



Australian Government



Australian
Space Agency

Australian Launch Permit

Application Guidelines

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Disclaimer

Guidelines are not legally binding other than to the extent they refer to binding legislation, identified throughout.

Guidelines should be read in conjunction with the *Space (Launches and Returns) Act 2018* (the Act), *Space (Launches and Returns) (General) Rules 2019* (the General Rules) and *Space (Launches and Returns) (Insurance) Rules 2019* (the Insurance Rules). Guidelines do not exclude, limit or replace the requirements of the Act, General Rules and Insurance Rules. If there is any ambiguity or inconsistency, the Act, General Rules and/or Insurance Rules have precedence.

This publication is not legal or professional advice. Persons rely upon this publication entirely at their own risk and must take responsibility for assessing the relevance and accuracy of the information in relation to their circumstances.

Version control

Version	Date	Details
1.0	02 August 2023	Initial issue.
1.1	01 December 2023	Updated to reflect changes to application process, now managed through Regulatory Applications Hub.

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1. Introduction

1.1 *Space (Launches and Returns) Act 2018*

Australia is a founding member of the Committee on the Peaceful Uses of Outer Space and is party to the United Nations space treaties. Australia is committed to ensuring a safe, stable and sustainable outer space environment by building a culture of safety and sustainability within the Australian space sector.

The [*Space \(Launches and Returns\) Act 2018*](#) (the Act) sets out a regime for the regulation of civil space-related activities carried out either from or to Australia or by Australians overseas. The objects of the Act include seeking to ensure 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
- the safety of space activities, and the risk of damage to persons or property as a result of space activities.

The Act also implements certain Australian obligations under the United Nations space treaties.

The Act includes powers for the Minister to make rules by legislative instrument. The rules support effective operation of the Act. They are intended to provide clear information and a streamlined process relevant to the approval of an activity under the Act. There are currently three legislative instruments setting out rules under the Act (collectively the Rules):

- the [*Space \(Launches and Returns\) \(General\) Rules 2019*](#) (the General Rules) provides detail on the application requirements and additional criteria for approvals under the Act (other than Australian high power rocket permits)
- the [*Space \(Launches and Returns\) \(High Power Rocket\) Rules 2019*](#) provides detail on the application requirements and additional criteria for approval of Australian high power rocket permits
- the [*Space \(Launches and Returns\) \(Insurance\) Rules 2019*](#) (the Insurance Rules) provides detail relating to insurance and financial requirements applicable to certain approvals under the Act.

Other relevant documents referred to by the Rules are the [Flight Safety Code](#) and the Maximum Probable Loss Methodology ([MPL Methodology](#)).

1.2 About these guidelines

These guidelines explain the application and assessment process for an Australian launch permit.

Under the Act, you need an Australian launch permit to launch a space object from Australia that will go beyond an altitude of 100 kilometres above mean sea level.

These guidelines are not legally binding other than to the extent they refer to binding legislation. Therefore these guidelines should be read in conjunction with the Act, General Rules and Insurance Rules. Guidelines do not exclude, limit or replace the requirements of the legislation. If there is any ambiguity or inconsistency, the Act, General Rules and/or Insurance Rules have precedence.

1.3 Role of the applicant

An applicant (you/your) is responsible for applying for an Australian launch permit, where required, and meeting all legislative obligations as required by the Act, General Rules, and Insurance Rules, as well as any conditions placed on the permit.

1.4 Role of the Australian Space Agency

The Australian Space Agency (we/us/the Agency) is a division of the Department of Industry, Science, Resources (the Department). The Department, through the Agency and its Office of the Space Regulator, is responsible for administering the Act and Rules, and publishes information to assist applicants navigate application and assessment processes for their activities.

1.5 Role of the Minister

The Minister makes the decision whether to grant an Australian launch permit, considering advice from the Agency and only if they are satisfied that an application meets the criteria in the Act and General Rules (see [2.4 Criteria for granting an Australian launch permit](#)).

2. Australian launch permit overview

2.1 Who should apply?

You will need an Australian launch permit if you intend to launch one or more space objects from a launch facility in Australia, from an Australian aircraft that is in flight, or from a foreign aircraft that is in the airspace over Australian territory. This requirement applies to both orbital and suborbital launches.

A space object is an object the whole or part of which will travel beyond and/or return from a distance of 100km above mean sea level. A space object can be any part of such an object, even if the part only goes some of the way towards and/or back from an area beyond the distance of 100km above mean sea level (see [8. Glossary](#)).

A launch vehicle is considered a space object if any part of the vehicle (including any payload the vehicle carries) goes beyond a distance of 100km above mean sea level.

If you have any questions as to whether you need an Australian launch permit, you can contact us (see [7. Contacting us](#)).

NOTE: An Australian high power rocket permit, not an Australian launch permit, is required if your rocket will not go beyond 100 kilometres above mean sea level and is propelled by a motor or motors with a combined total impulse greater than:

- 889,600 Newton seconds, or

- 40,960 Newton seconds and is fitted with a system or systems that allow active control of its trajectory

2.2 What is the purpose of an Australian launch permit?

An Australian launch permit aims to, among other criteria, ensure:

- the probability of the launch or launches, or any connected return, causing substantial harm to public health or public safety, or causing substantial damage to property is as low as reasonably practicable, and
- that adequate considerations are made for the environment and Australia's security, defence and international relations.

Australian launch permits also ensure that Australia meets certain obligations under the United Nations space treaties.

2.3 What does an Australian launch permit authorise?

An Australian launch permit authorises the launch of one or more space objects, or a series of launches of space objects, from a specified launch facility in Australia, a specified Australian aircraft that is in flight or a specified foreign aircraft that is in the airspace over Australian territory.

