

EXPLANATORY STATEMENT

Issued by the authority of the Minister for Industry, Science and Technology

Space (Launches and Returns) Act 2018

Space (Launches and Returns) (General) Rules 2019

Purpose and Operation

The *Space Activities Amendment (Launches and Returns) Act 2018* was passed by parliament in August 2018 and amended the *Space Activities Act 1998* (the 1998 Act). The *Space (Launches and Returns) Act 2018* (the Act), as the amended Act is known, provides an improved and streamlined framework for the regulation of space activities in Australia or by Australians overseas, as well as arrangements for the launch of high power rockets. Section 110 of the Act includes powers for the Minister to make rules by legislative instrument. The rules are needed to support the 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.

Specifically, the *Space (Launches and Returns) (General) Rules 2019* (the Rules) provides detail on the application requirements for five of the six approvals possible under the Act¹. These are the:

1. launch facility licence;
2. Australian launch permit;
3. overseas payload permit;
4. return authorisation; and
5. authorisation certificate.

The Rules also detail additional criteria, in addition to the criteria in the Act, that the Minister must consider when making a decision whether to grant a specific application for a permit, licence, certificate or authorisation. In addition to the standard conditions in the Act, the Rules also contain additional standard conditions that will be imposed on a permit or licence holder. The Rules also include information to support the Act with regards to notice requirements for the launch safety officer and the provision of fees and allowances available to people who attend or assist the Investigator, and delegations.

The Flight Safety Code is incorporated into this instrument by reference. Subsection 110(3) of the Act provides the authority for the rules to make provision in relation to a matter by applying, adopting or incorporating, with or without modification, any matter contained in an instrument or other writing as in force or existing from time to time.

¹ The application requirements for the sixth approval type, Australian high power rocket permits, is addressed in the *Space (Launches and Returns) (High Power Rocket) Rules 2019*.

The Flight Safety Code describes specific measures relating to public safety. It sets out the requirements for applicants to demonstrate that their activities will be safe. The document is developed and owned by the Australian Government. The Flight Safety Code is incorporated in this way to increase the flexibility of the Rules to respond to the rapidly evolving nature of space technologies (therefore supporting the growth of the sector), and to allow for the need to agilely review safety standards and the corresponding equations if safety requirements change including consideration of changing international approaches. The document is amended by the Australian Government, as required.

The Flight Safety Code is a complex document, and including the information contained in it directly in the Rules would substantially increase the length and complexity of the Rules. The Flight Safety Code is freely available on the website of the Australian Space Agency (Agency) (www.space.gov.au).

Background

In 2015, the Australian Government commenced a review of the 1998 Act 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 1998 Act would benefit from increased flexibility and a focus on the nature of the activity rather than the type of organisation undertaking the activity and had a higher level of insurance/financial requirements in comparison to other space-faring nations.

A Bill to amend the 1998 Act was drafted that provided improvements appropriate to Australia's national context and supported participation in the Australian space industry, whilst balancing the safety of space activities, and the risk of damage to persons or property as a result of space activities. The framework implements certain Australian obligations under the UN Space Treaties. *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. The amendment Act commenced on 31 August 2019.

Authority

Subsection 110(1) of the Act provides that the Minister may, by legislative instrument, make rules prescribing matters required or permitted by the Act to be prescribed by the rules, or make rules prescribing matters necessary or convenient to be prescribed for carrying out or giving effect to the Act.

Accordingly, the Rules are made under subsection 110(1) of the Act.

Consultation

Public consultation on the draft Rules was undertaken in May to June 2019 for a period of four weeks. As part of this consultation, the Agency released a consultation paper along with an exposure draft of the Rules and accepted submissions on the draft Rules. Additionally, a

public meeting was held in every capital city. The Agency also consulted with relevant Australian Government departments.

The Rules were drafted by the Office of Parliamentary Counsel.

Regulatory Impact

The regulatory impact of the Rules was considered during its development. A preliminary assessment form was completed and provided to the Office of Best Practice Regulation (OBPR) for consideration. It was determined that the development of streamlined rules to support the Act would only have a minor regulatory impact. As such a Regulatory Impact Statement was not required (OBPR reference number 25273).

Details of the *Space (Launches and Returns) (General) Rules 2019*

Part 1—Preliminary

Section 1—Name

This section specifies the name of the instrument as the *Space (Launches and Returns) (General) Rules 2019* (the Rules).

Section 2—Commencement

This section sets out the commencement date for the Rules, which provides that the whole instrument commences at the same time as the *Space Activities Amendment (Launches and Returns) Act 2018*. The commencement of the Rules has been linked to the commencement of that Act as that is when the rule making power under section 110 of the *Space (Launches and Returns) Act 2018* (the Act) comes into force.

Section 3—Authority

This section identifies that this instrument is made under the Act.

Section 4—Definitions

This item provides for definitions of terms used in the Rules. The following terms are defined in this section.

The definition of *ABN* has the same meaning as in the *A New Tax System (Australian Business Number) Act 1999*.

The definition of *ACN* has the same meaning as in the *Corporations Act 2001*.

The definition of *Act* is the *Space (Launches and Returns) Act 2018*.

The definition of *Agency* is that part of the Department of Industry, Innovation and Science known as the Australian Space Agency.

The definition of *current version* is for a plan relating to a launch facility licence, an Australian launch permit or overseas payload permit. This may be either the plan as included as part of the application for the licence or permit (including any variations to the application) or, if the holder of the licence or permit has subsequently given a copy of an amendment of the plan to the Minister, the plan as amended.

The definition of *Emergency Management Australia* is that part of the Home Affairs Department known as Emergency Management Australia.

The definition of *Flight Safety Code* is the document of that name published by the Agency, as in force from time to time. The Flight Safety Code is freely available on the Agency's website (www.space.gov.au).

The definition of *Home Affairs Department* means the Department administered by the Minister administering the *Australian Border Force Act 2015*.

The definition of *insurance/financial requirements* is the insurance/financial requirements in Division 7 of Part 3 of the Act.

The definition of *overseas payload return application* is the application for a return authorisation where each return to be authorised meets the following criteria:

- (a) the return is to a place or area outside Australia;
- (b) the space object to be returned will be carried as a payload by another space object that does not require a return authorisation.

The definition of *period*, in relation to the launch or return of a space object, is the period that includes all of the days for which there is a window for the launch or return. This definition is intended to define *period* as the period of days in which a window has been identified that the launch or return may occur on.

The definition of *standard return application* is an application for a return authorisation other than an overseas payload return application.

The definition of *stated purpose* is to confirm which section of the application contains the stated purpose. The purpose identified in these sections will then be the one considered when other sections of the Rules refer to the purpose of the activity. For example, in subsection 35(2), an additional criteria for the grant of Australian launch permit states "the launch vehicle to be used in the launch or series of launches must be as effective and safe as is reasonably practicable having regard to the purpose of the launch". Applying this definition, the purpose referred to in subsection 35(2), is the one provided by the applicant under section 46.

The definition of *technical recognition instrument* is an instrument in which Australia recognises another country's licensing or certification of a launch facility or space object, or part of a launch facility or space object.

The definition of *window*, in relation to the launch or return of a space object on a given day, is the window or windows of time on that day in which the space object is able to be launched or returned. This definition is intended to define *window* as the time period in which the space object is able to be launched or returned.

Part 2—Launch facility licences

Division 1—Additional criteria for grant of launch facility licence

Division 1 of the Rules establishes criteria, in addition to those specified in the Act, which must be satisfied by the applicant before the Minister can grant a launch facility licence.

Section 5—Additional criteria

Section 18 of the Act sets out that the Minister may grant a launch facility licence if the Minister is satisfied that certain criteria are met. Paragraph 18(f) of the Act states that the rules may prescribe additional criteria that must be satisfied in relation to the launch facility.

Section 5 of the Rules sets out an additional criterion of which the Minister must be satisfied in order to grant a launch facility licence for a launch facility in Australia under paragraph 18(f) of the Act. The criterion specifies that the Minister, having regard to the proposed use of the facility, must be satisfied that the design and construction of the launch facility is as effective and safe as reasonably practicable. The purpose of this criterion is for the Minister to be satisfied that the chosen design and construction of the facility means that when it is operational, it is as effective and safe as is reasonable practicable. It is essential that the overall safety of the launch facility can be assessed by the Minister so as to minimise the risk of damage to persons or property as a result of launch activities.

Division 2—Standard launch facility licence conditions

Section 20 of the Act sets out the standard conditions for a launch facility licence, including any conditions prescribed by the rules. Division 2 of Part 2 of the Rules contains additional conditions with which the holder of a launch facility licence must comply.

These conditions are critical for ensuring that the operations of the launch facility are undertaken in a manner that reduces the risk of harm to health and safety or damage to property to a level that is as low as reasonably practicable. In particular, the conditions focus on ensuring the facility is operated consistently with the requirements of the Act and in line with the various plans that have been submitted to the Minister (for example, the facility management plan submitted under section 15 of the Rules). Section 21 of the Act imposes a civil penalty for breaching a launch facility condition.

Section 6—Standard conditions

Section 6 states that the conditions listed under Division 2 of Part 2 of the Rules apply, for the purposes of paragraph 20(b) of the Act, to each launch facility licence granted to a person.

Section 7—Operating facility consistently with Act

Section 7 sets out the requirements that the holder of a licence must comply with in order to operate their launch site facility consistently with the Act.

Subsection 7(1) restricts the launch facility from being used for a launch that has not been authorised under the Act. This will assist in preventing the unauthorised launch of space objects or high power rockets.

Subsection 7(2) is intended to ensure that the conditions imposed on an Australian launch permit, Australian high power rocket permit or authorisation certificate for a launch at the licence holder's facility are complied with by the launch facility licence holder. The conditions that have been imposed on a permit or certificate have been included to ensure the safety of the activity. To ensure the risk of harm to health and safety of persons or damage to property is as low as reasonably practicable, the launch facility licence holder must not act inconsistently with these conditions.

Subsections 7(3) and (4) align access, assistance and information provisions for the launch facility licence holder with those for the Australian launch permit holder that are detailed in paragraphs 52(2)(a) and (b) of the Act. This will ensure that the Launch Safety Officer has the access, assistance and information needed to undertake their functions. In line with paragraph 52(2)(a) of the Act, the Launch Safety Officer can only access the facility with the consent of the permit holder or an authorised person under the Act.

Subsection 7(5) is a repeat of the condition set out in paragraph 20(a) of the Act. It has been included here to assist an applicant in easily identifying all the standard conditions that apply to them.

Section 8—Plans and record-keeping

Pursuant to subsection 8(1), if the relevant plans in relation to the launch facility are amended, the holder of the licence must provide a copy of the plan as amended to the Minister. This allows the Minister to consider any amendments made to the plans that relate to the design or operation of the facility. The Minister can then assess whether the amendments create or increase risk to health and safety, property, or national security or otherwise affect criteria that the Minister had regard to when considering the application under section 18 of the Act.

It is essential that the licence holder is able to amend their plans so that they can, among other things, address changing circumstances, ensure their plans remain accurate, and make updates to ensure that the risk of the operation of the facility causing substantial harm to public health or safety or substantial damage to property continues to be as low as is reasonably practicable.

The launch facility must be operated, and constructed if construction is not completed when the licence is granted, in accordance with the plans submitted or the plans as amended pursuant to subsection 8(2). Under paragraph 18(d) of the Act, the Minister must assess the probability of the construction or operation of the launch facility causing substantial harm to public health or safety or causing substantial damage to property, before granting a launch facility licence, and do so on the basis that it will be operated in line with these plans. If the

launch facility licence holder were to cease operating or constructing the facility in line with the plans, this may increase the risk of harm to persons or property.

The record keeping provisions in subsections 8(3) and (4) of the Rules are intended to ensure that if the Minister wishes to use their power under section 60 of the Act to request information on the past operation of the facility, that information will be available.

Section 9—Personnel

Pursuant to section 9, if the details of the organisational structure or personnel with relevant responsibilities or roles change, the holder of the licence must notify the Minister of the changes. The licence holder must retain personnel records for at least 7 years after the individual ceases to have a relevant responsibility or role or until the holder's licence expires. Section 9(3) details the types of information that must be included in the personnel record.

These provisions are intended to ensure that information on personnel and their roles is available if the Minister seeks information about personnel under section 60 of the Act. The Minister may, among other reasons, seek information on personnel if they have concerns about the competence of the operation of the facility, or concerns relevant to the security, defence or international relations of Australia in relation to the personnel identified.

Division 3—Application for grant of licence

Division 3 of Part 2 sets out requirements that the applicant must comply with in their application for the Minister to make a decision as to whether to grant a launch facility licence.

Subdivision A—Preliminary

Section 10—Purpose of Division

Section 10 sets out the purpose of Division 3 of Part 2 is to set out the requirements for an application for the grant of a launch facility licence.

Section 11—Application must be in writing and in English

Section 11 states that applications, and documents required to be included in applications, must be in writing and in English. If the document is not in English, a translation of the document into English must be provided. The purpose of this section is to ensure that the Minister can have regard to all of the information that must be included in applications.

Subdivision B—Initial stage of application

Subdivision B sets out the information required to be submitted in the initial stage of the application. The application for a launch facility is to be made in three stages. After information is submitted for a stage, it will be considered and, the applicant may then be invited to submit the information for the next stage. A staged approach has been implemented

under subsection 24(2) of the Act because of the number and complexity of documents required as part of an application for a launch facility licence. It will assist applicants by providing a phased approach to applying for an approval, and streamline the subsequent assessment of those applications.

Section 12—Contents of initial stage of application

Section 12 states that Subdivision B provides details of the material required in the first stage of the launch facility licence application.

Section 13—Information about applicant

Section 13 specifies the details about the applicant that must be included in the application. This information is required so that the applicant can be identified. Information about other persons or entities that have ownership, control or direction of the applicant is relevant to the Minister's consideration of whether there are any reasons relating to the security, defence or international relations of Australia that the licence should not be granted. The applicant is required to provide this information so that the Minister can consider the person or persons who may be in a position to influence or control the applicant in their operation of the launch facility.

Section 14—Information about launch facility

Section 14 specifies the information about the launch facility that must be included in the application. This information is required to inform the Minister of the intended purpose of the facility including the frequency of launches and possible kinds of launch vehicles. It also includes information for informing the Minister of the facility's geographical location and site plan, and when the applicant proposes to commence constructing the facility, if applicable, and commence operating the facility.

Paragraphs 14(b) and (d) allows an applicant to nominate more than one location and site plan to accommodate mobile launch facilities. These are facilities that are not fixed in place but may be moved to alternate locations. A mobile facility can only be operated from the locations specified in the application, or in subsequent approved variations to the licence.

Section 15—Facility management plan

Section 15 specifies the details about the facility management plan for the launch facility that must be included in the application. The plan must include information on the operation of the facility. This includes the applicant's strategies for operating the facility in relation to the intended use of the facility, the practices and procedures to control the operation of the facility, the arrangements for reporting on the operation of the facility to relevant authorities, a description or copy of the quality assurance plan, the system used for keeping records and maintaining documentation and arrangements for maintaining the launch facility.

This will form part of the Minister's assessment of whether the applicant meets the criteria under section 18 of the Act. In particular, the information provided under section 15 of the Rules will be relevant to whether the Minister is satisfied that the probability of the construction and operation of the launch facility causing substantial harm to public health or public safety or causing substantial damage to property is as low as reasonably practicable under paragraph 18(d) of the Act.

Section 16—Financial standing

Section 16 specifies details about the evidence required for the applicant's financial standing and capacity, and a description of the financial processes that must be included in the application. This will ensure that the Minister is satisfied that the person has sufficient funding to construct and operate the launch facility as required under paragraph 18(c) of the Act.

Subdivision C—Second stage of application

Subdivision C sets out the information required for the second stage of the application.

Section 17—Contents of second stage of application

Section 17 specifies that the Minister may invite the applicant to lodge the documents for the second stage of application, following the submission of the information for the initial stage of the application under Subdivision B of Division 3 of Part 2. This subdivision sets out the documents required to be lodged for the second stage of application.

