



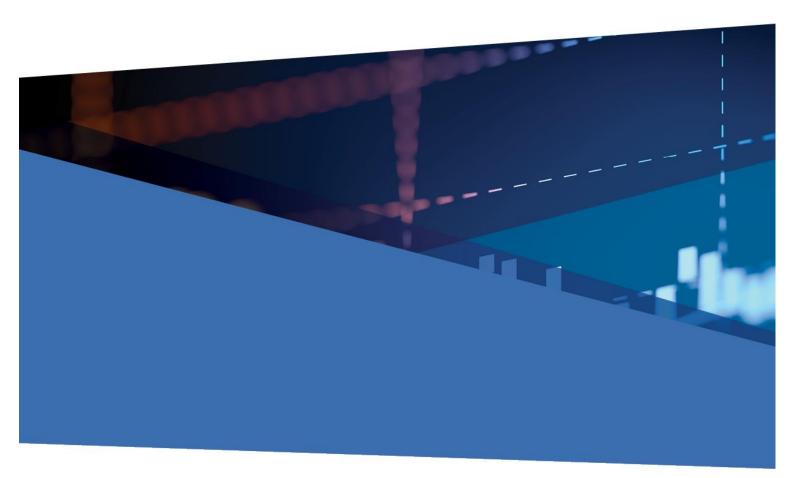
Regulation Impact Statement

Patent Box Concessional Tax Regime

February 2022

The Treasury

Office of Best Practice Regulation Reference: OBPR21-01137



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1 EXECUTIVE SUMMARY

The purpose of this Regulation Impact Statement¹ is to provide an estimate of the policy and regulatory impacts of Australia adopting a 'patent box' in the medical and biotechnology sectors. A patent box is a policy tool that provides a reduced corporate tax rate on income generated from particular types of qualifying intellectual property (IP), particularly patents. Under the proposed patent box, the intention would be to tax corporate income derived from eligible Australian patents in the medical and biotechnology sectors at a concessional rate effective from 1 July 2022.

1.1 PROBLEM

Over the last 20 years, a number of factors have emerged that have worked to disincentivise the development and retention of IP assets in Australia's tax jurisdiction, along with the R&D operations that underpin them. Two key factors are:

- Quite significant reductions in corporate tax rates overseas. Australia's corporate tax rate has moved from below the Organisation for Economic Co-operation and Development (OECD) average to be 3rd equal highest in the OECD and well above the OECD average.
- In addition to this, patent box regimes with very low effective tax rates are becoming more common amongst comparable developed economies.

While these issues are not unique to the medical and biotechnology sector, they appear to have a significant impact in this sector. Certainly, this industry has been the most active in advocating for a patent box with a competitive concessional rate on eligible patents. This industry also has experience with patent box regimes in other jurisdictions and has indicated it can comply with the regulatory burden consistent with other foreign patent box regimes.

For the above reasons, in the 2021-22 Budget the Australian Government announced its intention to introduce a patent box regime for the medical and biotechnology sector, and that it would consult with industry on the design of the patent box prior to making a final decision on the regime.

The Government also announced it would consult on whether to expand the announced patent box proposal to the clean energy (or low emissions) sector. Views from stakeholders on the inclusion of low emissions and clean energy technologies are not in scope for this RIS as the Government has not made any policy decision on their inclusion.

1.2 OPTIONS AND IMPACTS

There are three broad options available to the Government in responding to the problem:

- Option 1: Do not implement a patent box regime retain the status quo.
- Option 2: Implement the announced patent box regime.
- Option 3: Implement a modified version of the announced patent box regime, whose design takes into account feedback from consultation with industry on the announced regime.