A launch permit may also authorise one or more space objects to be returned, in connection with the launch or launches, to a specified place or area in Australia (known as a connected return). If you are not an Australian national (see [8. Glossary](#) for definition of Australian national) you may need permits/authorisations from your country which will need to be provided as a part of your application.

2.4 Criteria for granting an Australian launch permit

In granting an Australian launch permit, the Minister or their delegate must be satisfied that:¹

¹ See section 28 of the Act and section 35 of the General Rules.

- the person who is to carry out the launch or launches, and any connected return, is competent to do so
- the insurance/financial requirements will be satisfied for the launch or launches, and any connected return*
- the probability that the launch or launches, or any connected return, will cause substantial harm to public health or public safety, or cause substantial damage to property is as low as is reasonably practicable
- the space object or objects concerned are not and do not contain a nuclear weapon or a weapon of mass destruction of any other kind
- there are no reasons relevant to the security, defence or international relations of Australia why the permit should not be granted
- the proposed launch vehicle is as effective and safe as is reasonably practicable, having regard to the purpose of the launch
- the flight path for each launch is as effective and safe as is reasonably practicable, having regard to the purpose of the launch, the design of the launch vehicle and the launch safety standards in the [Flight Safety Code](#)
- the risk hazard analysis for each launch and any connected return is consistent with the [Flight Safety Code](#)
- there is adequate planning to address the environmental impacts of the launch or launches and any connected return

***NOTE:** The Act includes a criterion that the Minister must be satisfied that insurance/financial requirements have been satisfied for the launch or launches and any connected return. The Act and Insurance Rules specify that the amount of insurance must be at least equal to the lesser of \$100 million or the amount determined using the Maximum Probable Loss (MPL) Methodology. As an alternative to holding insurance, you may show direct financial responsibility for an equivalent amount.

2.5 Permit conditions

Australian launch permits are typically subject to standard conditions as detailed in the Act and General Rules.²

Your Australian launch permit will typically include the following conditions:

- the launch or launches, and any connected return must not be conducted in a way that is likely to cause substantial harm to public health or public safety or to cause substantial damage to property
- the space object or objects must not be or contain a nuclear weapon or a weapon of mass destruction of any kind
- the space object or objects must not contain a nuclear power source unless the Minister's written approval has been obtained first
- the insurance/financial requirements outlined in Division 7 of the Act for each launch, and each return, conducted under the permit are satisfied

Your Australian launch permit will also typically include the following standard conditions, which require you to:

- at least 2 days before a launch but not more than 10 days before:
 - confirm the day of a launch and the launch window on that day
 - confirm the planned trajectory of the space object

² See section 30 of the Act and Part 3 Division 2 of the General Rules.

- provide information about any subsequent days, and the launch window on those days, that the launch may be attempted if it does not occur on the scheduled launch day
- notify if the launch does not occur on the scheduled day, and you intend to attempt the launch on a subsequent day
- notify of any changes to payloads to be launched
- provide any changes to the assumptions and data used in the risk hazard analysis for a launch and any connected return, along with a statement from a suitably qualified expert (see [8. Glossary](#)) approved by the Minister as to whether the risk hazard analysis continues to fall within the launch safety standards of the Flight Safety Code
- notify of any changes to the flight path for the launch and any connected return
- as far as is practicable, conduct each launch and any connected return consistently with the information provided, either in your application or subsequently, relating to the flight path
- provide copies of any amendments to the launch management plan, flight safety plan or technology security plan for the launch and any connected return. You must also ensure that the launch and any connected return is conducted in accordance with the current version of each of these plans
- as soon as practicable after the launch provide:
 - I. information about the orbital parameters of the space object under Article IV of the [Convention on Registration of Objects launched into Outer Space](#) (Registration Convention)
 - II. if a country other than Australia is the launching state, whether the other launching state has indicated its intention to register the space object
 - III. a report on the compliance of the launch with the launch safety standards in the Flight Safety Code and with assumptions and data used in the risk hazard analysis for the launch
- give written notice of any action taken in response to a direction given by a Launch Safety Officer within 10 business days of that direction being given
- notify of any changes to your organisational structure, the identity of key personnel and/or changes of duties of key personnel.

Other conditions may also be included on your permit. Penalties may be imposed if you do not comply with the conditions of your permit (see [2.6 Offences and civil penalties](#)).

2.6 Offences and civil penalties

You commit an offence if you do not have an Australian launch permit or authorisation certificate covering the launch, and you launch a space object:

- from a launch facility in Australia
- from an Australian aircraft in flight or
- from a foreign aircraft in the airspace over Australian territory.

The maximum penalty for this offence is:

- for an individual, imprisonment for 10 years or a fine of 5,500 penalty units ([8. Glossary](#)) or both
- for a body corporate, a fine of 100,000 penalty units.

These matters are outlined in section 12 of the Act.

It is also an offence if you hold an Australian launch permit and contravene a condition of the permit specified in section 30(a)-(d) of the Act.* The maximum penalty for this offence is:

- for an individual, imprisonment for 10 years or a fine of 5,500 penalty units or both
- for a body corporate, a fine of 100,000 penalty units

Contravening a permit condition may also attract a civil penalty of up to 1,000 penalty units for an individual or up to 5,000 penalty units for a body corporate.

These matters are outlined in section 31 of the Act.

***NOTE:** this only applies to breaches of the conditions under paragraph 30(a), (b), (c) or (d) of the Act, not all permit conditions. Civil penalties may apply to breaches of any of the permit conditions.

3. Application and assessment process

3.1 Preparing an application

Before applying you should read and understand these guidelines.

