



Australian Government



Australian
Space Agency

Space (Launches and Returns) Act 2018

Consultation paper on draft rules
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1. Introduction

In 2015, the Australian Government commenced a review of the *Space Activities Act 1998* to ensure Australia's space regulation was appropriate for technology advancements and did not unnecessarily inhibit innovation in Australia's space activities. The review identified that the *Space Activities Act 1998* had an unnecessary level of inflexibility, a high level of insurance/financial requirements in comparison to other space-faring nations, and a focus on the type of organisation undertaking the activity rather than the nature of the activity. A Bill to amend the *Space Activities Act 1998* was drafted that provided improvements appropriate to Australia's national context and supported participation in the Australian space industry, while balancing the Australian Space Agency's role as a globally responsible regulator.

The *Space Activities Amendment (Launches and Returns) Act 2018* passed both houses of Parliament in August 2018 and received Royal Assent on 31 August 2018. It will commence on 31 August 2019. The *Space (Launches and Returns) Act 2018* (the amended Act) will provide greater clarity and flexibility for the Australian space industry. It reflects consideration of removal of barriers to participation in activities, encouraging innovation and entrepreneurship, the safety of activities and the risk of damage to persons and property as a result of activities, and the implementation of certain obligations under the United Nations Space Treaties.

Recognising the rapid technological development in the space sector, the amended Act broadens the regulatory framework to specifically include launches from aircraft in flight and provides for launches of high power rockets. It also streamlines the approvals processes and insurance requirements for launches and returns. This regulatory framework is articulated in 'rules' instead of regulations to provide increased flexibility.¹

Attached are the proposed rules that have been developed to support the effective operation of the amended Act. The rules include information that an applicant will need to provide for different licences and permits, insurance requirements and conditions for certain permits and licences.² The amended Act introduced new terms for the existing permits, licences and certificates and introduced a new type of permit for high power rocket activity. Table 1 provides a simplified comparison of the terms under the current Act and the amended Act.

Recognising the importance of the rules to future growth of the Australian space industry, as well as ensuring the safety of the Australian community, the Australian Space Agency (Agency) is undertaking public consultation on the draft rules. The Agency is seeking your considered evaluation of the practical implications of these rules, and welcome your comments and feedback during the consultation phase.

¹ Section 110 of the *Space (Launches and Returns) Act 2018* provides for the making of rules by legislative instrument by the Minister.

² The *Space Activities Regulations 2001*, which provided the regulatory framework for civil space launches and returns under the *Space Activities Act 1998*, will be repealed to coincide with the commencement of the *Space (Launches and Returns) Act 2018* and associated rules.

Table 1: Licence, permit, authorisation and certificates (proposed and current)

| Terms proposed under the amended Act | Terms under the current Act |
|--------------------------------------|--|
| Launch facility licence | Space licence |
| Australian launch permit | Launch permit |
| Australian high power rocket permit | Currently under the <i>Civil Aviation Safety Regulation 1998</i> |
| Overseas payload permit | Overseas launch certificate |
| Return authorisation | Authorisation (of return of overseas-launched space objects) |
| Authorisation certificate | Exemption certificate |

2. General Rules

- 2.1. The *Space (Launches and Returns) (General) Rules 2019* (General Rules) articulates the specific requirements of certain licences, permits or certificates to reflect the different levels of responsibility and risk, and reduce the burden of unnecessary requirements. The drafting of the proposed General Rules seeks to streamline the application process and improve the readability of the application requirements.
- 2.2. Under the *Space Activities Act 1998*, a launch permit could only be provided to a space licence holder. Consequently, under the *Space Activities Regulations 2001*, the application for the space licence addressed a number of elements related to the operation of the launch itself. Under the amended Act, the requirement for the launch permit holder to also hold a facility licence has been removed. The proposed General Rules reflects this by clearly delineating the responsibilities of the launch facility and the launch operator under the launch facility licence and Australian launch permit respectively.
- 2.3. The overseas payload permit part sets out the rules for the launch of one or more space objects from outside Australia.³ The return authorisation part sets the rules for the return of a space object or objects in or outside Australia.⁴ The authorisation certificate part sets out the rules for authorisation of certain activity that would otherwise be prevented by the Act.

³ For example, the launch of an Australian satellite (like a CubeSat or a telecommunications satellite) on any launch vehicle (like an Ariane5, Electron, Falcon 9, H-IIA, PSLV-CA, or a Soyuz-2) from an overseas launch facility (like the Baikonur Cosmodrome, Rocket Lab Launch Complex 1, Satish Dhawan Space Centre, or the Vandenberg Air Force Base).

⁴ A return authorisation is when a launch occurs from an overseas launch facility and the space object such as a capsule has a controlled return to a place within Australia. A return authorisation is also for the controlled return of any Australian space object to anywhere on earth, such as an Australian research payload returning from the International Space Station.

