



Australian Government



Australian
Space Agency

Draft cost recovery implementation statement

Fees for activities
under the *Space (Launches and Returns) Act 2018*
2021-2022

space.gov.au

Comments due: 12 April 2021

<https://consult.industry.gov.au/space/cost-recovery-implementation-statement>





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Introduction

Cost recovery involves government entities charging individuals or non-government organisations some or all of the efficient costs of a regulatory activity. These costs may include goods, services or regulation, or a combination of them. The Australian Government Charging Framework (AGCF), which incorporates the Australian Government Cost Recovery Guidelines (the CRGs),¹ sets out the framework under which government entities design, implement and review regulatory charging activities.

The Australian Government's overarching cost recovery policy is that, where appropriate, non-government recipients of specific government activities should be charged some or all of the costs of those activities.² A cost recovery implementation statement (CRIS) is a mandatory requirement for all cost recovered activities under the CRGs.

This CRIS details the statutory and policy basis for charging (including the decision for partial cost recovery and a subsequent deferral of charges until 1 July 2021 due to the impacts of the COVID-19 pandemic), the design of the cost recovery model, and estimated costs of the activity.

Purpose of the cost recovery implementation statement

This draft CRIS sets out how the Australian Space Agency (the Agency) proposes to implement partial cost recovery charges for the assessment of applications made under the *Space (Launches and Returns) Act 2018* (the Act). It contains estimated costs to assess applications, estimates of demand for approvals and financial forecasts for 2021-22 and three forward years.

Once this CRIS is finalised, the Agency will maintain and update it until the activity or cost recovery for the activity has been discontinued (for example, though a decision of government to revise the policy approval to charge).

Please note that the Agency will not charge any fees for applications it receives prior to 1 July 2021, until which time this CRIS is finalised and approved, and the cost recovery arrangements are implemented through legislative amendments (discussed further below).

Description of the regulatory activity

Under the Act, the Minister³ must grant approval before certain types³ of civil space activities are undertaken. Such activities must not jeopardise Australian interests including public safety, property, the environment, security and international relations.

The Act and its subordinate legislation ensure that a reasonable balance is achieved between:

- removing barriers to participation in space activities and encouraging innovation and entrepreneurship in the space industry
- the safety of space activities, and the risk of damage to persons or property as a result of space activities
- implementing certain obligations under the UN space treaties.⁴

¹ The ACGF and the CRGs are available on the Department of Finance website (www.finance.gov.au).

² CRGs section 10.

³ Under section 104 of the Act, the Minister may delegate powers under the Act (for example, authorising space activities) to a suitably qualified person.

⁴ The UN space treaties defined in section 8 of the Act.

The activity that is to be cost recovered by the Agency is the assessment of applications for the conduct of certain space activities (in Australia or by an Australian national overseas) or high power rocket activities in Australia. Not all of these activities will attract fees (see Description of model, below).

Types of authorisations

A summary of authorisations for activities under the Act is provided below.

- Launch facility licence – for operating a space launch facility in Australia.
- Australian launch permit – to conduct a space launch from Australia.
- Australian high power rocket permit – to conduct the launch of a rocket that does not reach space but is considered a high power rocket.
- Overseas payload permit – for Australian payloads being launched overseas.
- Return authorisation – for the return of an Australian space object outside of Australia, or the return of a space object to Australia.
- Authorisation certificate – for authorisations where the activity may otherwise be prohibited by the Act.

Regulatory framework for authorisations

The Act is supported by three sets of rules which set out the information that an applicant needs to provide to apply for the above authorisations:

- *Space (Launches and Returns) (General) Rules 2019*
- *Space (Launches and Returns) (Insurance) Rules 2019* (Insurance Rules)
- *Space (Launches and Returns) (High Power Rocket) Rules 2019* (High Power Rocket Rules)

The partial cost recovery arrangements described in this draft CRIS will be implemented through amendments to the Insurance Rules, for which public consultation is underway.

Cost recovery policy considerations

Cost recovery of assessing applications is consistent with the CRGs, as outlined below:

- The activity involves administering a regulatory framework for the assessment of space and high power rocket activities which can only be authorised by the Australian Government.
- The costs would be charged to the stakeholders seeking approvals.
- It is efficient to cost recover the costs of the activity.