You should then complete and submit an expression of interest form through the Regulatory Applications Hub and provide supporting materials demonstrating your progress against the [application requirements](#).

We use the information in your expression of interest to inform an application plan workshop.

The purpose of the application plan workshop is to:

- establish the status of your application
- develop a shared understanding of application requirements that need to be met
- set and agree application and assessment timeframes
- clarify roles and responsibilities
- establish principles for how we engage throughout the application and assessment process.

Outcomes from this workshop will be documented in your application plan. Your plan will contain:

- details of milestone dates for your proposed launch or series of launches, and any connected return
- an agreed timeline for delivery of information by you and important feedback events
- comments/notes on information gaps, details on what a complete application may look like and agreed application requirements
- administrative requirements such as document storage, communication channels and points of contact within the Agency
- useful links to guidance material and legislation.

You then complete and submit application documents within the timeframes agreed in your application plan. All documents need to be uploaded to the corresponding application in the Regulatory Applications Hub. Timeframes may be reviewed and adjusted during the process if needed.

Your expression of interest and all corresponding documents must be in writing and in English. If a required document is not in English, you must also include an English language translation.

Documents can undergo multiple revisions before being finalised. Good document management (including version control, consistency across documents, and updates to parent documents) is important during the application process and will help to facilitate a smooth and efficient assessment process.

If you are submitting more than one application (for example, for a launch facility licence and Australian launch permit) each application needs to stand on its own to address relevant requirements.

Our assessment is evidence-based. You should include materials to support your claims. Supporting materials should be robust, sufficiently detailed and appropriate for the scope and complexity of your proposed activity. We generally do not consider to be sufficient self-declared statements of compliance against the requirements in the Act and General Rules.

We provide guidance on the information and documents you must submit. It remains, however, your responsibility to obtain the evidence required in your application, including other government approvals. We will not prepare material for these approvals.

Provision of information as set out in these guidelines, and provision of guidance by the Agency in relation to the preparation of your application, does not guarantee that the Minister will decide to grant a permit.

You may contact us during the assessment period if you need to make amendments to your application, for example if information becomes outdated or incorrect, or you need to change launch plans. This ensures the Minister’s consideration is based on current and accurate information.

NOTE: There are other approvals you may need to receive an Australian launch permit. We recommend you initiate discussion with the appropriate authorities early to understand the requirements and timeframes so as not to delay the assessment process.

3.2 Application fees

There are no application fees for an Australian launch permit under the Act.

3.3 Submitting an application

You submit your expression of interest for an Australian launch permit and all subsequent documents to the Agency through the Regulatory Applications Hub. If you have any issues submitting your expression of interest form, contact us for guidance (see section [7. Contacting us](#)).

An expression of interest form can be found on our [website](#).

3.4 Application process

Steps in the application process:	
1. Expression of interest	<p>You download and complete an Australian launch permit expression of interest form.</p> <p>You create an account in the Regulatory Applications Hub (if you don’t already have an account).</p> <p>You initiate a New Application in the Regulatory Applications Hub. You will be asked to provide some details about yourself, your organisation and the type of permit, licence or authorisation you are wanting to apply for.</p> <p>You can then add your expression of interest document, and any other documents you choose to provide at this time, to your corresponding application in the Regulatory Applications Hub.</p> <p>We review your expression of interest against each of the requirements in the Act and the General Rules for an Australian launch permit application (see 4. Application requirements).</p> <p>We then book an application plan workshop with you.</p> <div style="background-color: #f0f0f0; padding: 5px; border: 1px solid #ccc;"> <p>NOTE: initiating your expression of interest is not an application submission, you will need to provide further documents.</p> </div>

Steps in the application process:

2. Application plan workshop	<p>We book an application plan workshop when your expression of interest provides sufficient information for the application process to proceed.</p> <p>During this workshop we:</p> <ul style="list-style-type: none">• establish the status of your application• develop a shared understanding of application requirements that need to be met• set and agree application and assessment timeframes• clarify roles and responsibilities• establish principles for how we engage throughout the application and assessment process <p>After the workshop we will provide you an application plan which will set out the remaining stages of the application process.</p>
3. Assessment	<p>You provide completed documents in line with your application plan by adding them to your corresponding application in the Regulatory Applications Hub.</p> <p>Your documents will be electronically transferred to the Agency, you are not required to notify us outside of the Regulatory Applications Hub when you have uploaded new documents.</p> <p>We commence assessment upon receipt of your completed documents and in line with the agreed Application Plan. We hold scheduled meetings with you to clarify information submitted and provide feedback on progress.</p> <p>During the assessment process we consult widely within government to see if there is any reason, including relating to Australian security, defence or international relations, why an Australian launch permit should not be granted.</p> <p>Once you have provided all required information in your application, we will finalise our assessment and make a recommendation to the Minister (or their delegate).</p>
4. Decision	<p>The Minister (or delegate) decides whether an Australian launch permit should be granted, taking into consideration advice from the Agency. The Minister, through the Agency, may request further information or clarification to support their decision.</p> <p>NOTE: If your permit is granted, a Launch Safety Officer will also be appointed for the launch or series of launches and any connected return at this time pursuant to section 50 of the Act.</p>

3.5 Timing for assessment

We estimate it will take approximately 6 months to assess your application, however, assessment timeframes will be discussed and agreed as part of your application plan workshop.

Following the workshop we provide an application plan that clearly outlines agreed timeframes.

If we find key information missing or inaccurate, or not at an appropriate level of detail we will discuss with you and agree revised timeframes to submit additional information. This may impact overall assessment timeframes.

We may also request additional information relating to your application.