Section 18—Organisational structure and personnel

The purpose of section 18 is to require information demonstrating that the applicant organisation has a suitable structure and appropriate personnel for holding a launch facility licence. This is relevant for the Minister's consideration of whether to grant a launch facility under section 18 of the Act.

Subsection 18(1) of the Rules specifies that the application must include a description of the organisational structure of the applicant, including the chain of command within the organisation and the responsibilities of each position within the chain of command, along with the particular personal details of the individuals who fulfil particular roles and responsibilities under subsection 18(2) within the applicant's organisation. Subsection 18(2) specifies the individuals of the applicant organisation for whom particular personal details must be disclosed under subsection 18(1).

Section 18 of the Rules requires the applicant to provide specific personal information on specific individuals related to the launch facility. It is necessary to request this information from the applicant in order to achieve the objects and purposes of the Act. Firstly, it is necessary to collect this information in order to determine the competence of the organisation to operate a launch facility. A lack of relevant experience and qualified personnel in key

positions in the facility could result in activities not being conducted safely, increasing the risk of damage to persons or property. The Minister cannot grant a launch facility licence unless they are satisfied that the applicant is competent to operate the launch facility pursuant to paragraph 18(a) of the Act.

Secondly, the information is required to assist in determining if there are any reasons relevant to the security, defence or international relations of Australia that a launch facility licence should not be granted. This is a matter the Minister must consider pursuant to paragraph 18(e) of the Act. The activities of a launch facility involve launching rockets which, if subverted, could result in significant injury and/or damage. Therefore, the name, date of birth, place of birth and address of each of the relevant persons are necessary for the Minister to determine if there are any national security concerns with the particular personnel. This information is not requested of all personnel at the launch facility, only those in a position who have access, control or provide direction on critical tasks in the operation of the facility.

Section 19—Design and engineering plans and specifications

Section 19 specifies that design and engineering plans, and specifications for the design and engineering, must be included in the application in respect of each part of the launch facility. This information is required to demonstrate that the applicant has design and engineering plans and specifications that are suitable for developing a fit-for-purpose launch site.

However, the Rules recognise that part or all of the facility design may include sensitive technology provided by another country. The other country may not want or be able to provide the specifics on that technology. In this case, if a technical recognition instrument has been agreed upon between Australia and the other country which recognises the other country's licensing or certification of all or part of the launch facility, then the applicant can provide a statement identifying the technical recognition instrument instead.

The information on the design and engineering plans and the design and engineering specifications is relevant to the Minister's consideration of whether to grant a launch facility licence under section 18 of the Act.

Section 20—Emergency plan

Section 20 requires the applicant to provide information demonstrating that they have a suitable emergency plan, and to provide information to the Australian Space Agency (the Agency) about the plan for responding to an accident, incident or other emergency at the proposed launch site.

Subsection 20(1) specifies that the application must include an emergency plan for responding to accidents and incidents involving a space object or high power rocket that was launched, or attempted to be launched, from the launch facility and any other kind of emergency. The terms 'accident' and 'incident' are defined in sections 85 and 86 of the Act. The reference to 'any other kind of emergency' refers to emergencies that do not meet the

definition of accident and incident, which may include a natural disaster, such as a bushfire or flood, or an explosion at the facility.

Subsection 20(2) outlines the provisions that the emergency plan must include, including the procedures that will be undertaken in response to an emergency and the personnel who are responsible. Amongst other requirements:

- the applicant must specify the equipment and facilities necessary for responding to an accident, incident or other emergency; and
- the licence holder must test the emergency plan annually and report the results of the exercises to the Agency.

Subsection 20(3) specifies that the application must include information about approvals required in relation to any provision of the emergency plan under any other law of the Commonwealth or a State or Territory, and provide evidence of whether the approvals have been obtained. Evidence of the approvals will assist the Minister in determining whether it is an adequate emergency plan and if it is suitable for the local environment.

Information on the emergency plan is important in ensuring that there is a plan for responding to an emergency, in the event that one does occur. Both the materials used in launch, including potentially explosive fuels, and the potential damage caused by a rocket that does not function correctly, can mean that if an emergency occurs it may be significant. Prior planning and testing of a suitable plan is expected to result in the impact from any emergency being lessened. This is particularly important given the potential for launch facilities to be located in relatively remote areas.

Section 21—Environment

Section 21 specifies details about the environmental approvals and plans for the launch facility that must be included in the application. This will assist the Minister in determining that all necessary environmental approvals under Australian law have been obtained, and that an adequate environmental plan has been made, as required under paragraph 18(b) of the Act.

If an applicant is required under any other law of the Commonwealth or a law of a State or Territory to have environmental approvals and an environmental plan, then the applicant needs to provide evidence that these have been obtained and submit the environmental plan required under the relevant law. If not, then the application must include an environmental plan which meets the requirements set out in subsection 21(4). The section has been structured this way so that the applicant does not have to prepare two separate environmental plans. This would be an unnecessary regulatory burden on the applicant.

Section 22—Technology security

Section 22 requires that the applicant provide a technology security plan that is suitable for preventing unauthorised access to technology to be used in operating the launch facility. This

includes all technology used in the facility, but, in particular, sensitive technology that can affect the operation of a launch.

Subsection 22(1) requires that the application includes a technology security plan for the launch facility. Subsection 22(2) requires that the technology security plan provide details of the arrangements and procedures that the applicant will utilise to prevent unauthorised persons from having access to the technology to be used in operating the launch facility, including cybersecurity arrangements. Under paragraph 22(2)(b), if all or part of the technology is protected by a technology security agreement between Australia and another country, the applicant must specify how the technology security plan addresses Australia's obligations under the agreement. This requirement is intended to ensure that Australia meets its international obligations in relation to safeguarding sensitive technology.

Identification of the cybersecurity strategy to be used is important, given the potential for malicious actors to gain access to, and potential control of, the launch facility's network or parts of it. Given the nature of some cyber-attacks it may even be difficult to identify if a facility's network has been breached. The defensive measures taken to protect the network are critical for preventing unauthorised access. This is why subsection 22(3) requires that the strategy be assessed, and a written report provided, by an independent person with suitable qualifications and experience in cybersecurity.

The information contained in the technology security plan, including the cybersecurity strategy, is relevant to the Minister's consideration of whether to grant a launch facility under section 18 of the Act.

Subdivision D—Third stage of application

Subdivision D relates to the third stage of the application, in which the applicant provides details of regulatory and non-regulatory matters and approval processes in relation to the construction and operation of the launch facility. The applicant may be invited by the Minister to lodge documents for the third stage after submitting the information for the second stage of application.

Section 23—Contents of third stage of application

Subsection 23(1) specifies that the Minister may, after making a request for further information under subsection 17(1), request information described under this Subdivision from the applicant for the third stage of the application.

Subsection 23(2) provides that this Subdivision specifies the material required to be provided in the third stage of the application.

Section 24—Outstanding approvals

Section 24 requires the applicant to provide information on any outstanding approvals required by Commonwealth law or the laws of a State or Territory that relate to the

construction and operation of the launch facility. The applicant must describe their arrangements and time frames for obtaining the approvals. This section is intended to provide the Minister information on outstanding approvals and the steps that have been or will be taken for obtaining them. This information is relevant to the Minister's consideration of whether to grant a launch facility licence under section 18 of the Act.

Section 25—Matters to be verified

Section 25 requires the applicant to provide information on any matters that are still required to be verified or validated as part of the facility management plan or technology security plan for the launch site. This must include information on the arrangements and time frames for obtaining the verification or validation. Matters could cover a range of different things, such as verifying that firewalls are operating to prevent unauthorised access to the network. This information is relevant to the Minister's consideration of whether to grant a launch facility licence under section 18 of the Act.

Subdivision E—Other matters

Section 26—Application may include additional information

Section 26 provides for the applicant to submit any other information that is not listed in Subdivisions B to D of Division 3 of Part 2 that the applicant considers relevant to demonstrating compliance with all requirements under section 18 of the Act (including the criteria prescribed by Division 1 of Part 2 of the Rules). The purpose of this section is to clarify that an applicant may submit additional relevant information.

Section 27—Application may be updated

Section 27 specifies that the applicant may, prior to the Minister's decision, update a part of the application. The changes may include updates to the details of the launch facility, the plans for the operation of the facility, or the implementation of the plans for the operation of the facility.

Section 27 is intended to ensure that the Minister's decision as to whether to grant a launch facility licence to the applicant is based on current and accurate information.

Division 4—Application for variation of licence

Section 28—Variation of licence conditions

Section 28 specifies that, in order to apply for a variation of licence conditions pursuant to section 24 of the Act, the licence holder must provide an application with a description of the variation sought, the reason for requesting the variation and may include any supporting material that the applicant believes will assist the Minister in making a decision on the application.

This action is required when seeking to vary one of the conditions on the licence itself. It is not needed if the licence holder is only amending plans in line with section 8 of the Rules. The purpose of section 28 is to advise licence holders of the information required if they are making an application for a variation of the licence conditions.

Division 5—Application for transfer of licence

Section 29—Purpose of Division

Under section 24 of the Act, a facility licence must be transferred to another person in accordance with the rules. Section 29 states the purpose of Division 5 of Part 2 of the Rules is to set out the requirements for an application for the transfer of a launch facility licence.

Section 30—Application to be made by transferee

Section 30 specifies that the application to transfer a licence must be made by the person to whom the licence is proposed to be transferred.

Section 31—Application must be in writing and in English

Section 31 states that the applications, and included documents, must be in writing and in English. If the document is not in English, an English translation of the document must be provided. The purpose of this section is to ensure that the Minister can have regard to all of the information that must be included in applications.

Section 32—Statement from current holder of licence

Section 32 specifies that the transfer application must include a statement by the current holder of the licence explaining why the transfer is being sought. The purpose of this section is to inform the Minister of the reasons for the transfer taking place. It also confirms that the current licence holder is aware of the proposed transfer.

Section 33—Other contents of transfer application

Subsections 33(1) and (2) specify that the transfer application must include all of the material required for the grant of a launch facility licence under Subdivisions B to D of Division 3 of Part 2 of the Rules. This material must be included in the transfer application at the time that the transfer application is made. This application process differs from the application for the grant of a launch facility licence, where material is provided in stages in response to a request from the Minister.

The purpose of subsections 33(1) and (2) is to ensure that the Minister has sufficient information to be satisfied that the criteria set out in section 18 of the Act are satisfied. This is necessary because subsection 22(1) of the Act provides that the Minister may transfer a launch facility licence to a person if the Minister could grant the licence to that person under section 18 of the Act.

Subsection 33(3) allows a transfer applicant to provide a copy of the plans of the current holder of the licence and a statement that they will operate the facility under the same plan. Subsection 33(4) allows a transfer applicant to include a copy of the additional information or material included in the original launch facility licence application, provided that it is still correct. This is not compulsory. An applicant can instead decide to create their own plans or provide different information or materials. These subsections are intended to simplify the application and assessment process.

Subsection 33(5) specifies that the application, and any document required to be included in the application, may include any other information relevant to demonstrating that the criteria in section 18 of the Act are met. Subsection 33(5) of the Rules ensures that the applicant can provide additional information relevant to satisfying the Minister.

Section 34—Application may be updated

Section 34 specifies that the applicant for a transfer may, prior to the Minister's decision as to whether to transfer a launch facility licence, update a part of the application. The purpose of this section is to ensure the Minister's decision as to whether to grant a transfer is based on current and accurate information.

Part 3—Australian launch permits

Division 1—Additional criteria for grant of Australian launch permit

Division 1 of Part 3 establishes additional criteria that must be satisfied by the applicant before the Minister can grant an Australian launch permit.

Section 35—Additional criteria

Subsection 28(3) of the Act sets out that the Minister may grant an Australian launch permit if they are satisfied that certain criteria are met. Paragraph 28(3)(f) of the Act states that the rules may prescribe additional criteria that must be satisfied in relation to the Australian launch permit.

Section 35 of the Rules prescribes the additional criteria for the grant of an Australian launch permit. The additional criteria in this section have been included to ensure the objects and purpose of the Act are met.

Subsection 35(2) of the Rules prescribes that, having regard to the proposed purpose of the launch, the launch vehicle that is to be used in a launch or a series of launches is as effective and safe as reasonably practicable. It is important that the overall safety of the launch vehicle can be assessed by the Minister to minimise the risk of damage to persons or property as a result of launch activities.

Subsection 35(3) specifies that, 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 flight path for

each launch is as safe as reasonably practicable. This criterion allows the Minister to consider how different components of the launch design interact when determining if the flight path is effective and safe. The launch safety standards in the Flight Safety Code sets out the safety standards for risks posed to third parties as a result of launch activities.

The Flight Safety Code (including the launch safety standards) is incorporated by reference into the Rules to maintain flexibility in case the launch safety standards change. Subsection 110(3) of the Act provides the authority for the rules to make provision in relation to a matter by applying, adopting or incorporating, with or without modification, any matter contained in an instrument or other writing as in force or existing from time to time.

The Flight Safety Code is incorporated in this way to increase the flexibility of the Rules to respond to the rapidly evolving nature of space technologies (therefore supporting the growth of the sector), and to allow for the need to agilely review safety standards and the corresponding equations if safety requirements change including consideration of changing international approaches. The Flight Safety Code is also a large and complex document, and including the information contained in it directly in the Rules would substantially increase the length and complexity of the Rules. The Flight Safety Code will be freely available on the Agency's website (www.space.gov.au).

Subsection 35(4) specifies that the risk hazard analysis for each launch and any connected return must be consistent with the Flight Safety Code. This criterion is intended to ensure that the applicant's risk hazard analysis prepared for the launch is consistent with the Flight Safety Code. The Flight Safety Code sets out the requirements for applicants to demonstrate that their proposed launch activities will be safe. Consistency with the Flight Safety Code is a critical component of ensuring that the risk of damage to persons or property as a result of a launch is minimised. Subsection 110(3) of the Act provides the authority for the rules to incorporate the Flight Safety Code by reference. The Flight Safety Code is incorporated in this way for the reasons outlined in the paragraph above. In addition to these reasons, it also allows for the risks hazard analysis section to be reviewed to address significant changes in technology and safety systems including consideration of changing international approaches.

Subsection 35(5) specifies that there must be adequate planning to address the environmental impacts of the launch or launches and any connected return.

Division 2—Standard Australian Launch Permit Conditions

Section 30 of the Act sets out the standard conditions for an Australian launch permit, including any conditions prescribed by the rules. Division 2 of Part 3 of the Rules contains additional conditions that the holder of an Australian launch permit must comply with. Section 31 of the Act imposes a civil penalty and an offence for breaching an Australian launch permit condition. This means that the contravention of the conditions detailed in Division 2 of Part 3 of the Rules may result in a civil penalty or an offence. Under section 33 of the Act, the Minister can vary or revoke an Australian launch permit. Section 35 of the Act specifies the procedure that must be followed. Section 36 of the Act, specifies that the

Minister may suspend an Australian launch permit and provides information on the procedure that must be followed if the Minister decides to suspend an Australian launch permit.

Compliance with the conditions included in the rules is critical for ensuring that the launch, or launches, are undertaken safely and minimise the risk of damage to person or property. In particular, they focus on notification requirements to ensure the Commonwealth is informed of the critical aspects of the activity; and on ensuring the launch, or launches, is operated in line with the various safety and management plans that have been submitted to the Minister.

Section 36—Standard conditions

Section 36 specifies that the standard conditions in this section are prescribed under paragraph 30(e) of the Act.

Section 37—Launch information and notice of changes

Subsection 37(1) specifies certain notice requirements the permit holder must comply with. The permit holder must give the Minister confirmation of the day the launch is scheduled to take place and the launch window on that day. The permit holder can identify subsequent days, and the launch window for those days, in which the launch may be attempted if the launch cannot occur on the scheduled day. A minimum of two days is required to ensure that relevant government agencies and the public are given advance notice of the launch activity in order for appropriate action to be taken. The confirmation must be provided no more than 10 days before the scheduled day of launch to reduce the likelihood that the launch day and launch window will have to be changed.