Identification of stakeholders

Recent applications made under the Act (or under transitional applications under the *Space Activities Act 1998* (the 1998 Act)) have mostly been from small businesses and scientific/educational organisations. These stakeholders have sought a range of approvals to support activities such as the launch of cubesats, the return of a spacecraft to Australia, operation of new launch facilities and launch permits.

Historically stakeholders seeking approvals have typically been large commercial telecommunications satellite operators seeking to launch geostationary telecommunications satellites. In addition to stakeholders seeking approvals, the Agency has identified other key stakeholders in relation to the regulatory charging activity, including

- technical experts that may contract to the Agency to assist with complex assessments
- potential customers of applicants.

Policy and statutory authority to cost recover

Government policy approval to cost recover the regulatory activity

The Australian Government agreed to introduce a partial cost recovery model, which was outlined in the Mid-Year Economic and Fiscal Outlook (MYEFO) 2019-20. Fees were expected to commence on 1 July 2020, however due to the impacts of the COVID-19 pandemic the commencement of fees was deferred to 1 July 2021.

Under the partial cost recovery model, work performed within the Agency is not expected to be cost recovered, while work performed outside of the Agency (by technical experts when required) is expected to be cost recovered. This decision was [publicly announced](#) by the Agency on 21 January 2020.

Statutory authority to charge

Under section 59 of the Act, a person must pay the relevant fee prescribed by the rules to apply for, transfer or vary certain licences, permits or authorisations. The explanatory memorandum to the Act indicates that the prescribed fees will operate on a cost recovery model in accordance with the CRGs.

Subsection 59(6) of the Act states that the rules may prescribe the circumstances in which the Minister⁵ may wholly or partly waive a fee.

The Agency is currently consulting on draft amendments to the Insurance Rules to introduce the partial cost recovery arrangements, including to:

- set the method of fee calculation
- specify timing for payment
- specify circumstances in which a fee may be wholly or partly waived.

Cost recovery model

Outputs and business processes of the regulatory charging activity

The relevant outputs of the activity are listed below.

Launch facility licence

A licence may be granted to operate a facility that is constructed as a place to launch space objects. This is typically a fixed facility, but includes mobile facilities. This licence will require a detailed application. The advice of a technical expert will be needed to assess elements of a launch facility licence application.

Australian launch permit

A permit may be issued to authorise a launch from an Australian launch facility; this includes fixed and mobile facilities on the ground, and launch from an aircraft in flight. The launch permit may also authorise an object to be returned to Australia (in connection with the launch). This permit will require a detailed application. A technical expert will be needed to assess elements of a launch permit application.

⁵ Under section 104 of the Act, the Minister may delegate powers under the Act (for example, to waive a fee) to a suitably qualified person.

High power rocket permit

A permit may be issued to authorise the launch of a high power rocket from Australia. The definition, characteristics and permit requirements for a high power rocket are contained in the High Power Rocket Rules. This permit will require a detailed application (though less detailed than an Australian launch permit). A technical expert will be needed to assess elements of a high power rocket permit application.

Overseas payload permit

Australians seeking to launch their space objects from an overseas site are required to obtain an overseas payload permit. This approval considers a number of potential risks with regard to issues such as public safety, security, defence and international relations. Technical expert advice is very unlikely to be required to assess an application.

Return authorisation

This authorisation has two types of application:

- overseas payload return application – for the return of a space object, which is carried as a payload by a separate space object that does not require a return authorisation, to a place or area outside Australia. For example, an experiment on the International Space Station may need to submit an overseas payload return application if it is returned to a place outside of Australia by a cargo spacecraft.
- standard return application– for the return of a space object to a place (in Australia or outside Australia) other than an overseas payload return application.

A standard return application (for a return authorisation) will require a detailed application and is expected to be an extensive body of work that requires a technical expert for the assessment.

An overseas payload return application (for a return authorisation) requires a simpler application than a standard return application and is unlikely to require technical expert advice for the assessment.