4. Application requirements

We ask you for information about:

- you
- your organisation including capability, structure and key personnel
- the launch, flight path, launch vehicle, payload and associated launch management plans
- your risk hazard analysis
- your flight safety plan
- your debris mitigation strategy
- your environmental approvals and technology security plan
- your insurance/financial requirements
- contracts, outstanding approvals and matters to be verified.

4.1 Information about the applicant

General Rules, section 44

You must provide the following information:

- applicant name
- name, position and contact details of an individual who will act as the contact for the application
- Australian Business Number (ABN), if any
- Australian Company Number (ACN), if you are applying as a company registered under the Corporations Act 2001
- information about which persons or entities have ownership, control, or direction of the applicant, including the nationality of those persons or entities.

4.2 Organisational structure and personnel

General Rules, section 45

You must provide the following information about the organisation making the application:

- a description of the organisational structure, including the chain of command
- duties and responsibilities of each position in the chain of command.

and for each of the following individuals:

- your chief executive officer or equivalent.

and each individual in a position:

- that would have authority to direct:
 - the conduct of a launch and any connected return, or
 - the operation of the launch vehicle
- that has or would have any duties or functions directly connected with operating the launch vehicle proposed to be used in a launch
- within the organisational structure of the applicant that has or would have authority or oversight in relation to manufacture or maintenance of the launch vehicle
- that would have authority or oversight in relation to tracking or communicating with the launch vehicle
- that would have authority or oversight in relation to integration of a payload with the launch vehicle
- that has or would have authority or oversight in relation to:
 - installation of software in the launch vehicle, or
 - verification that the software functions correctly

- that has or would have authority or oversight in relation to verification that the structural system, propulsion system, fuel system, electrical system or electronic system of the launch vehicle functions correctly
- who had authority or oversight in relation to preparing the technology security plan included in the application (as required by section 56 of the General Rules)
- that would have a role in implementing or monitoring the technology security plan.

you must provide the following information:

- name, date of birth and place of birth
- address of usual place of residence
- relevant qualifications and experience
- how long the individual has occupied their current position.

4.3 Information about launch

General Rules, section 46

You must provide the following information for each proposed launch:

- description of the purpose of the launch
- the facility or place from which the launch is proposed
- the latitude and longitude for any mobile launch
- the latitude, longitude and elevation of any aircraft launch
- launch period and launch windows within that period
- return period and return windows, if applicable for any connected return.

If the launch period extends over more than 1 day, your application must also include an estimated launch day.

4.4 Information about flight path

General Rules, section 47

You must provide the following information for each launch:

- a description of the flight path
- the name and location of any critical asset/s directly under the flight path or within an area where there is a reasonable probability any debris (scheduled or unscheduled) may land
 - if you have identified any such critical asset/s, you must explain why you consider the flight path is appropriate and safe given the location of these critical assets.

For each launch that has a connected return, you must also provide the following information for each space object to be returned:

- the path of the space object
- the ground track for re-entry
- staging events for the return
- predicted errors in accuracy for the re-entry and landing of the space object

Under the Act and General Rules [subsection 35(3)], the Minister must consider whether the flight path for each launch is effective and safe as is reasonably practicable.

4.5 Information about launch vehicle

General Rules, section 48

You must provide the following information for the proposed launch vehicle in each launch, including:

- the name and address of the manufacturer
- a copy, or description if a copy is not available, of the manufacturer’s quality assurance system
- whether the manufacturer has quality assurance certification in accordance with a recognised standard
- whether the launch vehicle has been manufactured in accordance with the designer’s specifications and tested and inspected having regard to those specifications
- whether the launch vehicle has been manufactured, tested and inspected in accordance with a recognised standard in the country of manufacture
- whether the launch vehicle has received appropriate import approvals.

In addition, for each of the following systems of the proposed launch vehicle:

- the structural system
- the propulsion system
- the fuel system
- the electrical system, including power supply and distribution
- each of the electronic systems, including the guidance, communications, flight control, computer and data management systems
- the flight safety system.

you must provide:

- the name and address of the system manufacturer
- technical specifications of the system
- a description of the development, qualification and acceptance programs for both hardware and software of the system, including:
 - information about any functional testing, modelling and analyses that have been performed for the system
 - a description of the results of the qualification verification and acceptance verification programs for the system.

Your application must also include a description of:

- any previous flights that the launch vehicle, or a part of the launch vehicle, has undertaken, and
- any assessment or testing of the vehicle following such a flight.

Your application must also include:

- a declaration that the launch vehicle is not, and does not contain, a nuclear weapon or weapon of mass destruction of any other kind
- if the vehicle contains a nuclear power source, you must seek the Minister’s approval. If you have obtained this written approval, your application must include a copy of it.

NOTE: if there is a technical recognition instrument regarding the launch vehicle specifications, you may include a statement identifying this instrument instead. The Minister may then decide to recognise another country’s licensing or certification for the type of launch vehicle, reducing your regulatory burden.

4.6 Flight history or testing of kind of launch vehicle

General Rules, section 49

You must provide the following information on the vehicle’s flight history:

- an outline of the publicly available information for the proposed launch vehicle type for the previous 5 years
- if the launch vehicle type has not been flight tested, or has had a major modification, your application must include:

- the vehicle's safety record, including testing history
- measures taken to reduce the risk of future anomalies or failures if this record includes anomalies or failures
- other information demonstrating the safety of the vehicle.

A major modification is:

- a change to the design of the vehicle: the type of engine, to navigation, flight control or flight termination systems, or
- the use of strap-in boosters, or
- any modification that might significantly affect any characteristics of the vehicle's operation or performance.