Subsection 37(2) requires the Australian launch permit holder to notify the Minister as soon as practicable if a launch does not go ahead on its scheduled day and the launch is intended to occur on a subsequent day. The notification must identify on which day of the subsequent days identified under paragraph 37(1)(b) and in which launch window the launch will proceed. This condition is intended to ensure that the Minister is aware of the launch period and window in which the holder of the permit intends the launch activity to occur.

Pursuant to subsection 37(3), the Australian launch permit holder must notify the Minister of any change to the payloads that will be launched. In the application for the Australian launch permit, the applicant must provide specific details of any payloads that will be included on or in the space object. At this stage, the payloads are assessed to determine their impact on the safety of the launch and if the Minister considers that any of these payloads should not be launched for reasons relevant to the security, defence or international relations of Australia. Additionally, under the *Convention on International Liability for Damage Caused by Space Objects* (Liability Convention), Australia as a launching state remains liable for these

payloads². This condition is intended to ensure the Minister is aware of any changes to the payloads that are launched so that the Minister may assess the impact of the changes.

Pursuant to subsection 37(4), the Australian launch permit holder must inform the Minister of any changes to the assumptions and data used in the risk hazard analysis for a launch and any connected returns. The holder must also provide a statement from a suitably qualified expert, who is approved by the Minister, as to whether the risk hazard analysis continues to satisfy the launch safety standards in the Flight Safety Code. This condition is intended to ensure that any changes in the assumptions and data do not result in the launch no longer being consistent with the Flight Safety Code. The Flight Safety Code sets out the requirements of applicants to demonstrate that their proposed launch activities will be safe. Consistency with the Flight Safety Code is a critical component of ensuring that the risk to persons or property as a result of a launch is minimised.

Subsection 37(5) specifies that the Australian launch permit holder must notify the Minister of any changes to the information mentioned in section 47 of the Rules (information about flight path) for a launch or connected return. The Minister can then assess the impact of the change including whether the amendments made to the information create or increase any risks to public health and safety, property, or Australia's defence security or international relations. It is important to allow the permit holder the opportunity to change their flight path, so that they can, among other things, address changing situations and make updates to ensure that the probability of the operation of the launch causing substantial harm to public health or safety or substantial damage to property continues to be as low as is reasonably practicable. However, the Minister needs to be made aware of any such change.

Notwithstanding the requirement in subsection 37(5), subsection 37(6) specifies that the Australian launch permit holder must conduct each launch and connected return, as far as practicable, consistently with the information provided under section 47 of the Rules (information about flight path) to the Minister. This condition recognises that circumstances may arise where a permit holder is unable to operate the launch in accordance with the information provided on the flight path, in particular, if a deviation is required for safety reasons. Otherwise the launch must be conducted in line with the information provided on the flight path. If the Australian launch permit holder were to cease operating the launch in line with the information provided about the flight path, this may increase the probability of damage to persons or property to an unacceptable level.

Section 38—Plans

Pursuant to subsection 38(1), if the launch management plan, flight safety plan or technology security plan, in relation to the launch are amended, the Australian launch permit holder must provide a copy of the plan as amended to the Minister. The Minister can then assess whether

² The Convention is in Australian Treaty Series 1975 No. 5 ([1975] ATS 5) and could in 2019 be viewed in the Australian Treaties Library on the AustLII website (<http://www.austlii.edu.au>) or at <https://info.dfat.gov.au/Info/Treaties/Treaties.nsf/AllDocIDs/364307EC73C6023BCA256CD10083A85E>

the amendments create or increase risk to health and safety, property, or national security or otherwise affect criteria that the Minister had regard to when considering the application under section 28 of the Act. The Minister can then raise any concerns with the amendments made to the plans with the permit holder. It is essential that the permit holder is able to amend their plans so that they can, among other things, address changing situations, ensure their plans remain accurate and make updates to ensure that the probability of the operation of the launch causing substantial harm to public health or safety or substantial damage to property continues to be as low as is reasonably practicable.

Subsection 38(2) specifies that the launch and any connected return must be operated in accordance with the current version of the plans submitted. The Minister must assess the probability of the launch causing substantial harm to public health or safety or causing substantial damage to property before granting an Australian launch permit, and does so on the basis that it will be operated in line with these plans. If the Australian launch permit holder were to cease operating the launch in line with the plans this may increase the risk of damage to persons or property as a result of the launch or connected return.

Section 39—Information that must be given after launch

Pursuant to paragraph 39(a), as soon as practicable following the launch of the space object authorised by the permit, the holder must provide to the Minister information on the orbital parameters of the space object or objects, in line with the information required under paragraph 1(d) of Article IV of the *Convention on Registration of Objects Launched into Outer Space* (Registration Convention)³. This information is required so that Australia can meet its obligations under the Registration Convention. Under the Registration Convention, more than one state can be considered a launching state and so be responsible for registering the space object. In practice, this means there needs to be agreement over which country will register the space object. Paragraph 39(b) of the Rules requires the applicant to provide information to the Minister as soon as practicable on whether any other launching state for the space object has indicated it wishes to register the space object in order to streamline the registration process.

Pursuant to paragraph 39(c), a report on the compliance of the launch with the launch safety standards in the Flight Safety Code and with the assumptions and data used in the risk hazard analysis for the launch must be provided to the Minister as soon as practicable after the launch. This condition is intended to verify that the launch was conducted safely and in line with the Australian launch permit holder's plans and information provided under section 52 (risk hazard analysis).

Section 40—Compliance with directions and requests for information

³ The Convention is in Australian Treaty Series 1986 No. 5 ([1986] ATS 5) and could in 2019 be viewed in the Australian Treaties Library on the AustLII website (<http://www.austlii.edu.au>) or at <https://info.dfat.gov.au/Info/Treaties/treaties.nsf/AllDocIDs/849324D6F78446D9CA256CD10083A860>

Pursuant to subsection 40(1), the Australian launch permit holder must give the Minister written notice of any action taken in response to a direction from a Launch Safety Officer under paragraph 52(2)(c) of the Act within 10 business days after the direction is given. This condition is intended to ensure that the Minister is aware of the action taken in response to a written direction from the Launch Safety Officer.

Subsection 52(6) of the Act requires the Launch Safety Officer to provide the Minister a copy of a direction given under paragraph 52(2)(c) of the Act. Requiring the permit holder to report on any action taken in response provides more complete information to the Minister on the direction and action. This transparency is important given the powers available to the Launch Safety Officer.

Subsection 40(2) specifies that the permit holder must give the Minister any information about the permit that the Minister requests under section 60 of the Act. The Minister needs to be able to request information about the launch to ensure that the launch is being undertaken in line with the plans and information provided and that the launch activity is being undertaken safely. In particular, this information is required so that the Minister can be satisfied that 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 is reasonably practicable. This has been included as a condition on the permit holder to ensure that the Minister's request for information is enforceable.

Section 41—Personnel

Pursuant to subsections 41(1) and (2), if the details of the organisational structure and specific personnel with relevant responsibilities or roles change, the holder of the permit must notify the Minister of the changes. These provisions are intended to ensure that information on personnel and their roles is available if the Minister seeks information under section 60 of the Act specifically with regard to personnel. The Minister may seek information on personnel if they have concerns about the competence of the operation of the launch or if concerns relevant to the security, defence or international relations of Australia are raised about specific personnel, which are criteria that the Minister must be satisfied of under paragraphs 28(3)(a) and (e) of the Act.

Division 3—Application for grant of permit

Division 3 of Part 3 of the Rules sets out requirements that the applicant must comply with in their application for the grant of an Australian launch permit.

Section 42—Purpose of Division

Section 42 states the purpose of Division 3 of Part 3 of the Rules is to set out the requirements for an application for the grant of an Australian launch permit.

Section 43—Application must be in writing and in English

Section 43 states that applications, and documents required to be included in applications, must be in writing and in English. If the document is not in English, a translation of the document into English must be provided. The purpose of this section is to ensure that the Minister can have regard to all of the information that must be included in applications.

Section 44—Information about applicant

Section 44 specifies details about the applicant that must be included in the application. This information is required so that the applicant can be identified. Information about other persons or entities that have ownership, control or direction of the applicant is relevant to the Minister's consideration of whether there are any reasons relating to the security, defence or international relations of Australia that the permit should not be granted. The applicant is required to provide this information so that the Minister can consider the person or persons who may be in a position to influence or control the applicant in their operation of the launch.

Section 45—Organisational structure and personnel

Section 45 of the Rules provides the details required concerning the applicant and its personnel as part of the application.

The purpose of section 45 is to provide information that demonstrates the applicant's organisation has a suitable structure and appropriate personnel for holding an Australian launch permit. This is relevant for the Minister's consideration of whether to grant an Australian launch permit under section 28 of the Act.

Paragraph 45(1)(a) specifies that the application must include a description of the applicant's organisational structure, including the chain of command within the organisation and the responsibilities of each position within the chain of command, along with the particular personal details of the individuals who fulfil particular roles and responsibilities under subsection 45(2) within the applicant organisation.

Subsection 45(2) specifies the individuals of the applicant organisation for whom particular personal details must be disclosed under subsection 45(1). Paragraph 45(1)(b) specifies the personal information that must be provided by the people captured in subsection 45(2). This includes their name, date of birth, place of birth, current address and the individual's relevant qualifications and experience.

Section 45 requires the applicant to provide specific personal information on specific individuals related to the launch and any connected return. It is necessary to request this amount of information from the applicant in order to achieve the objects and purposes of the Act. Firstly, it is necessary to collect this information in order to determine the competence of the organisation to operate a launch. A lack of relevant experienced and qualified personnel in key positions could result in activities not being conducted safely, increasing the risk of damage to persons or property. The Minister cannot grant an Australian launch permit unless they are satisfied that the applicant is competent to carry out the launch pursuant to paragraph 28(3)(a) of the Act.

Secondly, the information is required to assist in determining if there are any reasons relevant to the security, defence or international relations of Australia that an Australian launch permit should not be granted. This is a matter the Minister must consider pursuant to paragraph 28(3)(e) of the Act. The launching of rockets could, if subverted, result in significant damage and injury. The name, date of birth, place of birth and address of relevant persons are necessary for the Minister to determine if there are any national security concerns with the particular personnel. This information is not requested of all personnel associated with the launch, only those who have access, control, or provide direction on, critical tasks in the operation of the launch.

Section 46—Information about Launch

Section 46 sets out the specific information that the applicant must provide about each launch. This information informs the Minister where the launch will take place from, the launch period and launch windows and the period for any connected return and return windows that the applicant anticipates. This information on the launch is relevant to the Minister's consideration of whether to grant an Australian launch permit under section 28 of the Act.

Section 47—Information about flight path

Subsection 47(1) sets out the requirements that the applicant must provide concerning the flight path. This includes a description of the flight path and identification of critical assets directly under the flight path, or within an area of reasonable probability that scheduled or unscheduled debris may fall. Scheduled debris has the same definition as in the Flight Safety Code.

Under subsection 35(3) of the Act, the Minister must consider whether the flight path is effective and safe as is reasonably practicable. Understanding what critical assets are located under the flight path or in areas in which scheduled debris or unscheduled debris may fall is critical to this consideration. This information is also relevant to the Minister's consideration as to whether there are reasons relevant to the security, defence or international relations of Australia that the permit should not be granted.

The information regarding the flight path is relevant to the Minister's consideration on whether to grant an Australian launch permit under section 28 of the Act.

Section 48—Information about launch vehicle

Section 48 sets out the information that the applicant must provide in relation to the launch vehicle.

Paragraphs 48(1)(a) to (h) requires the applicant to provide information on the manufacturing of the launch vehicle, including the quality assurance certification and systems, and information showing whether the launch vehicle has been manufactured and tested to specifications and standards and has received appropriate import approvals, if applicable.

Subsection 48(2) allows for an instrument in the form of a technical recognition instrument to be included for elements of the subsection 48(1) requirements. This subsection is intended to provide an option for a launch vehicle to be used in Australia in circumstances where the country that designed the launch vehicle will not release the information required in subsection 48(1) and a bilateral arrangements has been negotiated between Australia and the other country. It also provides an option for the Minister to decide to recognise another country's licensing or certification for the type of launch vehicle. This may reduce the regulatory burden for an applicant.

Subsection 48(3) lists the types of systems that need to have their technical specifications explained pursuant to paragraphs 48(1)(g) to (i) including details of their manufacturer.

Subsection 48(4) requires a description of any previous flights that the launch vehicle, or a part of that launch vehicle has undertaken to be included in the application. The description must also include any post flight assessments or testing of the vehicle that occurred.

Subsection 48(5) sets out a requirement for the applicant to provide a declaration that the vehicle is not and does not contain a nuclear weapon or weapon of mass destruction. This is to ensure Australia meets its international obligations under the *Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies* (Outer Space Treaty) not to place a weapon of mass destruction including a nuclear weapon into orbit or outer space⁴. Subsection 48(6) allows for nuclear power sources to be utilised, but only with the Minister's written approval.

The information regarding the launch vehicle is relevant to the Minister's consideration on whether to grant an Australian launch permit under section 28 of the Act. In particular, it is relevant to the Minister's determination as to whether, pursuant to subsection 35(2) of the Rules, the launch vehicle is as effective and safe as is reasonably practicable.

Section 49—Flight history or testing of kind of launch vehicle

Section 49 sets out the flight history information that must be provided on the launch vehicle.

Subsection 49(1) provides that the application must include an outline of publicly available information on the flight history of the kind of launch vehicle over the last 5 years.

Subsection 49(2) details the information required if the kind of launch vehicle has no flight history or is it a modified vehicle. The applicant must provide a safety record for the vehicle including testing history for example any static fire testing undertaken. If the safety record includes any anomalies or failures, the measures taken to reduce the risk of future anomalies or failures and other information relevant to demonstrating the safety of the vehicle.

⁴ The Treaty is in Australian Treaty Series 1967 No. 24 ([1967] ATS 24) and could in 2019 be viewed in the Australian Treaties Library on the AustLII website (<http://www.austlii.edu.au>) or at <https://info.dfat.gov.au/Info/Treaties/treaties.nsf/AllDocIDs/89692731D2AEE0A2CA256CDF001D0E5C>

Subsection 49(3) details what is meant by a ‘major modification’. It specifies that a launch vehicle has had a major modification if a change to the design of the vehicle involves a change to the type of engine, navigation system, flight control system or flight termination system, or a change to the design concerns the use of strap in boosters, or the vehicle has been modified in any way that might affect to a significant extent any characteristic of its operation or performance.

The information regarding the kind of launch vehicle is relevant to the Minister’s consideration of whether to grant an Australian launch permit under section 28 of the Act. In particular, it is relevant in relation to the Minister’s determination as to whether, pursuant to subsection 35(2) of the Rules, the launch vehicle is as effective and safe as is reasonably practicable having regard to the purpose of the launch.

Section 50—Information about payload

Section 50 sets out the information that the applicant must provide in relation to each payload. Payload here refers to any object that goes over 100km, excluding the launch vehicle itself. For example, it can refer to an entire satellite, a satellite bus or anything the bus carries such as a sensor as appropriate to the activity and ownership. It also captures any object that the launch vehicle carries but which may not leave the vehicle.

Subsection 50(1) necessitates that this information is mandatory for every payload. Paragraphs 50(1)(a) to (f) cover a description of the payload, who owns the payload/s, their purpose, a breakdown on the country and manufacturer of each payload subsystem, and their orbits.

Paragraphs 50(1)(d) and (e) specify that the application must include information about the owner of the payload. If the owner of the payload is a corporation, the application must include information on about significant shareholders in the corporation. If the owner of the payload is an individual, the application must include the address, date of birth and place of birth of the owner. This information is required to assist in determining if there are any reasons relevant to the security, defence or international relations of Australia that an Australian launch permit should not be granted. This is a matter the Minister must consider pursuant to paragraph 28(3)(e) of the Act.