- 2.4. The General Rules also includes sections on the activities of the launch safety officer, the investigation of accidents, and other miscellaneous provisions related to the operation of the rules such as delegations.
- 2.5. The General Rules do not refer to the *Space Activities (Approved Scientific or Educational Organisations) Guidelines 2015*. This is in line with the finding in the Legislative Proposals Paper that approving an activity should focus on the nature of the activity, rather than the type of organisation making the application.⁵ The current guidelines will be repealed to coincide with the commencement of the amended Act.
- 2.6. The Flight Safety Code is incorporated into the General Rules (and the High Power Rocket Rules below) by reference. Licence/permit applicants are required to satisfy the Launch Safety Standards, and comply with the risk hazard analysis methodology. The Flight Safety Code is being reviewed and updated to coincide with the commencement of the amended Act and the rules.

3. High Power Rocket Rules

- 3.1. The *Space (Launches and Returns) Act 2018* contains the objects of the Act which now include the regulation of the launch of high power rockets in Australia.
- 3.2. The *Space (Launches and Returns) (High Power Rocket) Rules 2019* (High Power Rocket Rules) define the characteristics of a high power rocket and articulate the specific requirements for the permit.
- 3.3. During the review of the *Space Activities Act 1998*, it was noted that certain activities presented a higher risk profile which would be better suited to evaluation under the Flight Safety Code.
- 3.4. The High Power Rocket Rules seek to ensure that a reasonable balance is achieved between industry participation and the safety of higher risk rocket activities whose altitude does not exceed 100km above mean sea level, including the risk of damage to persons or property.
- 3.5. The High Power Rocket Rules will introduce a new definition for a high power rocket. The definition proposes both an impulse and a complexity characteristic to distinguish these higher risk activities from model rocket activity in Australia. The *Civil Aviation Safety Regulations 1998* will be amended to align with this new definition.
- 3.6. The current definition in the draft High Power Rocket Rules proposes two characteristics that will be used to determine whether a rocket falls under the *Space (Launches and Returns) Act 2018*. The Agency is seeking comments on whether this definition is suitable. In particular, views and supporting evidence are sought on:
- Does the definition appropriately capture rockets that you consider should be assessed under the high power rocket definition?
 - Is the nominated level of complexity appropriate?
 - Is the nominated impulse level appropriate?
 - Does this definition capture rockets that you consider do not need to be assessed under the High Power Rocket rules?

⁵ Reform of the *Space Activities Act 1998* and associated framework, Legislative Proposals Paper, 24 March 2017, Section 4.9; available at: https://consult.industry.gov.au/space-activities/reform-of-the-space-activities-act-1998-and-associ/supporting_documents/Legislative%20Proposals%20Paper.pdf.

4. Insurance Rules

- 4.1. The Australian Government has certain liability under the Liability Convention.⁶ A part of that liability is passed on to the holder of the permit/licence/certificate. The *Space (Launches and Returns) Act 2018* specifies insurance/financial requirements for certain kinds of liabilities, which are then articulated in the *Space (Launches and Returns) (Insurance) Rules 2019* (Insurance Rules).
- 4.2. The Insurance Rules outline a number of methods that can be used to demonstrate meeting the requirements, specifically through insurance, or having available sufficient assets to cover liability under the amended Act. Amounts are specified (typically a maximum of \$100 million) and an optional method for determining an alternative acceptable amount.⁷ The requirement is the lower of the two amounts.
- 4.3. The Insurance Rules includes a proposal for setting the required insurance amount for overseas payload permits to \$0. This is, as for all the rules, subject to Ministerial approval. This removes a regulatory barrier to participation.

5. Privacy

- 5.1. The Agency is a non-statutory, whole-of-government entity located within the Department of Industry, Innovation and Science. The Agency is bound by the Australian Privacy Principles outlined in Schedule 1 of the *Privacy Act 1988* (Cth), which regulates how we may collect, use, disclose and store personal information.
- 5.2. The Department will collect from this consultation your personal information, including your name and/or company name, contact details, and comments and opinions to inform and improve the draft rules.
- 5.3. Your personal information will be accessed by Department staff who are involved with the drafting of the rules. Your personal information will not be used or disclosed without your consent, except as set out above or where authorised or required by law.
- 5.4. Personal Information will be stored and held in accordance with the Department's obligations under the *Archives Act 1983* (Cth). For further information, please refer to the Department of Industry, Innovation and Science's [Privacy Policy](#).⁸

⁶ The Liability Convention means the *Convention on International Liability for Damage Caused by Space Objects* done at London, Moscow and Washington on 29 March 1972. It can be found at the schedule 1 of the *Space Activities Act 1998*.

⁷ The method referenced to calculate an alternative acceptable amount is the Maximum Probable Loss Methodology. The Maximum Probable Loss Methodology is being reviewed and updated to coincide with the commencement of the *Space (Launches and Returns) Act 2018* and the Insurance Rules.

⁸ Available at <https://www.industry.gov.au/data-and-publications/privacy-policy>.

6. Conclusion

- 6.1. The Agency values your feedback and comments during consultation and is seeking written comments. This can include track changes to the Rules or a separate submission. Submissions can be uploaded into the Department of Industry Innovation and Science consultation portal at <https://consult.industry.gov.au/space/space-act-2018-consultation-on-draft-rules/>.⁹

⁹ Available at <https://consult.industry.gov.au/space/space-act-2018-consultation-on-draft-rules/>