The Government's approach was to announce a high-level patent box (Option 2) in the 2021-22 Budget, with the following proposed design elements to determine which investments can access the concessional tax regime:

- the patent box regime will be ringfenced to the medical and biotechnology sector;
- an effective concessional tax rate of 17 per cent for companies on eligible profits from eligible patented inventions;
- only inventions claimed in standard patents granted by IP Australia, which were applied for after the Budget announcement (that is, have a priority date after 11 May 2021), will be eligible;
- only eligible income from 1 July 2022 would be in scope; and
- the patent box will be designed to be consistent with the OECD/G20 Forum on Harmful Tax Practice (FHTP) framework governing IP regimes, including the OECD's Base Erosion and Profit Sharing (BEPS) Action 5 minimum standard (specified in the BEPS Action 5 Report).

As part of the announcement, the Government indicated it would consult closely with industry on the design of the patent box. This led to the development of Option 3, which is a modified version of Option 2 in key ways to reflect the outcomes of consultation with industry.

1. Eligibility start date

Following the Budget announcement, feedback from consultation and further analysis into the lifecycle of patents revealed long lead times to developing and commercialising patents in the medical and biotechnology sectors. Reflecting this, Option 3 proposes to expand the eligibility criteria to patents *granted* after 11 May 2021 (and therefore, some patents which may have been applied for before).

2. Patent filing location flexibility

Stakeholders also noted that a significant number of their Australian designed medical patents are filed overseas, and not with IP Australia. This is due to the relatively smaller market size of the Australian consumer base in contrast to larger jurisdictions such as the US and EU.

Limiting the patent box to just Australian patents would make income for some Australiandesigned innovations ineligible, or require businesses to go through the extra compliance burden and expense of filing a patent in Australia in order to gain eligibility. Therefore, Option 3 proposes to extend eligibility to the regime to patents filed under two equivalent IP frameworks overseas, while maintaining the requirement that underlying R&D expenditure occurred in Australia.

Other high-level design elements

Consultation with industry and further analysis following the budget announcement did not identify practical proposals to modify the proposed rate, starting income year, industry boundary or the decision to comply with BEPS Action 5. As such, these design specifications are identical under Options 2 and 3.

1.2.1 Design options to consider for Option 2

This RIS considers three broad options. However, a patent box is a generic term for any tax regime that is concessional for income derived from IP. There are significant and discrete but not mutually exclusive options for the design of the patent box that will affect its regulatory and compliance impact. These options were influenced by consultation and are summarised below (evaluated in body of report).

Rate

The 17 per cent rate was chosen for the initial announcement because it provides a 13 percentage point discount on Australia's headline rate of 30 per cent, which is a similar discount provided by other patent box regimes. The Government was also mindful of the OECD's intention to ensure Multinational Enterprises (MNEs) will be subject to a minimum tax rate (which has now been announced at 15 per cent which will be imposed from 2023). Stakeholders did not identify a compelling case to adopt a different tax rate, hence the original 17 per cent rate has been incorporated into both Options 2 and 3.

Industry ringfence

Consultation revealed a preference among taxpayers to leverage existing legislation to define the sector. Stakeholders suggested and preferred using the Therapeutic Goods Administration's (TGA) Register of Therapeutic Goods as the vast majority of medical and biotechnology patents are embedded in goods on that register. This approach provides certainty to stakeholders and the Government, and avoids the need to create a new bespoke definition of 'medical' in the tax legislation that both the ATO and taxpayers would be unfamiliar with. Both Option 2 and Option 3 require that for income to be eligible, it must be income from a patent for a good on the TGA Register of Therapeutic Goods.

IP Development conditions

The OECD BEPS Action 5 Report requires 'substantial activity' to be undertaken by a taxpayer within the tax jurisdiction offering the preferential tax regime. The patent box design will comply with the OECD guidelines to ensure the regime is not deemed a harmful tax practice by the OECD. If the patent box was to be deemed harmful, other jurisdictions may implement measures to deter their nationals from investing in Australia. Consultation involved collaboration with the OECD FHTP Secretariat. This significantly reduces the risk that the FHTP member jurisdictions, which are advised by the Secretariat on whether

regimes are harmful tax practices, will raise concerns with the regime at a later date. The FHTP will not formally consider Australian patent box legislation until it is adopted as Australian Government policy in its final form.