Authorisation certificate

An authorisation certificate is an approval to conduct an activity that would otherwise be prevented under the Act, but for which there isn't an existing approval process. This authorisation type helps futureproof from unforeseen technologies/activities that do not otherwise fit under the legislative framework. At this stage the Agency does not anticipate a demand for authorisation certificate applications, nor has it accepted any applications to date. Due to the unknown nature of an activity requiring an authorisation certificate, it is not possible to accurately estimate the application cost.

Business processes for approvals

The key business processes required to process applications are:

- liaise with the stakeholder regarding administrative processes and receive an application for an approval
- ensure the application is complete and addresses the relevant requirements set out in legislation
- assess the application and seek relevant advice from other agencies within the Australian Government or external technical experts, as required
- brief the Minister and/or delegate to seek a decision on the application
- notify the stakeholder of the decision and any conditions of approval
- perform consequential actions (for example, it may be necessary to register the Australian space object with the United Nations Office for Outer Space Affairs or to update the register of space objects on the website).

Other processes associated with the assessment of applications more generally include:

- appointment of a launch safety officer for certain launches and returns
- ensuring appropriate risk management processes are in place to support Commonwealth regulatory responsibilities
- development of guidance material

The business processes to consider a request to vary or transfer a licence, permit or authorisation will depend on the circumstances but are expected to be similar to the above. The workload involved, particularly whether technical advice is required, will depend on the nature of the transfer or variation.

Costs of the regulatory activity

Estimates of the per-application assessment costs are detailed in the table below.

Application Type	Costs				
	Direct	Indirect	External technical expert(s)	Capital	Total
Launch facility licence	\$50,428	\$9,793	\$191,520	\$0	\$251,741
Australian launch permit (fixed location)	\$38,388	\$7,148	\$91,200	\$0	\$136,736
Australian launch permit (mobile location / aircraft)	\$39,070	\$7,266	\$132,240	\$0	\$178,576
High power rocket permit	\$16,611	\$3,037	\$31,920	\$0	\$51,567
Overseas payload permit	\$8,837	\$1,734	\$0	\$0	\$10,571
Return authorisation: standard return application	\$36,612	\$6,835	\$68,400	\$0	\$111,846
Return authorisation: overseas payload return application	\$2,653	\$494	\$0	\$0	\$3,147
Authorisation certificate ⁶	Cost determined on a case-by-case basis				

Table 1: Per-application cost estimates

The above costings are generated from an estimate of the typical time and staffing requirements to perform the business processes within an activity. This is based on our experience of the current requirements and our

⁶ As an authorisation certificate is likely to be used to approve an activity not previously considered, it is not possible to accurately estimate the application cost. The Agency does not anticipate any authorisation certificate applications under the new framework. This authorisation type will help futureproof from unforeseen technologies/activities that do not otherwise fit under the legislative framework.

expectations for the future requirements. Both the direct and indirect costs are then calculated from estimates of the time for staff to assess applications and are aggregated in the table above.

Cost components

The main cost drivers for processing applications include the time taken by staff within the Agency (to assess an application and prepare briefing material) and, if required, technical expert advice. Estimates of the number of hours taken by Agency staff were generated for each application type. From this, direct and indirect cost estimates were generated.

In accordance with the CRGs advice on cost modelling, *direct costs* are comprised of:

- salary
- superannuation
- long service leave
- staff training
- workers' compensation premiums.

Similarly, *indirect costs* include:

- human resources support
- organisational services
- information and communication technology
- property operating expenses.

The approximate daily rate of an external technical expert is \$2,280 including GST (excluding any travel costs). Technical expert costs have therefore been generated by multiplying \$2,280 by the estimated number of days required to produce the necessary advice. The number of days required will depend on the type of application and the complexity of the individual case. For many application types there are few (if any) completed applications to guide the time estimates. From applications currently under assessment within the Agency, it can be seen that there can be significant variations in complexity of different applications of the same type. There is therefore currently a level of uncertainty in the time estimates. The Agency will refine the estimates regularly in the CRIS.