Paragraphs 50(1)(i) and (j) detail additional information that must be provided if the owner of the payload is an Australian national. Additional information is requested if the owner of the payload is an Australian national to ensure Australia is meeting its obligations under the UN Space Treaties in accordance with the objects of the Act⁵. Paragraph 50(1)(i) specifies that the application must include information on whether the payload is intended to be returned and if so information on the intended return process, timing and location. Paragraph 50(1)(j) specifies that an undertaking is required from the owner. The undertaking must include that

⁵ The UN space treaties are defined in section 8 of the Act. They can be viewed on the Australian Treaties Library on the AustLII website - (<http://www.austlii.edu.au>).

the owner will update the Agency, on a monthly basis, on efforts to establish communication with the payload; inform the Agency when communication is established and if subsequently lost; not operate the payload in a manner that causes Australia to be liable for damage under the Liability Convention or that they know, or ought reasonably to have known, will negatively affect the national security of Australia, and inform the Agency when end of mission manoeuvres commence.

If the owner of the payload is not an Australian national, the application must include a copy of any authorisation or permit that is required under paragraph 50(1)(k) of the rules. If the country does not issue authorisations or permits, the applicant is not required to provide any information for this paragraph.

Subsection 50(2) sets out that all payload owners need to provide a declaration that the payload is not, or does not contain, a nuclear weapon or weapon of mass destruction of any kind.

If the payload contains a nuclear power source, subsection 50(3) requires the applicant to provide a copy of the Minister's written approval for the payload to contain a nuclear power source, if the Minister has given this approval.

The information regarding the payload is relevant to the Minister's consideration on whether to grant an Australian launch permit under section 28 of the Act.

Section 51—Launch Management Plan

Section 51 details the information that must be included in the launch management plan for the relevant activity. The launch management plan is an important element in understanding the applicant's arrangements and procedures for managing the launch or launches and any connected return.

Subsection 51(2) requires information on the arrangements and procedures for a range of activities related to the launch and any connected return. Including the arrangements and procedures for the assembly of the launch vehicle, launch countdown, changes to the conduct of the flight, how ground safety is assured, and recovery from any launch anomalies.

Subsection 51(3) requires the launch management plan to include information on certain arrangements such as procedures to identify and manage hazardous ground operations, how changes to payloads are managed, the maintenance of the launch vehicle, how to resolve and respond to problems encountered during launch, ensuring personnel are properly prepared, the overall communications arrangements, record management arrangements as well as the reporting arrangements to the Minister.

Subsection 51(4) requires that the plan must include a timeline that identifies all events that are safety-critical for the launch and flight.

The information regarding the management of the launch and any connected return is relevant to the Minister’s consideration of whether to grant an Australian launch permit under section 28 of the Act. In particular, it is relevant to the Minister’s consideration as to whether they are satisfied that 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 is reasonably practicable, as required by paragraph 28(3)(c) of the Act.

Section 52—Risk hazard analysis

Section 52 specifies the requirements for the risk hazard analysis that must be included in the application for each launch and connected return. The purpose of this section is to ensure that every launch and connected return application contains a comprehensive risk hazard analysis by a suitably qualified independent expert. This is intended to ensure that the risk hazard analysis is suitable to inform the Minister’s consideration of whether to grant an Australian launch permit under the Act.

Risk hazard analyses are conducted to measure the risk to the public from a potential launch or re-entry mishap and to ensure that operations meet the threshold of carrying as low of a risk as reasonably practicable. Operations that exceed the threshold are not permitted. The risk hazard analysis provides satisfactory evidence that the launch, if carried out according to the information provided as part of the application, will satisfy the launch safety standards set out in the Flight Safety Code.

The information regarding risk hazard analysis is relevant to the Minister’s consideration of whether to grant an Australian launch permit under section 28 of the Act; in particular, whether the Minister can be satisfied in accordance with paragraph 28(3)(c) of the Act that 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.

Subsection 52(2) specifies the requirements for the risk hazard analysis. Under paragraph 52(2)(a), the analysis must be produced by a suitably qualified expert who is not a related party of the applicant and is approved by the Minister. “Related party” is defined in section 9 of the Act. The purpose of paragraph 52(2)(a) of the Rules is to ensure that experts are suitably qualified to undertake the risk analyses and are independent from the applicant to avoid the risk of bias. Given the critical role that the risk hazard analysis plays in ensuring the overall safety of the activity, it is appropriate that the expert who undertakes the analysis is approved by the Minister. This is to ensure that the Minister is satisfied as to the competence of the person undertaking the analysis. Under paragraph 52(2)(b), the analysis must be consistent with the launch safety standards that are set out in the Flight Safety Code.

Subsection 52(3) specifies that the application must contain descriptions of the methodologies, assumptions and data used in the risk hazard analysis. The purpose of this subsection is to provide the Minister with the materials required to verify the reasoning and conclusions of the risk hazard analysis, if required.

Subsection 52(4) specifies that the methodology must use the launch vehicle probability of failure within the risk hazard analysis methodology in the Flight Safety Code. The purpose of this subsection is to aid the Minister's understanding of the launch vehicle's failure probability for the launch licence application.

Subsection 52(5) specifies the content that must be included in the application if the methodology that is used by the suitably qualified expert is different from the risk hazard analysis methodology in the Flight Safety Code. The risk hazard analysis methodology includes more than just the launch vehicle probability of failure referred to in subsection 52(4); for example the probability of failure is one component of the failure response mode calculation which is a part of the larger casualty expectation equation. The purpose of this subsection is to allow an applicant to use a different risk hazard analysis methodology but to ensure that any other methodology is as robust as that outlined in the Flight Safety Code. The information provided under subsection 52(5) assists the Minister in understanding the methodology used to produce the risk hazard analysis in the application, and in determining whether the methodology is technically sound.

Subsection 52(6) specifies that the application must provide details of any software that was used to carry out the risk hazard analysis. This includes a description of the system for making and keeping records and data and maintaining documentation relating to the operation of the software. Additional information is required if the software is not a generally available commercial product which includes information on who developed the software, how it operates and its testing and validation. The purpose of subsection 52(6) is to enable the Minister to be able to assess the reliability of the software that produces material included in risk hazard analyses, as software errors or user error may compromise the validity of a risk hazard analysis.

Subsection 110(3) of the Act provides the authority for the rules to incorporate the Flight Safety Code by reference. The Flight Safety Code is incorporated in this way to increase the flexibility of the instrument to respond to the rapidly evolving nature of space technologies (therefore supporting the growth of the sector), and to allow for the need to agilely review the risks hazard analysis section and the corresponding equations to address significant changes in technology and safety systems or including consideration of international approaches. It is also a large and complex document, and including the information contained in it directly in the Rules would substantially increase the length and complexity of the Rules. The Flight Safety Code will be freely available on the Agency's website (www.space.gov.au).

Section 53—Flight safety plan

Section 53 specifies the requirements for a flight safety plan which, per subsection 53(1), must be included in all Australian launch permit applications. The purpose of section 53 is to ensure that the application contains a comprehensive and suitable flight safety plan. The launch must be operated in accordance with the flight safety plan. 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. Consideration of the flight safety plan is

relevant to the Minister’s decision on whether to grant an Australian launch permit under section 28 of the Act, particularly the criterion in paragraph 28(3)(c) of the Act.

Subsection 53(2) of the Rules specifies the information that must be contained in the flight safety plan. It requires that the flight safety plan identify the strategies and arrangements that will ensure that the launch or return will be conducted in a way that reduces the level of risk to third parties to being as low as is reasonably practicable, and that the launch activity complies with the launch safety standards set out in the Flight Safety Code. The plan must include the arrangements for reporting to the Minister any changes to the arrangements for conducting the launch and the assumptions and data used in the risk hazard analysis. The applicant must also identify the arrangements for reporting, subsequent to the launch or launches, compliance of the launch or return in relation to the launch safety standards and the assumptions and data used in the risk hazard analysis.

Subsection 53(3) specifies that the application must include written confirmation by a suitably qualified expert who is approved by the Minister, and is not a related party of the applicant, that the launch or return will fall within the launch safety standards if carried out in accordance with the flight safety plan. “Related party” is defined in section 9 of the Act. Having this written confirmation undertaken by an expert who is not a related party is important to ensure there is not a risk of bias. Given the critical role that the flight safety plan plays in ensuring the overall safety of the activity, it is appropriate that the expert who reviews it is approved by the Minister. This is intended to ensure that the Minister is satisfied as to the competence of the person providing the confirmation.

Section 54—Debris mitigation strategy

Section 54 supplements subsection 34(2) of the Act, which requires applications for Australian launch permits to include a debris mitigation strategy. The purpose of section 54 is to ensure that the debris mitigation strategy is sufficiently comprehensive and practicable in order to satisfy the Minister that the applicant has considered the impact of their activity on the space environment. Additionally, this section intends to ensure the Minister has information on the risks of the possible collision of space debris with the applicant’s space object during launch and in orbit, using an orbital debris assessment.

Subsection 54(1) requires the debris mitigation strategy in the application to be based on an internationally recognised guideline or standard for debris mitigation, and to identify the guideline or standard being used. A specific guideline or standard has not been identified so as to provide flexibility to the applicant to choose the guideline or standard that best suits their activity.

Subsection 54(2) requires the strategy to describe any mitigation measures planned for orbital debris that may arise from the proposed launch, including from payloads. This means that the guideline or standard that the applicant chooses must address this point. The note to the subsection also provides examples of mitigation measures that may be planned.

Subsection 54(3) requires the strategy to contain an orbital debris assessment based on an internationally recognised model. The orbital debris assessment will identify the risks of the space object colliding with space debris, given the launch and the orbit the space object enters.

An applicant's debris mitigation strategy must cover all payloads released into space as well as the launch vehicle and any payloads that remain on the vehicle. However, the amount of information provided for each of these payloads will vary depending on the nature of the payload. Additionally, an applicant's debris mitigation strategy does not have to follow the same international guidelines or standards for every space object the complete strategy covers.

The information on the debris mitigation strategy is relevant to the Minister's consideration of whether to grant an Australian launch permit under section 28 of the Act. In particular, as to whether there are reasons relevant to the security, defence or international relations of Australia that the permit should not be granted as required by paragraph 28(3)(e) of the Act.

Section 55—Environment

Section 55 specifies the considerations that environmental plans within applications for an Australian launch permit must address. The purpose of section 55 is for the applicant to provide information that is relevant to the Minister's consideration as to whether there has been adequate planning to address the environmental impacts of the launch or launches and any connected return as required in subsection 35(5) of the Rules.

The application must include one of the requirements listed in paragraph 55(a), (b) or (c). If the applicant chooses to meet the requirements in paragraph 55(a), they must include evidence that the applicant's activity has been addressed by the environmental plan prepared for by the launch facility. If the applicant chooses to meet the requirements in paragraph 55(b), they must include information about the environmental approvals required for the launch under any other law of the Commonwealth or a law of a State or Territory. If the applicant chooses to meet the requirements in paragraph 55(c), they must include an assessment of the likely environmental impact of the launch, and information on how any adverse effects on the environment will be monitored and mitigated. The information requirements are structured this way to prevent unnecessary duplication on environmental planning for the applicant as this would be an unnecessary regulatory burden.

Section 56—Technology security

Section 56 requires the applicant to provide a technology security plan that is suitable for preventing unauthorised access to technology to be used in operating the launch facility. This includes all technology used in the launch, but, in particular, sensitive technology that can affect the operation of a launch.

Subsection 56(1) requires that the application for the Australian launch permit include a technology security plan relating to the launch or series of launches and any connected return.

Subsection 56(2) requires that the technology security plan provide details of the arrangements and procedures that the applicant will utilise to prevent unauthorised persons from having access to, or harming the technology to be used conducting the launch and connected return, including cybersecurity arrangements. Under paragraph 56(2)(b), if all or part of the technology is protected by a technology security agreement between Australia and another country, the applicant must specify how the technology security plan addresses Australia's obligations under the agreement. This paragraph is intended to ensure that Australia meets its international obligations in relation to safeguarding sensitive technology.

Identification of the cybersecurity strategy to be used is important, given the potential for malicious actors to gain access and potential control the launch provider's network or parts of it. Given the nature of some cyber-attacks it may even be difficult to identify if a network has been breached. The defensive measures taken to protect the network are critical for preventing unauthorised access. This is why subsection 56(3) requires that the strategy be assessed by an independent person with suitable qualifications and experience in cybersecurity.

The information contained in the technology security plan, including the cybersecurity plan, is relevant to the Minister's consideration of whether to grant an Australian launch permit under section 28 of the Act.

Section 57—Insurance/financial requirements

Paragraph 57(a) specifies that the application for launch must show evidence of the applicant's ability to satisfy the insurance/financial requirements of the launch or return. Section 48 of the Act sets out the insurance requirements that need to be satisfied for a launch or connected return authorised by an Australian launch permit.

Subsection 48(4) of the Act provides that the minimum amount of insurance is the lower of the values of paragraphs 48(4)(a) and (b) of the Act. Paragraph 48(4)(a) of the Act specifies that the total insurance amount for the return, for the purposes of this paragraph, is the amount specified in the rules, while paragraph 48(4)(b) of the Act specifies, if the rules set out a method for determining an amount for the purposes of this paragraph, the amount determined using that method. The rules referred to in paragraphs 48(4)(a) and (b) of the Act are the *Space (Launches and Returns) (Insurance) Rules 2019* (the Insurance Rules).

Paragraph 57(b) of the Rules specifies that if an applicant chooses to use the method outlined under paragraph 48(4)(b) of the Act, they must include the calculations used in determining the amount and the name of the person who made the calculations. This information is intended to assist the Minister in determining if the calculations have been performed correctly.

The information provided by the applicant on insurance/financial requirements is relevant to the Minister's consideration of whether to grant an Australian launch permit under section

28 of the Act; in particular, whether the criterion specified in paragraph 28(3)(b) of the Act is satisfied.

Section 58—Contracts

Section 58 requires the applicant to provide copies of contracts entered into, and information on contracts that the applicant proposes to enter into, in order to undertake the launch or return activity.

The purpose of section 58 is to satisfy the Minister that the contractual arrangements entered into, or proposed to be entered into, by the applicant in relation to the launch or connected return activity are appropriate for the grant of an Australian launch permit and do not contain terms that are inconsistent with any of the conditions of the Australian launch permit. The contracts may also provide evidence for the satisfaction of various criteria that the Minister must consider under the Act.

The information required under section 58 may include, but is not limited to, any contracts for the use or lease of facilities, for others to undertake activities connected with a launch or connected return or for contracts for carrying payloads. This section is intended to provide the Minister information relevant to their consideration on whether to grant an Australian launch permit under section 28 of the Act.

Section 59—Outstanding approvals

Section 59 requires the applicant to provide information on any outstanding approvals required by any other Commonwealth law or a law of a State or Territory in relation to the launch and any connected return. The applicant must describe their arrangements, including time frames, for obtaining the approvals.

This section is intended to provide the Minister information on outstanding approvals and the process for obtaining them. This information is relevant to the Minister's consideration of whether to grant an Australian launch permit under section 28 of the Act.

Section 60—Matters to be verified

Section 60 requires the applicant to provide information on any matters still required to be verified or validated as part of the launch management plan or technology security plan for the launch. This must include information on the arrangements and processes that need to be followed to obtain the verification or validation. These matters could cover a range of different things, such as verifying that firewalls are operating to prevent unauthorised access to the network. This information is relevant to the Minister's consideration of whether to grant an Australian launch permit under section 28 of the Act.

Section 61—Application may include additional information

Section 61 allows the applicant to submit any other information not listed in Division 3 of Part 2 that they consider relevant to demonstrating compliance with all requirements under section 28 of the Act, including the criteria prescribed by Division 1 of Part 3 of the Rules. The purpose of this section is to clarify that an applicant may submit additional information if they choose.