4.7 Information about payload

General Rules, section 50

You must provide the following information in relation to each payload on the launch vehicle:

- payload description and purpose
- the owner of the payload
 - if the owner of the payload is a corporation – information about the corporation's significant shareholders
 - if the owner of the payload is an individual – their address and date and place of birth
 - if the owner of the payload is an Australian national – whether the payload is intended to be returned (other than in a connected return described under section 47)
 - if so, the approximate timing and intended location of the return, and a description of the intended return process
 - if the owner of the payload is an Australian national – an undertaking from the owner that they will:
 - update the Agency monthly about efforts to establish communication with the payload (until the Agency advises updates are no longer required), including informing the Agency when payload communication is established, or lost
 - not operate the payload so as to cause Australia to be liable for any damage under the [Convention on International Liability for Damage Caused by Space Objects](#) (the Liability Convention)
 - not operate the payload in a manner that the owner knows, or ought reasonably to know, will negatively affect the national security of Australia
 - inform the Agency when end of mission manoeuvres, as identified in the debris mitigation strategy, have begun
 - if the payload owner is not an Australian national – a copy of any authorisation/permit from the owner's country obtained regarding the payload launch
- the manufacturer of each payload subsystem and country of manufacture
- the proposed payload trajectory, and if applicable, orbit
- the sensors and other information-gathering devices attached to the payload or powered by it.

Your application must include for each payload:

- a declaration that the payload is not, and does not contain, a nuclear weapon or weapon of mass destruction of any other kind
- if the payload contains a nuclear power source, you must seek the Minister’s approval. If you have obtained this written approval, your application must include a copy of it.

NOTE: The requirement to provide information in relation to each payload applies to payloads carried on both orbital and suborbital launches and all payloads regardless of whether they will be deployed during flight or remain onboard of the launch vehicle.

4.8 Launch management plan

General Rules, section 51

You must provide a launch management plan for the launch/series of launches and any connected return including:

- safety arrangements for associated ground operations
- a statement identifying all hazardous ground operations associated with a launch or connected return, and how you will manage those operations
- a timeline for the launch and flight identifying all safety-critical events.

Procedures for:

- making any changes to the flight
- launch vehicle assembly (confirmation of readiness and assembly)
- integration of payloads
- managing any change to a payload, including how the change might affect the performance and stability of the launch vehicle
- identifying and responding to adverse launch weather conditions
- launch countdown
- recovering from any anomalies or failures during the launch
- for a connected return—recovery and removal of each returned space object.

Arrangements for:

- reporting to the Minister on a launch and any connected return
- ensuring launch personnel are properly prepared
- responding to and resolving any problem encountered in a launch or connected return
- communications for the launch and any connected return, including launch area, drop zone to launch area, telemetry (including radiofrequencies used) and emergency communications
- maintaining the launch vehicle, including recording scheduled and unscheduled maintenance.

Records management for the launch vehicle’s operation:

- the system to make and keep records
- the system for maintaining documentation such as manuals and procedures.

4.9 Risk hazard analysis

General Rules, section 52

You must include a risk hazard analysis for each launch and any connected return. The application must describe the methodology, assumptions and data used in the analysis.

A suitably qualified expert (SQE) must perform the analysis, which must fall within the launch safety standards in the [Flight Safety Code](#). An SQE must be approved by the Minister.

The methodology used for the risk hazard analysis must apply the launch vehicle probability of failure set out in the [Flight Safety Code](#) risk hazard analysis methodology.

If any other aspect of the methodology you used differs from the risk hazard analysis methodology in the [Flight Safety Code](#), you must:

- describe the methodology so that it can be assessed conveniently against the methodology in the [Flight Safety Code](#)
- set out each difference between the two methodologies
- demonstrate, considering these differences, that the methodology is technically sound.

You must describe any software used in the analysis, including the system for:

- data and record keeping relating to operating the software, and
- maintaining documentation (such as manuals) relating to operating the software.

For software that is not a generally available commercial product, provide the following:

- who developed the software
- how the software operates to implement the methodology you used
- how the software has been tested and the results of that testing
- who validated the software and how.

4.10 Flight safety plan

General Rules, section 53

You must include a flight safety plan for the launch or series of launches and any connected return.

An adequate flight safety plan assists in ensuring that the risks posed to the public by a space activity are controlled to a level that is as low as reasonably practicable.

Your flight safety plan must include:

- details of the arrangements you will have in place to ensure the launch/launches, the operation of the launch vehicle during flight and any connected return will be conducted:
 - so as to reduce the level of risk to third parties to as low as is reasonably practicable
 - within the launch safety standards set out in the [Flight Safety Code](#)
- arrangements for reporting to the Minister any changes in:
 - the launch/launches and any connected return
 - the assumptions and data used in the risk hazard analysis for each launch and connected return
- arrangements for subsequent reporting to the Minister on the compliance of the launch/launches, the launch vehicle flight and any connected return with:
 - the launch safety standards
 - the assumptions and data used in the risk hazard analysis for each launch and connected return.

You must include written confirmation by an SQE, who is approved by the Minister, that the launch or launches, the operation of the launch vehicle on the flight path and any connected return will fall within the launch safety standards if carried out in accordance with the flight safety plan.

4.11 Debris mitigation strategy

General Rules, section 54

You must include a debris mitigation strategy.

A debris mitigation strategy assists in ensuring that you have considered the impact of your activity on the space environment, and to provide information on the risks of possible collision of space debris with your object during launch and in orbit (if applicable).

Your debris mitigation strategy must be based on an internationally recognised guideline or standard and include:

- any mitigation measures planned for orbital debris arising from the proposed launch or launches (including from payloads)
- an orbital debris assessment, based on an internationally recognised model

Examples of an internationally recognised guideline or standard include, but are not limited to:

- the Space Debris Mitigation Guidelines of the Committee on the Peaceful Uses of Outer Space
- the Inter-Agency Space Debris Coordination Committee’s Space Debris Mitigation Guidelines.