Demand estimates

Table 2 contains the demand estimate for the next 4 financial years. This estimate is based on current and historic activities, the 2018 consultation on the draft CRIS, trends and general information.

The demand for overseas payload permits has been estimated based on the current number of assessments (5-9 per year recently) and a general trend of an increasing number of applications. The Agency estimates that this will increase to 12 applications per year. A permit may authorise more than one space object, or a series of launches of space objects.

The demand for complex assessments is based the demand for launch facilities reducing as facilities are approved, and for launch permits to increase over coming years.

Industry input on the demand estimates below is welcome. Additionally, demand estimates will be updated when the Agency reports on its cost recovery performance and provides updated financial estimates each year (through the CRIS), and as part of a formal scheduled review of the cost recovery model, currently scheduled for late in the 2021-22 financial year.

The estimated number of applications over a four-year window is shown below. The estimates have been modified since the 2018 draft CRIS. The new estimates consider comments received during the 2018 consultation and current trends. Applications submitted prior to 1 July 2021 are not included in the table.

Application Type	Estimated applications				
	2021-2022	2022-2023	2023-2024	2024-2025	Total
Overseas payload permit	12	12	12	12	48
Launch facility licence	1	-	-	-	1
Australian launch permit (fixed location)	5	7	12	12	36
Australian launch permit (mobile location / aircraft)	-	-	-	1	1
High power rocket permit	1	1	-	1	3
Return authorisation: standard return application	-	-	-	-	-
Return authorisation: Overseas payload return application	1	-	1	-	2
Authorisation certificate	-	-	-	-	-

Table 2: Estimated number of applications

Less than 30 applications per year are expected, and less than 15 applications per year are expected to attract fees. This figure is small compared to some other cost recovered activities (for example Therapeutic Goods Administration and Australian Securities and Investments Commission typically treat many hundreds of applications per year). An additional application could increase the expected total costs by a significant proportion.

Design of regulatory charges

Description of model

The partial cost recovery model is comprised of two elements: a fixed fee component for the work done within the Agency, and a variable fee component for any work required to be performed by an external technical expert. As the Government has agreed to absorb the cost of work done within the Agency, the fixed fee component for all application types is nil.

$$\text{Total cost} = \text{fixed fee (\$0)} + \text{value of external technical expert}$$

The value of a technical expert contract will depend on factors such as the type of application and the complexity of an application (for example, a large orbital launch vehicle is expected to be more complex than an unguided sounding rocket). Upon application, the Agency will obtain a quote for any advice required from

a technical expert.⁷ Once an estimated value of the technical expert cost is known, the applicant can consider and accept the estimated costs of the technical expert before progressing their application.

If it becomes apparent that the actual cost of the technical expert is likely to be greater than the estimated amount, a written notice will be given to the applicant specifying an updated estimated amount.

If the actual amount of the expert advice component is less than the estimated amount, any overpaid amount will be refunded to the applicant.

An applicant can apply to the Minister (or delegate) to have their fee wholly or partly waived. In considering an application for a fee waiver, the Minister (or delegate) will have regard to the nature and purpose of the proposed activity, and how the activity demonstrates innovation or entrepreneurship in the space industry.

Table 3 contains the current estimates for external technical advice for different application types. It is noted the amount of technical advice required will vary between applications.

Application Type	External technical expert(s)
Launch facility licence	\$191,520
Australian launch permit (fixed location)	\$91,200
Australian launch permit (mobile location / aircraft)	\$132,240
High power rocket permit	\$31,920
Overseas payload permit	\$0
Return authorisation: standard return application	\$68,400
Return authorisation: overseas payload return application	\$0
Authorisation certificate ⁸	N/A

⁷ Advice from a technical expert may cover assessment of complex items such as technology security plans, risk hazard analysis, flight paths, or emergency plans.

⁸ As an authorisation certificate is likely to be used to approve an activity not previously considered, it is not possible to accurately estimate the application cost. The Agency does not anticipate any authorisation certificate applications under the new framework. This authorisation type will help futureproof from unforeseen technologies/activities that do not otherwise fit under the legislative framework.