Section 62—Application may be updated

Section 62 specifies that the applicant may, prior to the Minister's decision on whether to grant an Australian launch permit, update a part of the application. The applicant may update any part of the application.

This section provides the applicant with the opportunity to ensure that the application is up-to-date, to ensure that the Minister's decision as to whether to grant the permit is based on current and accurate information.

Division 4—Application for variation of permit

Section 63—Variation of launch site or permit conditions

Section 63 specifies that, in order to apply for a variation of permit conditions pursuant to section 34 of the Act, the permit holder must provide an application with a description of the variation sought, the reason for requesting the variation and any supporting material that will assist the Minister in deciding the application.

This action is required when seeking to vary the launch facility or aircraft specified in the permit, or one of the conditions on the permit itself. It is not needed if the permit holder is only amending plans in line with subsection 38(1) of the Rules. The purpose of section 63 is to ensure that the Minister has sufficient information to assess whether the proposed variation is appropriate in the circumstances.

Section 64—Extension of permit period

Section 64 enables a permit holder to request an extension of their permit period from the Minister, who may extend a permit under subsection 29(3) of the Act. Pursuant to subsection 64(2) of the Rules, the request must include the period of extension being requested and the reason for requesting the extension. Pursuant to subsection 64(3), the request may include any supporting material the permit holder believes will assist the Minister to decide whether to extend the period of the permit.

The purpose of section 64 is to ensure that the Minister has sufficient information to assess whether to extend the permit period.

Division 5—Application for transfer of permit

Section 65—Purpose of Division

Under subsection 34(1) of the Act, an Australian launch permit must be transferred to another person in accordance with the rules. Section 65 of the Rules states the purpose of Division 5 of the Rules is to set out the requirements for an application for the transfer of an Australian launch permit.

Section 66—Application to be made by transferee

Section 66 specifies that the application to transfer a permit must be made by the person to whom the permit is proposed to be transferred.

Section 67—Application must be in writing and in English

Section 67 specifies that applications, and documents required to be included in applications, must be in writing and in English. The purpose of this section is to ensure that the Minister can have regard to all of the information that must be included in the transfer applications.

Section 68—Statement from current holder of permit

Section 68 specifies that the transfer application must include a statement by the current holder of the permit explaining why the transfer is being sought. The purpose of this section is so that the Minister is informed of why the transfer is taking place. It also confirms that the current holder of the permit is aware of the proposed transfer.

Section 69—Other contents of transfer application

Subsections 69(1) and (2) specify that the transfer application must include all of the material required for the grant of an Australian launch permit under sections 44 to 60. This material must be included in the transfer application at the time that the application is made.

The purpose of subsection 69(1) is to ensure that the Minister has enough information to be satisfied that the criteria set out in section 28 of the Act are satisfied. This is necessary because subsection 32(1) of the Act provides that the Minister may transfer an Australian launch permit to a person if the Minister could grant the permit to that person under section 28 of the Act.

Subsection 69(2) allows a transfer applicant to provide a copy of the plans of the current permit holder and a statement that they propose to conduct the launch under the same plan. Subsection 69(3) allows a transfer applicant to include a copy of the additional information or material included in the original permit application, provided it is still correct. This is not compulsory. An applicant can instead decide to create their own plans or provide different information or materials. The subsections are intended to simplify the application and assessment process.

Subsection 69(4) specifies that the application, and any document required to be included in the application, may include any other information relevant to demonstrating that the criteria in subsection 28(3) of the Act are met. Subsection 69(4) of the Rules ensures that the applicant can provide additional information relevant to satisfying the Minister of the criteria under section 28 of the Act.

Section 70—Application may be updated

Section 70 specifies that the applicant for a transfer may, prior to the Minister’s decision on whether to transfer an Australian launch permit, update a part of the application. The purpose of this section is to ensure the Minister is basing their decision on current and accurate information.

Part 4—Overseas payload permits

Division 1—Additional criteria for grant of overseas payload permit

Section 71—Additional criteria

Subsection 46B(2) of the Act sets out that the Minister may grant an overseas payload permit if they are satisfied that certain criteria are met. Paragraph 46B(2)(d) of the Act states that the rules may prescribe additional criteria that must be satisfied. Section 71 of the Rules provides the additional criteria that the Minister must be satisfied with in order to grant an overseas payload permit in Australia. The additional criteria in section 71 have been included to ensure the objects and purpose of the Act are met.

Subsection 71(2) of the Rules prescribes that the space object must not be, or contain, a nuclear weapon or a weapon of mass destruction of any other kind. The prohibition on conduct involving a nuclear weapon or a weapon of mass destruction is consistent with Australia’s international obligations under the *Outer Space Treaty* which indicates, in Article IV that “States Parties to the Treaty undertake not to place in orbit around the Earth any objects carrying nuclear weapons or any other kinds of weapons of mass destruction, install such weapons on celestial bodies, or station such weapons in outer space in any other manner”. The intention of this subsection is to ensure that an overseas payload permit is not issued for conduct that involves a nuclear weapon or a weapon of mass destruction.

Subsection 71(3) specifies that the applicant must obtain the Minister’s written approval in order to receive a grant of an overseas payload permit for a space object containing a nuclear power source. The purpose of this criteria is to ensure that the implications of a nuclear power source have been considered by the Minister and approved prior to the application for an overseas payload permit being submitted.

Division 2—Application for grant of permit

Division 2 of Part 4 of the Rules sets out requirements that the applicant must comply with in their application for the grant of an overseas payload permit.

Section 72—Purpose of Division

Section 72 states the purpose of Division 2 of Part 4 of the Rules is to set out the requirements for an application for the grant of an overseas payload permit.

Section 73—Application must be in writing and in English

Section 73 states that applications, and documents required to be included in applications, must be in writing and in English. If the document is not in English, a translation of the document into English must be provided. The purpose of this section is to ensure that the Minister can have regard to all of the information that must be included in applications.

Section 74—Information about applicant

Section 74 specifies details about the applicant that must be included in the application. This information is required so that the applicant can be identified. Information about other persons or entities that have ownership, control or direction of the applicant is relevant to the Minister's consideration of whether there are any reasons relevant to the security, defence or international relations of Australia that the permit should not be granted. The applicant is required to provide this information so that the Minister can consider the person or persons who may be in a position to influence or control the applicant in their operation of the launch facility.

Section 75—Organisational structure and personnel

The purpose of section 75 is to provide information that demonstrates the applicant's organisation has a suitable structure and appropriate personnel for holding an overseas payload permit. This is relevant for the Minister's consideration of whether to grant an overseas payload permit under section 46B of the Act. Section 75 of the Rules provides the details required concerning the applicant and its personnel as part of the application.

Paragraph 75(1)(a) specifies that the application must include a description of the applicant's organisational structure, including the chain of command within the organisation and the responsibilities of each position within the chain of command, along with the particular personal details of the individuals who fulfil particular roles and responsibilities under subsection 75(2) within the applicant organisation.

Subsection 75(2) specifies the individuals of the applicant organisation for whom particular personal details must be disclosed under subsection 75(1). Paragraph 75(1)(b) specifies the personal information that must be provided by the people captured in subsection 75(2). This includes their name, date of birth, place of birth, current address and the individual's relevant qualifications and experience.

Section 75 requires the applicant to provide specific personal information on specific individuals related to the activity. It is necessary to request this amount of information from the applicant in order to achieve the objects and purposes of the Act. Firstly, it is necessary to

collect this information in order to determine the competence of the organisation to build a space object. A lack of relevant experience and qualified personnel in key positions could result in activities not being conducted safely or successfully, increasing the risk that the space object may not function correctly.

Secondly, the information is required to assist in determining if there are any reasons relevant to the security, defence or international relations of Australia that an overseas payload permit should not be granted. This is a matter the Minister must consider pursuant to paragraph 46B(2)(c) of the Act. For example, an object launched to space that is subverted or commandeered could result in either significant damage to another space object or the space object being used for purposes counter to the interests of Australia. The name, date of birth, place of birth and address of relevant persons are necessary for the Minister to determine if there are any national security concerns with the particular personnel. This information is not requested of all personnel involved with the space object, only those who have access or control over, or provide direction on, critical tasks.

Section 76—Information about launch

Section 76 specifies that the application must contain details of the launch for which the permit is sought. The applicant must provide a description of the purpose of the launch, information on the facility or place from which the launch is proposed to take place, the proposed launch vehicle and the launch period and launch window.

Subsection 76(2) states that if the information under paragraph 76(1)(d) is unavailable to the applicant, and a series of launches is proposed, the applicant may instead provide details of the period during which the series is proposed to occur and the estimated launch period and launch window for each launch.

The purpose of section 76 is to inform the Minister of details relating to the proposed launch that may relate to their considerations under subsection 46B(2) of the Act.

Section 77—Information about payload

Section 77 specifies that the application must contain details of the payload. The purpose of this section is to inform the Minister of details relating to the proposed payload that may relate to their considerations under subsection 46B(2) of the Act.

Paragraphs 77(1)(a) to (c) of the Rules cover a description of the payload, their purpose, a breakdown on the country and manufacturer of each payload subsystem, and their proposed trajectory and orbits. Per paragraph 77(1)(d), an application must include details of whether the payload is intended to be returned, and if so, information on the return including a description of the intended return process. Paragraph 77(1)(e) requires the applicant to provide the information required for the registration of the payload under paragraph 1 of Article IV of the Registration Convention. The purpose of this section is to ensure that the Australian Government has the information it needs to ensure obligations under the Registration Convention are met.

Subsection 77(2) sets out that the application must include a declaration that the payload is not or does not contain a nuclear weapon or a weapon of mass destruction. Paragraph 77(2)(b) sets out that an undertaking needs to be provided by the applicant agreeing to not operate the payload in a manner that causes Australia to be liable for damage under the Liability Convention or that the applicant knows, or ought reasonably to have known, will negatively affect national security. These undertakings are intended to ensure the objects of the Act are met, including the implementation of certain Australian obligations under the UN Space Treaties.

Subsection 77(3) specifies that an applicant must obtain the Minister's written approval, and include it in the application, in order to be granted an overseas payload permit for a payload containing a nuclear power source.

The information regarding the payload is relevant to the Minister's consideration on whether to grant an overseas payload permit under subsection 46B(2) of the Act.

Section 78—Launch safety

Section 78 specifies the information that must be included in the overseas payload application, if the proposed launch is not to be conducted at a launch facility on the standard launch facility list published by the Department. Under paragraph 78(1)(a), the application must include the safety requirements that apply to each proposed launch in the country where the launch is to take place. Under paragraph 78(1)(b), the application must include all publically available information about launches or attempted launches from the facility or place from which the launch is proposed to be conducted, using the kind of launch vehicle that the applicant proposes to use. If the applicant's proposed launch site is on the standard launch facility list then they do not need to provide this information. If the standard launch facility list has not been published, then all applications must contain the information requested under paragraphs 78(1)(a) and 78(1)(b).

The purpose of this section is to satisfy the Minister that the safety regulations of the country of the proposed launch are adequate to protect the payload, public health and safety and meet Australia's international obligations. This is relevant to the Minister's consideration on whether to grant an overseas payload permit under subsection 46B(2) of the Act.

Section 79—Debris mitigation strategy

Section 79 supplements subsections 46G(2) to (4) of the Act, which require applications for overseas payload permits to include a debris mitigation strategy. The purpose of this section is to ensure that the debris mitigation strategy is sufficiently comprehensive and practicable in order to satisfy the Minister that the applicant has considered the impact of their activity on the space environment. Additionally, this section intends to ensure the Minister has information on the risks of the possible collision of space debris with the applicant's space object during launch and in orbit, using an orbital debris assessment.

Subsection 79(1) requires the debris mitigation strategy in the application to be based on an internationally recognised guideline or standard for debris mitigation, and to identify the guideline or standard being used. A specific guideline or standard has not been identified to provide flexibility to the applicant to choose the guideline or standard that best suits their activity.

Subsection 79(2) requires the strategy to describe any mitigation measures planned for orbital debris that may arise from the proposed launch, including from payloads. This means that the guideline or standard that the applicant chooses must address this point. The note to the subsection also provides examples of mitigation measures that may be planned.

Subsection 79(3) requires the strategy to contain an orbital debris assessment based on an internationally recognised model. The orbital debris assessment will identify the risks of the space object colliding with space debris, given the launch and the orbit to be entered into by the space object.

The information on the debris mitigation strategy is relevant to the Minister's consideration of whether to grant an overseas payload permit under subsection 46B(2) of the Act. In particular, as to whether there are reasons relevant to the security, defence or international relations of Australia that the permit should not be granted as required by paragraph 46B(2)(b) of the Act.

Section 80—Contracts

Section 80 requires the applicant to provide copies of contracts entered into, and information on contracts that the applicant proposes to enter into, for the purposes of the launch of the payload.

The purpose of this section is to satisfy the Minister that the contractual arrangements entered into, or proposed to be entered into, by the applicant in relation to the launch of the payload are appropriate for the grant of an overseas payload permit and do not contain terms that are inconsistent with any of the conditions of the overseas payload permit. They may also provide evidence for the satisfaction of various criteria the Minister must consider under the Act.

The information required under section 80 may include, but is not limited to, contracts with the persons undertaking a launch, contracts for others to undertake activities connected with a launch, and contracts for use or lease of facilities. This section is intended to provide the Minister information relevant to their consideration on whether to grant an overseas payload permit under section 46B(2) of the Act.

Section 81—Application may include additional information

Section 81 allows for the applicant to submit any other information not listed in Division 2 of Part 4, that they consider relevant to demonstrating compliance with all requirements under section 46B of the Act, including the criteria prescribed by Division 1 of Part 4 of the Rules.

The purpose of this section is to clarify that an applicant may submit additional information if they choose.

Section 82—Application may be updated

Section 82 specifies that the applicant may, prior to the Minister's decision, update a part of the application. The changes may include updates to the details of the payload or the plans for the launch.

This section provides the applicant with the opportunity to ensure that an application is up-to-date to ensure that the Minister's decision as to whether to grant the permit grant an overseas payload permit is based on current and accurate information.

Division 3—Application for variation of permit

Section 83—Variation of permit

Section 83 specifies that, in order to apply for a variation of an overseas payload permit condition pursuant to section 46G of the Act, the permit holder must provide a description of the variation sought, the reason for requesting the variation and any supporting material that will assist the Minister in deciding the application.

This action is required when seeking to vary the launch facility or place specified in the permit, the launch vehicle specified in the permit or one of the conditions on the permit itself. The purpose of this section is to ensure that the Minister has sufficient information to assess whether the proposed variation is appropriate in the circumstances.

Section 84—Extension of permit period

Section 84 enables an overseas payload permit holder to request an extension of their permit period from the Minister, who may extend a permit under subsection 46C(3) of the Act.

Pursuant to subsection 84(2) of the Rules, the request must include the period of extension being requested and the reason for requesting the extension.

Pursuant to subsection 84(3), the request may include any supporting material the holder believes will assist the Minister to decide whether to extend the period of the permit.

The purpose of this section is to ensure that the Minister has sufficient information to assess whether to extend the permit period.

Division 4—Application for transfer of permit

Section 85—Purpose of Division

Under section 46G of the Act, an overseas payload permit must be transferred to another person in accordance with the rules. Section 85 of the Rules states that the purpose of

Division 4 of Part 4 of the Rules is to set out the requirements for an application for the transfer of an overseas payload permit.

Section 86—Application to be made by transferee

Section 86 specifies that the application to transfer a permit must be made by the person to whom the permit is proposed to be transferred.

Section 87—Application must be in writing and in English

Section 87 states that the transfer applications, and documents required to be included in applications, must be in writing and in English. If the document is not in English, a translation of the document into English must be provided. The purpose of this section is to ensure that the Minister can have regard to all of the information that must be included in applications.

Section 88—Statement from current holder of permit

Section 88 specifies that the transfer application must include a statement by the current holder of the permit explaining why the transfer is being sought. The purpose of this section is to inform the Minister of the reasons for the transfer taking place. It also confirms that the current permit holder is aware of the proposed transfer.