These guidelines identify several measures:

- limiting the release of debris during normal operations
- avoiding intentional destruction and other harmful activities
- limiting the long-term presence of spacecraft and launch vehicle orbital stages in the low Earth orbit region after mission end.

Examples of appropriate mitigation measures for potential orbital debris from your proposed launch, including from payloads, include measures to address the following:

- how debris may be limited during normal operations
- how the potential for break-ups during operational phases will be minimised
- how the probability of accidental collision in orbit will be limited
- how the potential for post-mission break-ups as a result of stored energy will be minimised
- how the long-term presence of payloads and launch vehicle orbital stages in the low-earth orbit region or in geosynchronous earth orbit will be limited after the end of the mission.

An orbital debris assessment can be in the form of an orbital debris assessment report (ODAR). Examples of internationally recognised orbital debris assessment models that can be used to perform the required analyses are [NASA’s Debris Assessment Software](#) and the European Space Agency’s [Debris Risk Assessment and Mitigation Analysis](#) tool.

NOTE: a debris mitigation strategy is required for all launches including suborbital launches. For suborbital launches your strategy should be commensurate with your planned activity.

4.12 Environment

General Rules, section 55

You must provide information to demonstrate adequate planning to address any environmental impacts of your launch or launches and any connected return (see section 35(5) of the General Rules), including one of the following:

- evidence that any environmental impacts of your launch activity have been addressed by the environmental plan of the launch facility
- information about environmental approvals required for the launch under any other law of the Commonwealth or a law of a State or Territory, or
- an assessment of the likely environmental impact of the launch and any connected return, and information on how any adverse effects on the environment will be monitored and mitigated.

4.13 Technology security

General Rules, section 56

You must provide a technology security plan relating your launch or series of launches and any connected return. The technology security plan must include the following:

- arrangements and procedures for safeguarding the technology to be used in conducting the launch/launches and any connected return and in operating the launch vehicle, including:
 - procedures to prevent unauthorised people from having access to the technology
 - the cybersecurity strategy to be used
- if there is in force agreement of any kind between Australia and another country that relates to safeguarding all or part of the technology, you must provide information on how the plan ensures that Australia gives effect to its obligations under the agreement

You must include a written assessment of the adequacy of your cybersecurity strategy in your plan by a person with suitable cybersecurity qualifications and experience.

4.14 Insurance/financial requirements

General Rules, section 57

You must provide evidence of your capacity to satisfy the insurance/financial requirements in Division 7 of Part 3 of the Act for each launch or connected return. You satisfy the insurance/financial requirements if:

- throughout the liability period for the launch or return, you satisfy the insurance requirements in section 48 of the Act, or
- you have, in accordance with the Insurance Rules, shown direct financial responsibility for the launch or return for an amount not less than the amount that would otherwise have been applicable under subsection 48(4) of the Act.

To satisfy the insurance requirements, you must:

- be insured (to the extent required by subsection 48(4) of the Act) against any liability that you might incur under the Act to pay compensation for any damage to third parties that the launch or return causes, and
- insure the Commonwealth (to the extent required by subsection 48(4) of the Act) against any liability that the Commonwealth might incur, under the Liability Convention or otherwise under international law, to pay compensation for such damage.

These insurances may be:

- separate policies or,
- a single policy insuring both the permit holder and the Commonwealth.

You can propose a lesser amount of insurance using the Maximum Probable Loss Methodology ([MPL Methodology](#)). If you intend to rely on the amount calculated under the [MPL Methodology](#), you must provide the calculations and the name of the person who made those calculations as part of your Australian launch permit application.

You may also show direct financial responsibility for the launch or return for at least \$100 million, or a lesser amount determined by the [MPL Methodology](#), as an alternative to holding insurance (see section 47 of the Act and section 5 of the Insurance Rules). To do so you must provide evidence that:

- you have a sufficient amount of available assets that could be used to meet any liability that you might incur under the Act (for assets held wholly or partly by another person or body you must show that that person/body will make them available if required), or
- you are otherwise able to meet any liability that you might incur under the Act to pay compensation for any damage to third parties that the launch or return causes.

The Minister may request additional information to show that you have a sufficient amount of available assets, or are otherwise able to meet any liabilities as you have claimed.

4.15 Contracts

General Rules, section 58

You must provide copies of any contracts entered into, and information on any contracts that you propose to enter into, for the purposes of the launch or launches and any connected return. This includes:

- any contracts for use or lease of facilities
- any contracts for others to undertake activities connected with a launch or return
- any contracts for carrying payloads.

4.16 Outstanding approvals

General Rules, section 59

You must provide a list of all activities in relation to the launch or launches and any connected return for which you need an approval under any other Commonwealth law or law of a State or Territory, but have not yet obtained, and the arrangements (including the time frame) for obtaining each of these approvals.

4.17 Matters to be verified

General Rules, section 60

You must provide a list of matters mentioned in the launch management plan or technology security plan yet to be verified or validated, (for example, verifying that firewalls are operating to prevent unauthorised network access) and the arrangements (including the time frame) for obtaining these verifications or validations.

4.18 Additional information

You may include any other information relevant to demonstrating whether the criteria in the Act and General Rules for granting an Australian launch permit are met.

4.19 Application may be updated

You may, before the Minister's decision whether to grant an Australian launch permit, update a part of the application (for example, to update information that is no longer correct or to change plans for conducting your proposed launch or launches and any connected return).