Table 3 Estimated external technical advice for assessment of application types

Reasoning for model

The partial cost-recovery balances the need to meet the Australian Government's cost recovery policy, while recognising the Government's ambition to grow and transform the Australian space industry by absorbing costs incurred for work conducted within the Agency. For example, under this model, the application fee for an overseas payload permit (the application type most commonly received by the Agency) is \$0, a reduction from \$10,000 for commercial operators (or \$100 for approved scientific or educational organisations) in the 1998 Act and associated framework.⁹

A partial cost recovery model also recognises that recipients who create the need for a government activity, rather than the general public, should bear its costs – as outlined in the CRGs. However, consistent with the objects of the Act and noting the nascent and evolving nature of the space sector, the proposed rules also specify the circumstances the Minister (or delegate) is to have regard to when considering an application to waive, or partially waive, the fees. These circumstances include where the proposed activity demonstrates innovation or entrepreneurship in the space industry. The circumstances for a fee waiver align with the object of the Act; namely, the removal of barriers to participation in space activities and the encouragement of innovation and entrepreneurship in the space industry. This is consistent with the government's ambition to grow and transform the Australian space industry.

The model has been designed noting that there will be a small number of very different applications. Calculating average costs for complex applications will be difficult (and imposing average costs may disadvantage some applicants).

As the nature of Australia's space sector is rapidly evolving, the Agency will review the model to ensure it is consistent with demand and supports the growth and transformation of Australia's space sector. The next review is expected to occur in late 2021-22.

Charging risk assessment

Given the nascent and evolving nature of the Australian space industry, there is a risk that the amount of applications the Agency receives will not match the numbers that have been estimated. If demand significantly exceeds the estimate, staff may have difficulty processing the applications received in a timely manner.

The risks of under- or over-recovering costs for the activity has been mitigated through the design of the charging model. The cost recovery fees relate directly to work undertaken, and are not affected by demand variations. There are no activity-wide costs (for example, capital costs) applied that are based on an estimate of demand.

The cost recovery activities will be reviewed to ensure they remain appropriate and to allow experience to guide revised cost estimates. The review will also provide an opportunity to better understand potential future demand of a rapidly growing Australian space market and to re-examine the Agency's resources.

An initial risk assessment of the implementation of charging has been developed. The purpose of the risk assessment is to identify areas of implementation risk and inform the risk engagement strategy adopted by

⁹ Fees have not been charged since the Act commenced on 31 August 2019.

the Agency. In accordance with the CRGs, the Agency will agree a risk rating with the Department of Finance prior to finalisation of the CRIS (and prior to commencement of the fees legislation).

Stakeholder engagement

Past engagement on cost recovery charging

In 2018 when Parliament considered amendments to the 1998 Act, comments about fees were raised in the Senate Economics Legislation Committee (ELC) including:

- fees should be set in such a way as to encourage participation
- consideration should be given to scaling fees according to categories of space activities
- the ability to waive fees in some circumstances should be considered.

Comments were also raised in the 2017 Legislative Proposal Paper: Reform of the Space Activities Act 1998 and associated framework. Comments included:

- fees should be transparent, and not based on the size of an organisation
- annual fees for space licences (now known as launch facility licences) should be removed
- differing views on fee reductions for overseas launch certificates:
 - fees should not include cross-subsidies between applications from different types of organisations; and
 - cost recovery fees could be a major barrier to some Australian organisations (including universities).

These comments were considered in the development of the full and partial cost recovery charging models proposed in the previous version of this draft CRIS, which was submitted for public consultation in November and December 2018.

The Agency received 44 submissions in response to the consultation process from a wide range of stakeholders including government entities, academic and research institutions, commercial businesses and service providers, and individuals. Respondents were generally opposed to the imposition of any fees for the assessment of applications. The main issues that were raised related to:

- the negative effect that fees could have on the nascent Australian space industry
- the amount of the estimated fees and the basis of their calculation
- the apparent contradiction between the imposition of fees and the Agency's policy to support the growth of Australia's space industry
- the practice of some other jurisdictions in not charging fees for similar such activities.