Section 89—Other contents of transfer application

Subsections 89(1) and (2) specify that the transfer application must include all of the material required for the grant of an overseas payload permit under sections 74 to 80 of the Rules. This material must be included in the transfer application at the time that the application is made.

The purpose of subsection 89(1) is to ensure that the Minister has sufficient information to be satisfied that the criteria set out in section 46B of the Act are satisfied. This is necessary because subsection 46E(1) of the Act provides that the Minister may transfer an overseas payload permit to a person if the Minister could grant the permit to that person under section 46B of the Act.

Subsection 89(2) allows a transfer applicant to provide a copy of the strategy of the current permit holder and a statement they propose to conduct the launch under the same strategy. Subsection 89(3) allows a transfer applicant to include a copy of additional information or material included in the original grant application, provided it is still correct. This is not compulsory. An applicant can instead decide to create their own strategy or provide different information or materials. These subsections are intended to simplify the application and assessment process.

Subsection 89(4) specifies that the application, and any document required to be included in the application, may include any other information relevant to demonstrating that the criteria

in section 46B of the Act are met. The purpose of subsection 89(4) of the Rules is to ensure that the applicant can provide additional information relevant to satisfying the Minister of criteria under section 46B of the Act.

Section 90—Application may be updated

Section 90 specifies that the applicant for a transfer may, prior to the Minister's decision as to whether to transfer an overseas payload permit, update a part of the application.

The purpose of this section is to ensure the application is up-to-date and to ensure that the Minister's decision as to whether to grant a transfer is based on current and accurate information.

Part 5—Return authorisations

Division 1—Additional criteria for grant of return authorisation

Section 91—Additional criteria

Section 46L(2) of the Act sets out that the Minister may grant a return authorisation if they are satisfied that certain criteria are met. Paragraph 46L(2)(f) of the Act states that the rules may prescribe additional criteria that must be satisfied in relation to the return authorisation.

Section 91 of the Rules provides the additional criteria for the grant of a return authorisation. The additional criteria in section 91 of the Rules have been prescribed to ensure the objects and purpose of the Act are met.

Subsection 91(2) specifies that the criteria in this section do not apply in relation to a return authorisation if the return is to an area outside of Australia and the space object to be returned will be carried as a payload by another space object that does not require a return authorisation. The type of return described in subsection 91(2) is defined in the definitions section as an overseas payload return authorisation. The purpose of this subsection is to specify that the additional criteria do not need to be considered in relation to an overseas payload return authorisation.

Section 91(3) prescribes that, having regard to the purpose of the return, the return is as effective and safe as reasonably practicable. It is important that the overall safety of the return can be assessed by the Minister to minimise the risk of damage to persons or property as a result of returns.

Section 91(4) specifies that the risk hazard analysis for each return must be consistent with the Flight Safety Code. This criterion is intended to ensure that the applicant's risk hazard analysis prepared for the return is consistent with the Flight Safety Code. The Flight Safety Code sets out the requirements for applicants to demonstrate that their proposed return activities will be safe and effective. Consistency with the Flight Safety Code is a critical component of ensuring that the risk to persons or property from a return is minimised.

Subsection 110(3) of the Act provides the authority for the rules to incorporate the Flight Safety Code by reference. This document should be incorporated this way to increase the flexibility of the instrument to respond to the rapidly evolving nature of space technologies (therefore supporting the growth of the sector), and the need to agilely review safety standards and the corresponding equations if safety requirements change including consideration of changing international approaches. It is also a large and complex document, and including the information contained in it directly in the rules would substantially increase the length and complexity of the rules. The Flight Safety Code will be freely available on the Agency's website (www.space.gov.au).

Subsection 91(5) specifies that the applicant must have undertaken appropriate planning to address the environmental impacts of the return or series of returns to a place or area within or outside of Australia.

Division 2—Application for giving of authorisation

Subdivision A—Requirements for standard applications

This Subdivision sets out the requirements for a standard return application for a return authorisation. Section 4 of the Rules defines a 'standard return application' as being an application for a return authorisation other than an overseas payload return application.

Section 92—Purpose of Subdivision

Section 92 states the purpose of Subdivision A of Division 2 of Part 5 of the Rules is to set out the requirements for a standard return application.

Section 93—Application must be in writing and in English

Section 93 states that applications, and documents required to be included in applications, must be in writing and in English. Translations of documents not in English must be provided. The purpose of this section is to ensure that the Minister can have regard to all of the information that must be included in applications.

Section 94—Information about applicant

Section 94 specifies details about the applicant that must be included in the application. This information is required so that the applicant can be identified. Information about other persons or entities that have ownership, control or direction of the applicant is relevant to the Minister's consideration of whether there are any reasons relating to the security, defence or international relations of Australia that the authorisation should not be granted. The applicant is required to provide this information so that the Minister can consider the person or persons who may be in a position to influence or control the applicant in the activity.

Section 95—Organisational structure and personnel

The purpose of section 95 is to provide information demonstrating that the applicant's organisation has a suitable structure and appropriate personnel for holding a return authorisation. This is relevant for the Minister's consideration of whether to grant a return authorisation under subsection 46L(2) of the Act. Section 95 of the Rules provides the details required concerning the applicant and its personnel as part of the application

Subsection 95(1) specifies that the application must include a description of the applicant's organisational structure, including the chain of command within the organisation and the responsibilities of each position within the chain of command, along with the personal details of the individuals who fulfil particular roles and responsibilities under subsection 95(2) within the applicant's organisation.

Subsection 95(2) specifies the individuals of the applicant organisation for whom particular personal details must be disclosed under subsection 95(1). Paragraph 95(1)(b) specifies the personal information that must be provided by the people captured in subsection 95(2). This includes their name, date of birth, place of birth, current address and the individual's relevant qualifications and experience.

Section 95 requires the applicant to provide specific personal information on specific individuals related to the return. It is necessary to request this information from the applicant in order to achieve the objects and purposes of the Act. Firstly, it is necessary to collect this information in order to determine the competence of the organisation to conduct the return of a space object. A lack of relevant experience and qualified personnel in key positions in the organisation could result in return activities not being conducted safely, increasing the risk of damage to persons or property. The Minister cannot grant a return authorisation unless they are satisfied that the applicant is competent to conduct the return of a space object pursuant to subsection 46L(2) of the Act.

Secondly, the information is required to assist in determining if there are any reasons relevant to the security, defence or international relations of Australia that a return authorisation should not be granted. This is a matter the Minister must consider pursuant to subsection 46L(2) of the Act. The return of a space object, if subverted, could result in significant damage and injury. The name, date of birth, place of birth and address of relevant persons are necessary for the Australian Government to determine if there are any national security concerns with the particular personnel. This information is not requested of all personnel associated with the return, only those who have access, or control over, or provide direction on, critical tasks in the conduct of the return of a space object.

Section 96—Information about return of space object

Section 96 specifies details about the return of the space object that must be included in the application. This information is required to inform the Minister of the arrangements and

procedures for conducting the return, the timeline of the return and options that may be taken if the return does not proceed as planned.

This information on the return is relevant to the Minister's consideration of whether to grant a return authorisation under subsection 46L(2) of the Act.

Section 97—Return management plan

Section 97 requires a return management plan to be included in the application. The plan must include information on how the return will be conducted. This information is to inform the Minister how the return will be conducted. This will form part of the Minister's assessment of whether the applicant meets the criteria under subsection 46L(2) of the Act. In particular, the information provided will be relevant to whether the Minister is satisfied that the probability of the space object return causing substantial harm to public health or public safety or causing substantial damage to property is as low as is reasonably practicable under paragraph 46L(2)(c) of the Act.

Section 98—Risk hazard analysis

Section 98 specifies the requirements for the risk hazard analysis that must be included in the application for each return authorisation. The purpose of this section is to ensure that every return application contains a comprehensive risk hazard analysis by a suitably qualified independent expert. This is intended to ensure that the risk hazard analysis is suitable to inform the Minister's consideration of whether to grant a return authorisation under the Act.

Risk hazard analyses are conducted to measure the risk to the public from a potential re-entry mishap and to ensure that operations meet the threshold of carrying as low of a risk as reasonably practicable. Operations that exceed the threshold are not permitted. The risk hazard analysis provides satisfactory evidence that the return, if carried out according to the information provided as part of the application, will satisfy the launch safety standards set out in the Flight Safety Code.

The information regarding risk hazard analysis is relevant to the Minister's consideration of whether to grant a return authorisation under subsection 46L(2) of the Act. In particular, whether the Minister can be satisfied in accordance with paragraph 46L(2)(c) of the Act that the probability of the return causing substantial harm to public health or public safety or causing substantial damage to property is as low as is reasonably practicable.

Subsection 98(2) of the Rules specifies the requirements for the risk hazard analysis. Under paragraph 98(2)(a), the analysis must be produced by a suitably qualified expert, who is not a related party of the applicant and is approved by the Minister. "Related party" is defined in section 9 of the Act. The purpose of paragraph 98(2)(a) of the Rules is to ensure that experts are suitably qualified to undertake the risk analyses and are independent from the applicant to avoid the risk of bias. Under paragraph 98(2)(b), the analysis must be in accordance with the Flight Safety Code.

Given the critical role that the risk hazard analysis plays in ensuring the overall safety of the activity, it is appropriate that the expert who undertakes the analysis is approved by the Minister. This is to ensure that the Minister is satisfied as to the competence of the person undertaking the analysis.

Subsection 98(3) specifies that the application must contain descriptions of the methodologies, assumptions and data used in the risk analysis. The purpose of subsection 98(3) is to provide the Minister with the materials required to verify the reasoning and conclusions of the risk hazard analysis, if required.

Subsection 98(4) specifies that the methodology must use the space object probability of failure within the risk hazard analysis methodology in the Flight Safety Code. The purpose of subsection 98(4) is to aid the Minister's understanding of the space object's failure probability for the return authorisation application.

Subsection 98(5) specifies the content that must be included in the application if the methodology that is used by the suitably qualified expert is different from the risk hazard analysis methodology in the Flight Safety Code. The risk hazard analysis methodology includes more than just the probability of failure referred to in subsection 98(4); for example the probability of failure is one component of the failure response mode calculation which is a part of the larger casualty expectation equation. The purpose of subsection 98(5) is to allow an applicant to use a different risk hazard analysis methodology but to ensure that any other methodology is as robust as that provided in the Flight Safety Code. The information provided under subsection 98(5) assists the Minister in understanding the methodology used to produce the risk hazard analysis in the application, and in determining whether the methodology is technically sound.

Subsection 98(6) specifies that the application must provide details of any software that was used to carry out the risk hazard analysis. This includes a description of the system for making and keeping records and data, and for maintaining documentation. Additional information is required if the software is not a generally available commercial product, pursuant to paragraph 98(6)(b), including information on who developed the software, how it operates and its testing and validation. The purpose of subsection 98(6) is to enable the Minister to be able to understand the reliability of the software that produces material included in risk hazard analyses, as software errors or user error may compromise the validity of a risk hazard analysis.

Section 99 – Return safety plan

Section 99 specifies the requirements for a return safety plan, which, per subsection 99(1), must be included in all return authorisation applications for the return or each return in a series. The purpose of this section is to ensure that the application contains a comprehensive and suitable return safety plan for each return. The return will be required to be operated in accordance with the return safety plan. An adequate return safety plan provides a framework to reduce the risks posed to the public by a space activity to a level that is as low as

reasonably practicable. Consideration of the return safety plan is relevant to the Minister’s decision on whether to grant a return authorisation under subsection 46L(2) of the Act, particularly the criterion in paragraph 46L(2)(c).

Subsection 99(2) specifies the information that must be contained in the return safety plan. It requires that the return safety plan identify the strategies and arrangements that will ensure that the return will be conducted in a way that reduces the level of risk to third parties to being as low as is reasonably practicable, and that the return activity complies with the Flight Safety Code. The applicant must identify the arrangements for reporting to the Minister any changes to the arrangements for conducting the return and the assumptions and data used in the risk hazard analysis. The applicant must also identify the arrangements for reporting, subsequent to the return, compliance of the return in relation to the Flight Safety Code and the assumptions and data used in the risk hazard analysis.

Subsection 99(3) specifies that the application must include a written confirmation by a suitably qualified expert who is approved by the Minister, and is not a related party of the applicant, that return will be in accordance with the Flight Safety Code if carried out in accordance with the return safety plan. “Related party” is defined in section 9 of the Act. Having this written confirmation undertaken by an expert who is not a related party is important to ensure there is not a risk of bias.

Given the critical role that the return safety plan plays in ensuring the overall safety of the activity, it is appropriate that the expert who reviews it is approved by the Minister. This is intended to ensure that the Minister is satisfied as to the competence of the person providing the confirmation.

Section 100—Emergency plan

The information described in section 100 is required in order to demonstrate that the applicant has a suitable emergency plan, and provides information to the Agency about the plan for responding to an accident, incident or other emergency at the applicant’s return site.

Subsection 100(1) specifies that the application must include an emergency plan for responding to accidents and incidents involving the return of a space object, and any other kind of emergency at or near the facility or premises from which a return is proposed to be conducted. The terms ‘accident’ and ‘incident’ are defined in sections 85 and 86 of the Act. The reference to ‘any other kind of emergency’ refers to emergencies that do not meet the definition of accident and incident. A kind of emergency may include a natural disaster, such as a bushfire or flood, or an explosion at the facility.

Subsection 100(2) outlines the information that the emergency plan must contain, including the procedures that will be undertaken in response to an emergency and the personnel who are responsible. Amongst other requirements:

- the applicant must specify the equipment and facilities necessary for responding to an accident, incident or other emergency; and

- the authorisation holder must test the emergency plan prior to the return and report the results of the exercises to the Agency.

Information on the emergency plan is important in ensuring that there is a plan for responding to an emergency, in the event that one does occur. Given the nature of a returning space object, any emergency that occurs is significant. Prior planning and testing of a suitable plan is expected to result in the impact from any emergency being lessened. This is particularly important given the potential for return facilities to be located in relatively remote areas.

Section 101—Environment

Section 101 specifies the environmental information that must be included in an application. The purpose of section 101 is for the applicant to provide information that is relevant to the Minister's consideration as to whether there has been adequate planning to address the environmental impacts of the launch or launches and any connected return as required in subsection 91(5).

Subsections 101(1) and (2) relate to a standard return application for a return to an area within Australia. If the space object is proposed to be returned to an area within Australia, then the application must contain information about the approvals required for the return under the laws of the Commonwealth and any relevant State or Territory. The application should specify whether the applicant has obtained the relevant approvals.

However, if no environmental approvals are required for a return, then the applicant must provide information on how the likely environmental impact of the return has been assessed, and how any adverse effects on the environment will be monitored and mitigated as specified in subsection 101(2).

Subsections 101(3) and (4) apply to a standard return application for a return to an area outside Australia. If the space object is proposed to be returned to an area outside of Australia, then the application must include an environmental plan. If the country to which return is proposed requires an environmental plan, then the applicant may provide a copy of the environmental plan in the application (if the original plan is not in English, then a translation must be provided as well as per subsection 93(2)).

Section 102—Technology security

Section 102 requires the applicant to provide a technology security plan that is suitable for preventing unauthorised access to the technology to be used in the return. This includes all technology used in the return and, in particular, sensitive technology that can affect the operation of a return.

Subsection 102(1) requires that the application for a return authorisation include a technology security plan relating to the return or series of returns.

Subsection 102(2) requires that the technology security plan provide details of the arrangements and procedures that the applicant will utilise to prevent unauthorised persons from having access to the technology to be used in conducting the return, including cybersecurity arrangements.

If all or part of the technology is protected by a technology security agreement between Australia and another country, the applicant must specify how the technology security plan gives effect to Australia's obligations under the agreement. This requirement is intended to ensure that Australia meets its international obligations in relation to safeguarding sensitive technology.