5. If you are granted a permit

If the Minister grants a permit:

- it will specify the day it comes into force and the period it remains in force (which may be a particular event instead of a specified time)
- it is granted subject to conditions
- the Minister can, by written notice, extend or further extend the period the permit remains in force.

5.1 Keeping us informed

If the information submitted in your application changes after you have been granted a permit, in many instances you must notify us. These include changes to:

- the payloads that you will launch
- the assumptions and data used in your risk hazard analysis
- information about flight path
- your launch management plan
- your flight safety plan
- your technology security plan
- your organisational structure
- the identity of individuals who have responsibilities and roles as described in section 4.2
- the duties or functions of individuals who have responsibilities or roles described in section 4.2.

Depending on the circumstances, your Australian launch permit may need to be varied, transferred, suspended or revoked.

5.2 Varying, suspending or revoking an Australian launch permit

You may apply for a variation to an Australian launch permit, including:

- varying the launch facility or aircraft specified in the permit or conditions on the permit
- extending the period of the permit.

When applying for a variation you should include a description and reason for the variation, and any supporting material you believe will assist the Minister in making a decision.

The Minister may also vary, revoke or transfer an Australian launch permit on their own initiative. If the Minister considers there may be grounds to do this, they must:

- give you written notice of their opinion specifying the reasons for that opinion, and
- invite you to make a written submission about the matter within a reasonable period specified in the notice.

In deciding whether to vary, revoke or transfer the permit, the Minister must consider your written submission if you provide it within the period specified in the notice.

The Minister may suspend your permit if:

- you have contravened a permit condition
- for reasons relevant to the security, defence or international relations of Australia, the permit should be suspended
- an incident involving a space object covered by your permit occurs during the liability period for the launch or return of the object.

The Minister must give notice of the suspension to you in writing, specifying when it takes effect.

NOTE: under section 95 of the Act, if an accident occurs an Australian launch permit is immediately taken to be suspended until the Minister revokes the suspension.

5.3 Transferring an Australian launch permit

Your Australian launch permit may be transferred on application by the transferee, who must provide a statement from you with the transfer application explaining why the transfer is being sought.

The transfer application must include all material required for an Australian launch permit application. This may include any information or materials from your original application if that information or material is still correct.

The requirement to provide a debris mitigation strategy may be met by the transferee providing a copy of your strategy, along with a statement that the launch will be conducted with the same strategy. If you are seeking to transfer a permit, please contact the Agency.

6. How we use your information

6.1 Confidential information

We collect information:

- to assess applications to conduct space activities
- to monitor a permit, licence or certificate holder's compliance with their obligations under the Act, the relevant rules and the conditions of their permit, licence or certificate
- to facilitate the registration of space objects.

We will treat the information you give us as confidential if it meets all of the following conditions:

- you clearly identify the information as confidential and explain why we should treat it as confidential at the time you provide the information
- the information is commercially sensitive
- disclosing the information would cause unreasonable harm to you or someone else
- you provide the information with an understanding that it will stay confidential.

Unless the information you provide to us is identified as confidential information, we may share your information with other government agencies or third parties for a relevant Commonwealth purpose such as:

- the administration and assessment of your application
- to ascertain if there is any reason why a licence or permit should not be granted
- to third parties for the purposes of conducting a technical review of your application, under a deed of confidentiality.

We may disclose confidential information:

- to our Commonwealth employees and contractors, to help us to assess your application
- to the Auditor-General, Ombudsman or Privacy Commissioner
- to the responsible Minister or Assistant Minister
- to the Prime Minister
- to a House or a Committee of the Australian Parliament.

We may also disclose confidential information if:

- we are required or authorised by law to disclose it
- you agree to the information being disclosed, or
- someone other than us has made the confidential information public.

6.2 Personal information

We must treat your personal information according to the [Australian Privacy Principles](#) (APPs) and the [Privacy Act 1988](#) (Cth). This includes letting you know:

- what personal information we collect
- why we collect your personal information
- to whom we give your personal information.

You can read the [Privacy Policy](#) on the department's website for more information on:

- what is personal information
- how we collect, use, disclose and store your personal information
- how you can access and correct your personal information.

6.3 Freedom of information

All documents in the possession of the Australian Government are subject to the [Freedom of Information Act 1982](#) (Cth) (FOI Act). The purpose of the FOI Act is to give members of the public

rights of access to information held by the Australian Government and its entities. Under the FOI Act, members of the public can seek access to documents held by the Australian Government. This right of access is limited only by the exceptions and exemptions necessary to protect essential public interests and private and business affairs of persons in respect of whom the information relates.

7. Contacting us

We encourage you to contact us early in planning for any space activity that requires authorisation under the Act. Early engagement may help to resolve questions specific to your activity.

Email regulation@space.gov.au

Phone 1800 487 182 (within Australia)
 +61 2 6276 1166 (outside Australia)

Head office: Lot 14, McEwin Building, North Terrace, Adelaide, SA 5000

Post: Office of the Space Regulator
 Australian Space Agency
 GPO Box 2013
 Canberra ACT 2601