Feedback received from respondents was also considered in the proposal and subsequent decision to proceed with a partial cost recovery charging model. As outlined earlier in the document, the partial cost recovery model supports the sector by absorbing the costs for work conducted within the Agency. The model also reflects the government policy that recipients who create the need for a government activity, rather than the general public, should bear (some or all of) the costs of those activities. Additionally, consistent with the objects of the Act and noting the nascent and evolving nature of the space sector, the Minister (or delegate) may wholly or partly waive fees. For example, it is proposed that when considering an application to waive fees, consideration is given to how the proposed activity demonstrates innovation or entrepreneurship in the space industry.

Future consultation on cost recovery charging

The Agency is currently consulting on draft amendments to the Insurance Rules to introduce the cost recovery arrangements, including to set the method of fee calculation, specify timing for payment, and specify circumstances in which a fee may be wholly or partly waived.

The Agency is currently liaising with the Department of Finance to agree a risk rating, as required by the CRGs. Following consideration of feedback from consultation on this draft CRIS and the draft amendments to the Insurance Rules, the CRIS will be published, and the amended rules will be considered.

The Agency will update the CRIS yearly. The Agency will also review the cost recovery model (currently scheduled for late in the 2021-22 financial year) to ensure it is consistent with demand and supports the growth and transformation of Australia's space sector.

Financial estimates

Application Type	2021-2022	2022-2023	2023-2024	2024-2025
Launch facility licence	\$191,520	\$0	\$0	\$0
Australian launch permit (fixed location)	\$456,000	\$638,400	\$1,094,400	\$1,094,400
Australian launch permit (mobile location / aircraft)	\$0	\$0	\$0	\$132,240
High power rocket permit	\$31,920	\$31,920	\$0	\$31,920
Overseas payload permit	\$0	\$0	\$0	\$0
Return authorisation: standard return application	\$0	\$0	\$0	\$0
Return authorisation: Overseas payload return application	\$0	\$0	\$0	\$0
Authorisation certificate	-	-	-	-
Total cost	\$679,440	\$670,320	\$1,094,400	\$1,258,560

Table 4: Estimated yearly costs for the 4 forward financial years

Financial performance

The following table provides historical revenue for the past five financial years.

Application Type	2017-2018	2018-2019	2019-2020 ¹⁰	2020-2021
Overseas launch certificates	\$20,100	\$30,200	\$0	\$0
Space licences	\$0		\$0	\$0
Launch permits	\$0		\$0	\$0
Authorisation of return of overseas-launched space objects	\$0		\$10,000	\$0
Exemption certificates	\$0		\$0	\$0
Total revenue	\$20,100	\$30,200	\$10,000	\$0

Table 5: Previous revenue

Non-financial performance

The number of applications varies with demand. The demand for overseas launch certificates/overseas payload permits has seen a significant increase since 2015. Between 2003 and 2015, only 5 applications were assessed, for very large geostationary communications satellites. Since 2018 the Agency has received 20 applications, these have been for small non-geostationary space objects, often for testing or academic purposes.

Since 2018 the Agency has received 17 complex applications. Of these, assessment of two has been completed. The 14 other applications are under technical consideration, awaiting further information before progressing, or are on hold or have been withdrawn at the request of the applicant.

Key forward dates and events

The key forward events and estimated dates are set out in the table below.

Key events	Indicative dates
Consultation on draft rule amendments to implement partial cost recovery	16 March , 2021
Finalisation of the CRIS	Quarter 2, 2021
Commencement of partial cost recovery fees	1 July, 2021

¹⁰ The Australian Government made a policy decision to introduce a partial cost recovery model in November 2019, and commencement of fees was deferred to 2021-22. Fees shown in the table for the 2019-20 financial year were for activities under the 1998 Act.

Table 6 Key dates of forward events

Estimates of expenses, revenue and demand will be updated yearly.

The Agency has committed to review cost recovery activities to ensure they remain appropriate and efficient.

CRIS approval and change register

The following table will contain the change register when the CRIS is finalised.

CRIS change	Date of CRIS change	Approver	Basis for changes
Certification of the CRIS	TBD	TBD	New regulatory charging activity
Agreement to the CRIS	TBD	TBD	

Table 7 CRIS change register