Identification of the cybersecurity strategy to be used is important, given the potential for malicious actors to gain access and potential control the network. Given the nature of some cyber-attacks it may even be difficult to identify if a network has been breached. The defensive measures taken to protect the network are critical for preventing unauthorised access. This is why subsection 102(3) requires that the strategy be assessed by an independent person with suitable qualifications and experience in cybersecurity.

Section 103—Insurance/financial requirements

Paragraph 103(a) specifies that the application for return authorisation must show evidence of the applicant's ability to satisfy the insurance/financial requirements of the return. Section 48 of the Act sets out the insurance requirements that need to be satisfied for a return authorisation.

Subsection 48(4) of the Act provides that the minimum amount of insurance is the lower of the values of paragraphs 48(4)(a) and (b) of the Act. Paragraph 48(4)(a) of the Act specifies that the total insurance amount for the return, for the purposes of this paragraph, is the amount specified in the rules, while paragraph 48(4)(b) of the Act specifies, if the rules set out a method for determining an amount for the purposes of this paragraph, the amount determined using that method. The rules referred to in paragraphs 48(4)(a) and (b) of the Act are the *Space (Launches and Returns) (Insurance) Rules 2019* (the Insurance Rules).

Paragraph 103(b) of the Rules specifies that if an applicant chooses to use the method outlined under 48(4)(b), they must include the calculations used in determining the amount and the name of the person who made the calculations. This information is intended to assist the Minister in determining if the calculations have been performed correctly.

The information provided by the applicant on insurance/financial requirements is relevant to the Minister's consideration of whether to grant an Australian launch permit under section 28 of the Act; in particular, whether either of the criteria specified in paragraph 46B(2)(a) of the Act are satisfied.

Section 104—Contracts

Section 104 requires the applicant to provide copies of contracts entered into, and information on contracts that the applicant proposes to enter into in order to undertake the space object return.

The purpose of section 104 is to satisfy the Minister that the contractual arrangements entered into, or proposed to be entered into, by the applicant in relation to the return are appropriate for the return authorisation and do not contain terms that are inconsistent with any of the conditions of the return authorisation. They may also provide evidence for the satisfaction of various criteria the Minister must consider under the Act.

The information required under section 104 may include, but is not limited to, any contracts for the use or lease of facilities, for others to undertake activities connected to the return or for contracts for dealing with a space object after it is return. This section is intended to provide the Minister information relevant to their consideration on whether to grant a return authorisation under subsection 46L(2) of the Act.

Section 105—Outstanding approvals

Section 105 requires the applicant to provide information on any outstanding approvals required by Commonwealth law or the laws of a State or Territory that relate to the return. The applicant must describe their arrangements, including time frames for obtaining the approvals. This section is intended to provide the Minister information on outstanding approvals and the process for obtaining them. This information is relevant to the Minister's consideration of whether to grant a return authorisation under subsection 46L(2) of the Act.

Section 106—Matters to be verified

Section 106 requires the applicant to provide information on any matters that are still required to be verified or validated as part of the return management plan. This must include information on the arrangements and processes that need to be followed to obtain the verification or validation. These matters could cover a range of things, such as what process needs to be followed. Matters could cover a range of different things, such as verifying that firewalls are operating to prevent unauthorised access to the network.

This information is relevant to the Minister's consideration of whether to grant a return authorisation under subsection 46L(2) of the Act.

Section 107—Application may include additional information

Section 107 provides for the applicant to submit any other information not listed in Division 2 of Part 5, that they consider relevant to demonstrating compliance with all requirements under section 46L of the Act, including the criteria prescribed by Division 1 of Part 5. The purpose of this section is to clarify that an applicant may submit additional information if they choose.

Section 108—Application may be updated

Section 108 specifies that the applicant may, prior to the Minister’s decision on whether to grant a return authorisation, update a part of the application. The applicant may update any part of the application.

This section provides the applicant with the opportunity to ensure that the application is up-to-date to ensure that the Minister’s decision as to whether to grant the permit is based on current and accurate information.

Subdivision B—Requirements for overseas payload return applications

This Subdivision sets out the requirements for an overseas payload return application for a return authorisation. Section 4 of the Rules defines an ‘overseas payload return application’ as being an application for a return authorisation that meets certain criteria.

Section 109—Purpose of Subdivision

Section 109 states the purpose of Subdivision A of Division 2 of Part 5 of the Rules is to set out the requirements for an overseas payload return application.

Section 110—Application must be in writing and in English

Section 110 states that applications, and documents required to be included in applications, must be in writing and in English. If the document is not in English, a translation of the document into English must be provided. The purpose of this section is to ensure that the Minister can have regard to all of the information that must be included in applications.

Section 111—Information about applicant

Section 111 specifies details about the applicant that must be included in the application. This information is required so that the applicant can be identified. Information about other persons or entities that have ownership, control or direction of the applicant is relevant to the Minister’s consideration of whether there are any reasons relating to the security, defence or international relations of Australia that the authorisation should not be granted.

The applicant is required to provide this information so that the Minister can consider the person or persons who may be in a position to influence or control the applicant in their operation of the return.

Section 112—Organisational structure and personnel

The purpose of section 112 is to provide information that demonstrates the applicant’s organisation has a suitable structure and appropriate personnel for holding a return authorisation. This is relevant for the Minister’s consideration of whether to grant a return authorisation under section 46L of the Act. Section 112 of the Rules provides the details required concerning the applicant and its personnel as part of the application.

Subsection 112(1) specifies that the application must include a description of the applicant's organisational structure, including the chain of command within the organisation and the responsibilities of each position within the chain of command, along with the particular personal details of the individuals who fulfil particular roles and responsibilities under subsection 112(2) within the applicant's organisation.

Subsection 112(2) specifies the individuals of the applicant organisation for whom particular personal details must be disclosed under subsection 112(1). Paragraph 112(1)(b) specifies the personal information that must be provided by the people captured in subsection 112(2). This includes their name, date of birth, place of birth, current address and the individual's relevant qualifications and experience.

Section 112 requires the applicant to provide specific personal information on specific individuals related to the return activity. It is necessary to request this information from the applicant in order to achieve the objects and purposes of the Act. Firstly, it is necessary to collect this information in order to determine the competence of the organisation to conduct the return of a space object. A lack of relevant experience and qualified personnel in key positions in the organisation could result in return activities not being conducted safely, increasing the risk of damage to persons or property. The Minister cannot grant a return authorisation unless they are satisfied that the applicant is competent to undertake the return of a space object pursuant to paragraph 46L(2) of the Act.

Secondly, the information is required to assist in determining if there are any reasons relevant to the security, defence or international relations of Australia that a return authorisation should not be granted. This is a matter the Minister must consider pursuant to paragraph 46L(2) of the Act. The return of a space object, if subverted, could result in significant damage and injury. The name, date of birth, place of birth and address of relevant persons are necessary for the Australian Government to determine if there are any national security concerns with the particular personnel. This information is not requested of all personnel associated with the return, only those who have access or, control over or provide direction on, critical tasks in the conduct of the return of a space object.

Section 113—Information about return of space object

Section 113 specifies that the application must contain information in relation to each space object to be returned.

Paragraphs 113(a) to (f) of the Rules cover a description of the space objects, its purpose, why the object is to be returned, details on the return including the return area, return period and return window, the proposed return vehicle and, if known, the proposed trajectory of the return vehicle.

This information is relevant to the Minister's consideration on whether to grant a return authorisation under section 46L(2) of the Act.

Section 114—Return safety

Section 114 specifies the information on safety that must be included in the return application. Paragraph 114(a) requires the safety requirements that apply to each proposed return in the country where the return is proposed to take place to be provided. Paragraph 114(b) requires information about returns or attempted returns in the past 5 years conducted by the person or organisation that would be responsible for conducting each proposed return, using the kind of return vehicle proposed to be used.

The purpose of section 114 is to satisfy the Minister that the safety regulations of the country of the proposed return are adequate to protect the payload, public health and safety, and Australian interests, and inform the Minister's consideration of the safety record of the return vehicle and organisation operating the return, under subsection 46L(2) of the Act.

Section 115—Contracts

Section 115 requires the applicant to provide copies of contracts entered into, and information on contracts that the applicant proposes to enter into, in order to undertake the space object return.

The purpose of section 115 is to satisfy the Minister that the contractual arrangements entered into by the applicant, or proposed to be entered into, in relation to the return are appropriate for the return authorisation and do not contain terms that are inconsistent with any of the conditions of the return authorisation. They may also provide evidence for the satisfaction of various criteria that the Minister must consider under the Act.

The information required under section 115 may include, but is not limited to, any contracts for the use or lease of facilities, for others to undertake activities connected the return or for contracts for dealing with a space object after it is return. This section is intended to provide the Minister information relevant to their consideration on whether to grant a return authorisation under section 46L of the Act.

Section 116—Application may include additional information

Section 116 provides for the applicant to submit any other information not listed in Division 2 of Part 5, that they consider relevant to demonstrating compliance with all requirements under section 46L of the Act, including the criteria prescribed by Division 1 of Part 5 of the Rules, if applicable. The purpose of this section is to clarify that an applicant may submit additional information if they choose.

Section 117—Application may be updated

Section 117 specifies that the applicant may, prior to the Minister's decision on whether to grant a return authorisation, update a part of the application. The applicant may update any part of the application.

This section provides the application with the opportunity to ensure that the application is up-to-date to ensure that the Minister's decision as to whether to grant the return authorisation is based on current and accurate information.

Division 3—Application for variation of authorisation

Section 118—Variation of authorisation conditions

Section 118 specifies that, in order to apply for a variation of return authorisation conditions pursuant to section 46Q of the Act, the authorisation holder must provide an application with a description of the variation sought, the reason for requesting the variation and any supporting material that will assist the Minister in deciding the application.

This action is required when seeking to vary the place or area of return specified in the authorisation, or one of the conditions on the authorisation itself. It is not needed if the authorisation holder is only amending plans. The purpose of section 118 of the Rules is to ensure that the Minister has sufficient information to assess whether the proposed variation is appropriate in the circumstances.

Part 6—Authorisation certificates

Section 119—Matters to which the Minister must have regard

Section 46U of the Act sets out that the Minister may issue an authorisation certificate covering conduct that might otherwise be prohibited by sections 11, 12, 13, 14, 15 or 15A of the Act. Subsection 46U(2) of the Act specifies that the rules may set out matters to which the Minister must have regard to in deciding whether to issue an Authorisation certificate. Section 119 of the Rules provides the matters that the Minister must have regard to in deciding whether to issue an authorisation certificate. The matters in section 119 have been included to ensure the objects and purposes of the Act are met.

Paragraph 119(a) specifies that the person who applies for the authorisation certificate must be competent to carry out the conduct. The intention of this matter is to ensure that the applicant is competent in order to minimise the risk to persons or property of the particular activity.

Paragraph 119(b) specifies that the Minister must consider whether there is a risk the conduct might expose the Commonwealth to liability for damage. This may include liability incurred in Australia, compensation for damage to third parties or liability that may be incurred under the Liability Convention or other international law. In considering the risk, the Minister may also consider whether specific action has been undertaken to minimise the risk, for example, whether the applicant has taken out insurance with the Commonwealth listed on the policy for any damage caused by the conduct.

Paragraph 119(c) specifies that the Minister must consider whether the risk identified in paragraph 119(b) is unsatisfactory if insurance is not held to cover the applicant or the Commonwealth.

Paragraph 119(d) requires the Minister to consider whether the probability of the conduct causing substantial harm to public health or public safety or causing substantial damage to property is as low as reasonably practicable. The purpose of this paragraph is to ensure that authorisation certificates are not granted if there is a risk to public health, public safety, or of substantial damage to property, and if so, this risk is as low as is reasonably practicable.

Paragraph 119(e) requires the Minister to consider whether the conduct involves a nuclear weapon or a weapon of mass destruction of any other kind. The prohibition on conduct involving a nuclear weapon or a weapon of mass destruction is consistent with Australia's international obligations under the Outer Space Treaty which provides, in Article IV that "States Parties to the Treaty undertake not to place in orbit around the Earth any objects carrying nuclear weapons or any other kinds of weapons of mass destruction, install such weapons on celestial bodies, or station such weapons in outer space in any other manner". The intention of this paragraph is to ensure that an authorisation certificate is not issued for conduct that involves a nuclear weapon or a weapon of mass destruction.

Paragraph 119(f) requires the Minister to consider whether the authorisation certificate should not be issued for reasons relevant to the security, defence or international relations of Australia. The intention of this paragraph is to ensure that before issuing the authorisation certificate, the Minister considers the conduct in relation to the security, defence or international relations of Australia and if there are any reasons that the conduct should not be approved.

Paragraph 119(g) requires the Minister to consider, before issuing the authorisation certificate, if it would be more appropriate for the conduct to be covered by one of the other permits, licences or authorisations available under the Act. The intention of this paragraph is to ensure that authorisation certificates are only used for activities that are not covered by another form of permit, licence or authorisation available under the Act.

Part 7—Launch Safety Officers

Section 120—Notice by Launch Safety Officer of launch or return of a space object

Section 120 supplements paragraph 51(a) of the Act to prescribe the procedure that the Launch Safety Officer must undertake to ensure that notice is given of the launch and return of a space object. The purpose of section 120 of the Rules is to ensure that relevant persons and all people located within a 50 km radius of a launch site or return site, are notified of launches and returns that will take place. This notification should be sufficiently early so that they may take actions, including safety actions, in relation to the launch or return event. It is also intended to ensure that people are aware of the launch.

Space object launches

Subsection 120(2) provides the procedures that the Launch Safety Officer must undertake prior to the launch of a space object. Under paragraph 120(2)(a) at least 30 days prior to the launch, the Launch Safety Officer must give written notice of the launch to each relevant person. The relevant persons are listed under subsection 120(5).

The purpose of this provision is to provide notice of the launch to all relevant people. The notification of relevant persons, sufficiently in advance of the launch, is important as they may need to take action, including notifying others. The relevant persons also include those who may be involved if an accident or incident occurs. Early notification is intended to ensure they have time to take whatever action they need to in preparation for an emergency.

Paragraph 120(2)(b) specifies that, between 2 and 10 days before the launch, the Launch Safety Officer must give written notice of the day and window of the launch, along with the subsequent days that the launch may be attempted on, to each relevant person. The purpose of this provision is to provide relevant persons with details of the launch in a timely way, ahead of the launch taking place.

Paragraph 120(2)(c) specifies that the Launch Safety Officer has obligations to take all reasonable steps to notify persons located (continuously, periodically or occasionally) within a 50 km radius (the launch radius) of the launch facility for the launch. The purpose of this provision is to inform the persons who, due to their proximity to the launch, may be affected by the launch of a space object. The Launch Safety Officer must take all reasonable steps to notify persons in the launch radius, between 2 and 10 days before the launch. The Launch Safety Officer has discretion over the manner and form of the notification. As there can be various launch locations proposed by applicants, this clause allows the Launch Safety Officer to identify how notification should best be carried out in the circumstances relevant to that launch and its location.

Under subparagraph 120(2)(c)(ii), the Launch Safety Officer must arrange for a notice of the launch to be broadcast, between 2 and 10 days before the launch, on each local radio station (if any) for the launch radius. The purpose of this provision is to provide notice through a commonly used form of mass media and thereby spread awareness of the launch in the local population.

Under subparagraph 120(2)(c)(iii), the Launch Safety Officer must arrange for a notice of the launch to be broadcast, between 1 and 12 hours before the launch, on each local radio station (if any) for the launch radius. The purpose of this provision is to provide notice of the launch when its attempt is imminent.

Subsection 120(3) sets out the process the Launch Safety Officer must follow in terms of notification if the launch does not occur on the scheduled day and instead will be attempted on one of the subsequent days initially identified. This includes giving written notice to each of the relevant persons of the new launch day and launch window and also arranging for the

notice to be broadcast between 1 and 12 hours before the launch, on each local radio station (if any) for the launch radius.

Additionally, the Launch Safety Officer may take steps to notify persons located in the launch radius of the new launch day and launch window. The Launch Safety Officer has discretion over the manner and form of the notification and whether this is needed. This decision may be affected by the circumstances surrounding the launch, including its location and what information was provided in the initial notice.