8. Glossary

Term	Definition
Accident	<p>Section 85 of the Space (Launches and Returns) Act 2018 states an accident involving a space object or high power rocket occurs if:</p> <ol style="list-style-type: none"> a person dies or suffers serious injury as a result of the operation of the space object, or the space object or high power rocket is destroyed or seriously damaged or causes damage to other property (other than in the circumstances prescribed in the rules) <p>Section 121 of the General Rules sets out exceptions for the purposes of paragraph 85(b).</p>
Act	The Space (Launches and Returns) Act 2018
Australian launch permit	<p>An Australian launch permit authorises the launch of one or more space objects, or a series of launches of space objects, from a specified launch facility in Australia, a specified Australian aircraft that is in flight or a specified foreign aircraft that is in the airspace over Australian territory.</p> <p>A launch permit may also authorise one or more space objects to be returned, in connection with the launch or launches, to a specified place or area in Australia.</p>
Australian national	<p>Any of the following:</p> <ul style="list-style-type: none"> an Australian citizen an Australian resident a body incorporated by or under a law of the Commonwealth, of a State or of a Territory the Commonwealth, a State or a Territory.
Australian resident	An individual who resides in Australia and is the holder (within the meaning of the Migration Act 1958) of a permanent visa (within the meaning of that Act).
Australian Space Agency	A division of the Department. The Agency, through the Office of the Space Regulator, is responsible for administering the Act, Rules and related framework.
Authorisation certificate	A certificate issued by the Minister to cover conduct that would otherwise be prevented under the Act. We would consider an authorisation certificate where there isn't an existing approval process.
Department	The Department of Industry, Science and Resources.
Flight Safety Code	<p>The Flight Safety Code provides:</p> <ul style="list-style-type: none"> the methodology to assess that certain launch and return activities are safe under the Act and associated legislative instruments a quantitative approach to ensuring that the risks associated with certain civil space and high power rocket activities in Australia are as low as reasonably practicable

Term	Definition
	<ul style="list-style-type: none"> • methods through risk hazard analysis to identify potential hazards during launches or returns that may cause harm to public health and safety, analyse the risks associated with these hazards, and develop measures to minimise those risks and ensure that they remain below the established launch safety standards
General Rules	The Space (Launches and Returns) (General) Rules 2019
High power rocket	<p>An object of a kind prescribed by the Space (Launches and Returns) (High Power Rocket) Rules 2019, that is rocket propelled by a motor or motors:</p> <p>(a) with a combined total impulse greater than 889,600 Newton seconds, or</p> <p>(b) with a combined total impulse greater than 40,960 Newton seconds and is fitted with a system or systems that allow active control of its trajectory</p> <p>The rocket must not go beyond an altitude of 100km above mean sea level.</p>
High Power Rocket Rules	The Space (Launches and Returns) (High Power Rocket) Rules 2019
Incident	An incident is defined under section 86 of the Space (Launches and Returns) Act 2018 as an occurrence associated with the operation of a space object or high power rocket that affects or could affect the safety or the operation of the space object or high power rocket or that involves circumstances indicating that an accident nearly occurred.
Insurance Rules	The Space (Launches and Returns) (Insurance) Rules 2019
Launch facility	A facility (whether fixed or mobile) or a place specifically designed or constructed as a facility or place from which space objects can be launched, including all other facilities or place that are necessary to launch.
Liability Convention	The Convention on International Liability for Damage Caused by Space Objects
Liability period	<p>Space (Launches and Returns) Act 2018 provides the following definition of liability period:</p> <ol style="list-style-type: none"> for the launch of a space object—the period of 30 days beginning when the launch takes place, or such other period as is specified in the rules, and for the return of a space object—the period beginning when the relevant re-entry manoeuvre is begun and ending when the object has come to rest on Earth, or such other period as is specified in the rules, and for the launch of a high power rocket—the period of 30 days beginning when the launch takes place, or such other period as is specified in the rules.

Term	Definition
Maximum Probable Loss Methodology (MPL Methodology)	The MPL Methodology sets out the method that can be used to calculate the maximum probable loss that might occur due to certain space activities. You can use the methodology to determine the insured amount defined in the Act and specified in the Insurance Rules.
Minister	The Commonwealth Minister responsible for the <i>Space (Launches and Returns) Act 2018</i> .
Payload	Payload can commonly refer to an entire satellite, a satellite bus, or anything the bus carries. It also captures any object that the launch or return vehicle carries, but which may not leave the vehicle.
Penalty unit	A standard amount of money used to determine the maximum penalty for a breach of law. For offences committed from 1 January 2023, the Commonwealth penalty unit is \$275. Penalty units are automatically indexed on 1 July every three years in line with the All Groups Consumer Price Index (CPI).
Personal information	Has the same meaning as in the <i>Privacy Act 1988</i> (Cth) which is: Information or an opinion about an identified individual, or an individual who is reasonably identifiable: <ul style="list-style-type: none"> • whether the information or opinion is true or not, and • whether the information or opinion is recorded in a material form or not.
Space object	The meaning is defined in the Space (Launches and Returns) Act 2018 : <ul style="list-style-type: none"> • an object the whole or a part of which is to go into or come back from an area beyond the distance of 100km above mean sea level • 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 100km above mean sea level.
SQE	A Suitably Qualified Expert (SQE) performs flight safety assurance functions for civil launch and return activities carried out from Australia. These functions give assurance the launch and/or return activity falls within Australia launch safety standards. SQE functions are distinct from individuals, companies or organisations with suitable qualifications and experience who provide a written assessment of the adequacy of an environmental plan or cybersecurity strategy. For the purposes of an Australian launch permit an SQE, who is approved by the Minister, is required to: <ul style="list-style-type: none"> • conduct the risk hazard analysis • provide written confirmation that the launch or launches, operation of the launch vehicle on the flight path and any connected return will fall within the launch safety standards if carried out in accordance with the flight safety plan.
United Nations space treaties	The meaning is defined in the Space (Launches and Returns) Act 2018 :

Term	Definition
	<p>The United Nations space treaties means the following:</p> <ul style="list-style-type: none">• the Liability Convention• the Registration Convention• the Outer Space Treaty• the Moon and other Celestial Bodies Agreement, and• the Astronauts and Objects Agreement.