible New Zealand space regulatory framework.

5. Legal obligations which would be imposed on New Zealand by treaty action, the position in respect of reservations to the treaty, and an outline of any dispute settlement mechanisms

The key new obligation that would arise from accession is the requirement on New Zealand as a launching state to establish and maintain a central register of space objects launched into orbit or into outer space, to register each space object, and to inform the UN Secretary-General of the establishment of such a registry (Article II(1)). A space object includes the component parts of a space object and its launch vehicle (Article I(b)). In practice, a space object is anything that is launched into Earth orbit or beyond.

New Zealand would be required (under Article IV) to provide to the UN Secretary-General, as soon as practicable, specified information concerning each space object carried on its registry (the name of launching State or States, an appropriate designator of the space object or its registration number, the date and territory or location of launch; basic orbital parameters, including: nodal period; (ii) Inclination; (iii) apogee; (iv) perigee; (e) general function of the space object). It is then the responsibility of the UN Secretary-General to maintain a public UN Register of Objects Launched into Outer Space (Article III).

A launching state includes a State which launches or procures the launching of a space object, and/or a State from whose territory or facility a space object is launched (Article I (a)). This definition allows for there to be more than one launching State. This is consistent with the concept of launching state established in Article VII of the Outer Space Treaty, and the definition of launching state in Article I of the Liability Convention.

When there is more than one launching State, the launching States must determine between themselves who will register the space object (Article III (2)). The Registration Convention does not prescribe how launching states are to decide who will register the space object. In practice, launching States can decide whether one or more States register the space object (including component parts). The decision could be made on a case by case basis, or via ongoing arrangements.

The Registration Convention provides that a State on whose registry a space object is registered is the State of registry for the purposes of the Outer Space Treaty (Article I (c)). Article VIII of the Outer Space Treaty provides that a State of registry retains jurisdiction and control over the space object. In practice, this means that space objects would be subject to New Zealand law, and that New Zealand would have a responsibility to exercise ongoing control and supervision over such objects. The Registration Convention provides that when there is more than one launching State, the launching States can make separate agreement concerning jurisdiction and control over the space objects (Article II(2)).

Accession to the Registration Convention would have no bearing on liability for any damage resulting from space objects registered in New Zealand. Liability, which is governed by the Liability Convention, accrues to the launching State(s), independently of whether the launching State(s) is a State of Registry.

The Registration Convention contains no provisions on reservations and does not include a dispute resolution mechanism.

6. Measures which the Government could or should adopt to implement the treaty action, including specific reference to implementing legislation

The Registration Convention states explicitly that "...the launching state shall register the space object", so if New Zealand acceded there will need to be some form of compulsory registration.

To comply with the Registration Convention should New Zealand be required to be the State of registry, New Zealand would need to establish a register for space objects which would at least need to include the mandatory information under Article IV(1).

It is therefore proposed that legislation will be introduced to give effect to New Zealand's obligations under the Registration Convention.

7. Economic, social, cultural and environmental costs and effects of treaty action

New Zealand Accession would not have any significant social, cultural and environmental costs for New Zealand.

8. The costs to New Zealand of compliance with the treaty

There are likely to be costs associated with the establishment and maintenance of a register. It is proposed that legislation could provide for broad regulation-making powers to prescribe fees and that, if necessary, whole or parts of any costs associated with the establishment and maintaining of a register could be recovered via fees applicable under the new legislation.

9. Completed or proposed consultation with the community and parties interested in the treaty action

The following agencies were consulted in the drafting of this national interest analysis and support its conclusions: the Ministry of Foreign Affairs and Trade, the Ministry of Transport, the New Zealand Defence Force, and the Ministry of Defence. The New Zealand security agencies have been consulted through a process led by the Department of Prime Minister and Cabinet.

The public has not been separately consulted on the proposed accession to the Registration Convention. The creation and establishment of a register of space object is an integral part of the proposed new legislation. The public will have an opportunity to make submission at select committee once the legislation is introduced in the House of Representatives.

10. Subsequent protocols and/or amendments to the Treaty and their likely effects

Any Party may propose amendments to the Registration Convention, which will enter into force for Parties which accept them following acceptance by the majority of Parties. For Parties which accept the amendment after it has entered into force, it would enter into force on the day of acceptance (Article IX).

11. Withdrawal or denunciation provision in the treaty

A State Party may also withdraw from the Registration Convention by giving notice to the UN Secretary-General, effective one year from the date of the notification (Article XI).

12. Agency disclosure statement

This extended NIA has been prepared by the Ministry of Business, Innovation and Employment, in consultation with other relevant government agencies. The extended NIA identifies all the substantive legal obligations arising from New Zealand's accession to the NIA, some of which will require legislative implementation, and analyses the advantages and disadvantages to New Zealand in becoming a Party to the Registration Convention.

Implementation of the obligations arising under the Registration Convention would not be expected to impose additional costs on businesses; impair private property rights, market competition, or the incentives on businesses to innovate and invest; or override fundamental common law principles.