Space object returns

Subsection 120(4) provides the procedures that the Launch Safety Officer must undertake prior to the return of a space object. Under paragraph 120(4)(a), at least 30 days prior to the return, the Launch Safety Officer must give written notice of the return to each relevant person. The purpose of this provision is to provide due notice of the return to all relevant people so they will be aware of the return ahead of the return date. The notification of relevant persons, sufficiently in advance of the return is important as they may need to take appropriate action, including notifying others. The relevant persons also include those who may be involved if an accident or incident occurs. Early notification is intended to ensure they have time to take whatever action they need to in preparation for an emergency.

Under paragraph 120(4)(b), the Launch Safety Officer has obligations to attempt to notify persons located (continuously, periodically or occasionally) within a 50 km radius (the return radius) of the proposed return place or area. The purpose of this provision is to update relevant persons with more precise details of the return of the space object, in a timely way, ahead of it taking place.

Under subparagraph 120(4)(b)(i), the Launch Safety Officer must take all reasonable steps to notify persons in the return radius, between 2 and 10 days before the return. The Launch Safety Officer has discretion over the manner and form of the notification. As the location of the return is unknown, this clause was intended to allow the Launch Safety Officer to identify how notification should best be carried out in the circumstances relevant to that return and its location.

Under subparagraph 120(4)(b)(ii), the Launch Safety Officer must arrange for a notice of the return to be broadcast, between 2 and 10 days before the return, on each local radio station (if any) for the return radius. The purpose of this provision is to provide notice through a commonly used form of mass media and thereby spread awareness of the return in the local population.

Under subparagraph 120(4)(b)(iii), the Launch Safety Officer must arrange for a notice of the return to be broadcast, between 1 and 12 hours before the launch, on each local radio station (if any) for the return radius. This notice must be up-to-date, with any changes implemented since the previous notice or notices. The purpose of this provision is to provide notice of the return when the return is imminent.

Relevant persons

Subsection 120(5) lists “relevant persons” for the purpose of subsections 120(2) to (4).

The purpose of subsection 120(5) is to list the persons who, at a minimum, must be notified for the purposes of subsections 120(2) to (4). The persons include authorities responsible for emergency services within each State and Territory that is affected by a space launch or return. The purpose of subsection 120(5) is to ensure that all government stakeholders whose interests or responsibilities are affected by a space launch or return are duly notified of the launch or return, well in advance of it taking place, so that any adjustments and preparations can take place as needed.

Subsection 120(6) specifies that a State or Territory is “affected” by a space launch or return if:

- under paragraph 120(6)(a) the launch takes place in that State or Territory, or the proposed flight path of the space object passes through the airspace over the State or Territory; or
- under paragraph 120(6)(b) the proposed return place or area is in the State or Territory, or the predicted trajectory of the object passes through the airspace over the State or Territory.

Part 8—Investigation of accidents

Section 121—Meaning of *accident*

Section 121 supplements section 85 of the Act by prescribing circumstances, in which a space object or high power rocket is destroyed or damaged, and which do not constitute accidents for the purposes of the Act. The purpose of section 121 of the Rules is to limit the application of Part 7 of the Act in order to exclude circumstances where it would not be necessary or appropriate to carry out an investigation in accordance with Part 7 of the Act. For example the destruction of the space object may be part of the proposed purpose of the launch.

Paragraph 121(a) of the Rules relates to space objects launched in accordance with an Australian launch permit or an overseas payload permit. If the destruction of, or damage to, the space object occurs in a manner that is consistent with the stated purpose of the launch (other than when the flight is terminated by the operation of the flight safety system), then the circumstance is not an accident for the purposes of the Act. The purpose of paragraph 121(a) is to ensure that the destruction of, or damage to, space objects is not classified as an accident when it was undertaken as part of the identified purpose of the launch.

Paragraph 121(b) relates to high power rockets launched in accordance with an Australian high power rocket permit. If the destruction of, or damage to, the high power rocket occurs in a manner that is consistent with the stated purpose of the launch (other than when the flight is terminated by the operation of the flight safety system), then the circumstance is not an

accident for the purposes of the Act. The purpose of paragraph 121(b) is to ensure that the destruction of, or damage to, high power rockets is not classified as an accident when it was undertaken as part of the identified purpose of the launch.

Paragraph 121(c) relates to space objects returned in accordance with a return authorisation. If the destruction of, or damage to, the space object occurs in a manner that is consistent with the stated purpose of the return (other than when the flight is terminated by the operation of the flight safety system), then the circumstance is not an accident for the purposes of the Act. The purpose of paragraph 121(c) is to ensure that the destruction of, or damage to, space objects is not classified as an accident when it was undertaken as part of the identified purpose of the launch

Section 122—Fees and allowances for persons assisting Investigators

Section 122 specifies the fees and allowances that a person invited to assist an accident Investigator under section 90 of the Act is entitled to be paid. The purpose of section 122 of the Rules is to provide details of the fees and allowances the Investigator can pay in recruiting people to assist with accident investigations, and to specify how the fees and allowances should be determined.

Subsection 122(2) specifies the following fees payable to a person assisting an Investigator:

- under paragraph 122(2)(a) if a person is assisting because of their occupation, and the person is remunerated in that occupation by wages, salary or fees, the payable amount is the amount of wages, salary or fees, for each day that the person assists the Investigator; or
- under paragraph 122(2)(b), if paragraph 122(2)(a) does not apply, then the payable amount is a reasonable amount for each day that the person assists the Investigator.

Subsection 122(3) specifies the following allowances payable to a person assisting an Investigator:

- under paragraph 122(3)(a), a person may be paid a reasonable amount for travel between their usual place of employment or residence and the place in which the person assists the Investigator; and
- under paragraph 122(3)(b), a person may be paid a reasonable amount for meals and accommodation, if they are required to be absent overnight from their usual place of residence.

Subsection 122(4) specifies that the Investigator must decide the amount of a payment under paragraph 122(2)(b), (3)(a) or (3)(b).

Under subsection 122(5), applications may be made to the Administrative Appeals Tribunal for review of decisions of an Investigator under subsection 122(4). This subsection provides a review mechanism for persons affected by decisions of the Investigator under subsection 122(4).

Section 123—Fees and allowances for persons required to attend before Investigators

Section 123 specifies the fees and allowances that a person who attends before the Investigator under paragraph 91(1)(a) of the Act is entitled to be paid. The purpose of section 123 of the Rules is to provide details of the fees and allowances the Investigator can pay in requiring people to attend before them, and to specify how the fees and allowances should be determined by the Investigator.

Subsection 123(2) specifies the following fees payable to a person required to attend before an Investigator:

- under paragraph 123(2)(a), that if a person is attending because of their occupation, and the person is remunerated in that occupation by wages, salary or fees, the payable amount is the amount of wages, salary or fees, for each day that the person attends before the Investigator; or
- under paragraph 123(2)(b), if paragraph 123(2)(a) does not apply, then the payable amount is a reasonable amount for each day, or part of a day, that the person attends before the Investigator. The Investigator has a discretion to pay a higher fee to an attending expert in a particular area who is not currently remunerated, when compared with a person who is required to attend for a reason besides their expertise.

Subsection 123(3) specifies the following allowances payable to a person required to attend before an Investigator:

- under paragraph 123(3)(a), a person may be paid a reasonable amount for travel between their usual place of employment or residence and the place in which the person appears before the Investigator; and
- Under paragraph 123(3)(b), a person may be paid a reasonable amount for meals and accommodation, if they are required to be absent overnight from their usual place of residence.

Subsection 123(4) specifies that the Investigator must decide the amount of a payment under paragraph 123(2)(b), (3)(a) or (3)(b).

Under subsection 123(5), applications may be made to the Administrative Appeals Tribunal for review of decisions of an Investigator under subsection 123(4). This subsection provides a review mechanism for persons affected by decisions of the Investigator under subsection 123(4).

Part 9—Miscellaneous

Section 124—Delegation

Section 124 allows the Minister to delegate any of the Minister's powers or functions under the Rules to:

- the Secretary of the Department; or
- the Head of the Agency; or
- an SES employee, or acting SES employee, in the Department.

Subsection 124(2) specifies that the delegate must comply with any directions of the Minister in relation to the use of their powers under the delegation.

The purpose of including this delegation power is to allow for efficient and more flexible decision making. Given the number of decisions the Minister may need to make, this will be particularly important if the volume of activity increases. The level of delegation is appropriate as it is limited to government officials at a sufficiently senior level, who therefore have experience in exercising decision making powers.

Statement of Compatibility with Human Rights

Prepared in accordance with Part 3 of the Human Rights (Parliamentary Scrutiny) Act 2011

Space (Launches and Returns) (General) Rules 2019

This instrument is compatible with the human rights and freedoms recognised or declared in the international instruments listed in section 3 of the *Human Rights (Parliamentary Scrutiny) Act 2011*.

Overview of the Legislative Instrument

The *Space Activities Amendment (Launches and Returns) Act 2018* was passed by parliament in August 2018 and amended the *Space Activities Act 1998*. The renamed *Space (Launches and Returns) Act 2018* (the Act) provides an improved and streamlined framework for the regulation of space activities in Australia or by Australians overseas, as well as arrangements for the launch of high power rockets. Section 110 of the Act includes powers for the Minister to make rules by legislative instrument. The rules are needed to support the 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.

Specifically, the *Space (Launches and Returns) (General) Rules 2019* (the Rules) provide detail on the application requirements for five of the six approvals possible under the Act⁶. These are the:

1. launch facility licence;
2. Australian launch permit;
3. overseas payload permit;
4. return authorisation; and
5. authorisation certificate.

The Rules also detail additional criteria that the Minister must consider when making a decision whether to grant a specific application for a permit, licence, certificate or authorisation. Along with additional standard conditions, in addition to the standard conditions in the Act, that will be imposed on any permit or licence holder. The Rules also include information to support the Act with regards to notice requirements for the launch safety officer and the provision of fees and allowances available to people who attend or assist the Investigator, and delegations.

⁶ The application requirements for the sixth approval type, Australian high power rocket permits, is addressed in the *Space (Launches and Returns) (High Power Rocket) Rules 2019*.

Human rights implications

The Rules engage the following human rights:

- The right to privacy in Article 17 of the *International Covenant on Civil and Political Rights* (the ICCPR); and
- The right to equality and non-discrimination in Article 26 of the ICCPR.

Limiting the Right to Privacy

Article 17 of the ICCPR provides that no one is subject to arbitrary or unlawful interference with their privacy. The Rules require an applicant for the grant or transfer of a launch facility licence (section 18 of the Rules), Australian launch permit (section 45 of the Rules), overseas payload permit (section 75 of the Rules) and return authorisations (section 95 of the Rules) to provide personal information about certain individuals with involvement in space activities. The personal information requested is the name, birth date, birth place, current address and relevant work experience and qualifications.

Personal information is requested from those individuals who are in critical roles with regards to ownership or control of the applicant, such as the chief executive or equivalent. Personal information is also requested from those individuals who are in specific roles that give them authority or oversight of key elements of the relevant operation such as the operation of the launch facility, the building of the payload or the integration of the payload with the launch vehicle. Finally, personal information is requested from those individuals who have a specific role in more sensitive roles relevant to national security, such as operation of the launch vehicle itself or being involved in the implementation or monitoring of the technology security plan.

A condition on both the launch facility licence (subsection 9(1) of the Rules) and Australian launch permit (subsection 41(1) of the Rules) requires the licence or permit holder to update the Minister of any changes to the identity of the individuals in the critical roles and hold a personnel record for those individuals under subsection 9(4). Additionally, in the application for an Australian launch permit, paragraph 50(1)(e) of the Rules specify that an applicant must provide certain information about the owner of a payload they propose to include in their launch vehicle. This includes the name, current address, date of birth and place of birth of the owner/s.

The personal information required under the Rules is necessary for achieving the purposes of the Act. In order to determine the competence of the organisation/person to undertake the activity, it is necessary to collect the information on qualifications and experience. A lack of relevant experience and qualified personnel in key positions could result in activities not being conducted safely, increasing the risk of damage to persons or property. The Minister cannot grant an approval unless they are satisfied that the activity will be undertaken competently.

The information is also required to assist in determining if there are any reasons relevant to the security, defence or international relations of Australia that the Minister should not grant a licence, permit or authorisation. This is a matter the Minister must consider under the Act. The activities that can occur under the Act could, if sabotaged or influenced by malicious actors, result in significant damage and injury. The name, date of birth, place of birth and address of relevant persons are necessary for the Minister to accurately identify people in order to determine if there are any national security concerns with the particular personnel. A rigorous decision on this point could not be made without access to this information.

The personal information requested has been limited to only that required to accurately identify an individual. This information is not requested of all personnel within the applicant's organisation, only those who have access, control or provide direction on critical tasks in undertaking the activity.

The specifics concerning the personal information needed to be included in the Rules and not in the Act to maintain the flexibility required to respond to changes in technology. The particular roles that are critical for the purposes of the collection of this information may need to be updated as there are changes in the technology concerning the launch of objects to space and the building of space objects.

The personal information collected will only be used for the purpose of the Rules and the Act. It will be protected in line with the requirements under the *Privacy Act 1998*.

The limitation is reasonable, necessary and proportionate as the objects of the Act could not be achieved without access to the personal information required to be provided under the Rules.

Limiting the Rights to equality and non-discrimination

Article 26 of the ICCPR provides that all persons are equal before the law and are entitled without any discrimination to the equal protection of the law.

The identification of the nationality of a person occurs in the Rules when information is sought on the birth place of people undertaking critical roles in the activities as part of the application for the grant or transfer of a launch facility licence (section 18 of the Rules), Australian launch permit (section 45 of the Rules), overseas payload permit (section 75 of the Rules) and return authorisation (section 95 of the Rules). A condition on both the launch facility licence (section 9 of the Rules) and Australian launch permit (section 41 of the Rules) requires the licence or permit holder to update the Minister of any changes to the identity of the individuals in the critical roles. Additionally, in the application for an Australian launch permit, paragraph 50(1)(e) of the Rules require an applicant to provide information including the birth place of the owner of a payload.

The personal information is requested from those individuals who are in critical roles with regards to ownership or control of the applicant, such as the chief executive or equivalent. The personal information is also requested from those individuals who are in specific roles that gives them authority or oversight of key elements of the relevant operation such as the operation of the launch facility, the building of the payload or the integration of the payload with the launch vehicle. Finally, the personal information is requested from those individuals who have a specific role in more sensitive roles relevant to national security such as operation of the launch vehicle itself or involved in the implementation or monitoring of the technology security plan.

The nationality of individuals in critical positions then forms part of the comprehensive information that the Minister considers when making a decision as to whether to grant an application or transfer for a licence, permit or authorisation. The Rules therefore limit this right by indirectly drawing a distinction between people based on different nationalities. The consideration of the Minister may be affected by the identification of non-Australian nationals in critical roles. What impact the nationality information has will depend on many different factors, including what the nationality is, the role they are playing in the activity and whether any other Commonwealth agencies have security concerns based on this information.

This limitation is reasonable, proportionate and necessary in order to achieve the objects and purposes of the Act. In particular, this information is required to identify if there are any reasons relevant to the security, defence or international relations of Australia that the activities should not be approved under the Act. This is a matter the Minister must consider for applications for launch facility licences, Australian launch permits, overseas payload permits and return authorisations (paragraphs 18(e), 28(3)(e), 46B(2)(c) and 46L(2)(e) of the Act, respectively.

This information is not requested of all personnel within the applicant's organisation, only those who have access, control or provide direction on critical tasks in undertaking the activity. Given the potential negative impact of malicious actors being involved in space activities, the indirect limitation on this right is proportionate and necessary.

Conclusion

The Rules are compatible with human rights because to the extent that they may limit human rights, those limitations are reasonable, necessary and proportionate.

The Hon Karen Andrews MP
Minister for Industry, Science and Technology