Form of Tax Relief

Some countries provide patent box tax relief through a lower bespoke rate targeted to eligible patent box income. Others apply their normal headline rate to eligible income, but reduce the final tax that would otherwise be payable by waiving a portion of the final tax bill or through inflated expense deductions. In the Australian context, the Offshore Banking Unit previously provided a 10 per cent effective concessional rate on certain banking activities through what is known as an apportionment approach or Non-Assessable Non-Exempt Income (NANEI) approach. In the patent box context, this approach makes part of the income NANEI to achieve the effective tax rate of 17 per cent. To comply with the OECD's rules on deductions being claimed at the same rate as income, the NANEI approach must also be applied to expenses incurred in producing the eligible patent. This approach is likely to satisfy the OECD FHTP members and was shared with stakeholders during targeted consultation. It has therefore been included under both Option 2 and 3.

Qualifying IP income

The OECD requires eligible income to be streamed so that only income attributable to the eligible patent is treated concessionally. The common types of income associated with patents reflect both revenue earned from licensing the patent or capital gains proceeds from the sale of the patent (along with damages from infringement). In consultation it was proposed that these forms of income be included in the scope of eligible income, which was supported by stakeholders.

Apportioning eligible income

Firms often do not sell their patent or license it directly, instead they often embed their patent into a product. The OECD BEPS Action 5 guidelines require that legislation must outline a method for entities to determine the income attributable to the eligible patent, separating that stream of income from other income streams derived from the final embedded product (e.g. income attributable to marketing).

There is the option to use transfer pricing principles to attribute the income. These determine an 'arm's length return' for pricing transactions within and between enterprises under common ownership or control. In the context of the patent box, this allows for the value attributable to the eligible IP to be determined via self-assessment by the taxpayer, which is then submitted to the ATO via a tax return.

There is also the option to use simplified transfer pricing mechanisms that provide formulaic assumptions. For instance, the UK Patent Box assumes a 10 per cent return on certain specified non-IP costs, and excludes this amount from the concessional treatment. This approach is also used albeit via a different mechanism in Switzerland (see Attachment A).

Stakeholder feedback indicated a preference for a simplified transfer pricing approach as it provides more certainty and lower compliance burdens by avoiding the need for detailed analysis of the economic substance of each stage in the development, manufacturing and marketing of multiple product lines. However, the full transfer pricing approach is recommended by the OECD (albeit that other approaches are acceptable) and would deliver outcomes commensurate with the facts and circumstances of each transaction, more closely targeting the benefits from the patent box towards the commercialisation of research and development performed in Australia. As such, both Options 2 and 3 propose the full transfer pricing approach.

Qualifying (Eligible) Taxpayer

The BEPS Action 5 minimum standard reduces the scope of qualifying taxpayers to resident companies, domestic permanent establishments (PEs) of foreign companies and foreign PEs of resident companies subject to tax in the jurisdiction that provides the benefits. Consultation with stakeholders supports the use of the R&D Tax Incentive's (R&DTI) definition of an eligible R&D Entity to determine who is eligible for the patent box as it is well understood by stakeholders. Both Options 2 and 3 reflect this approach.

1.3 RECOMMENDATION

Option 3 is the preferred option as it improves Australia's tax competitiveness for medical commercialisation decisions in relation to patents granted after Budget night 2021-22. In contrast Option 2 would not be relevant to patents for another 4 to 6 years based on the average lead time between patent application and grant. Option 3 will impose a lower regulatory burden due to its recognition of patents registered in some foreign jurisdictions, reducing the potential for Australian patent applications being made for tax purposes only.

Both Options 2 and 3 help to mitigate the effect of Australia's high corporate tax rate, and incentivise Australia's medical and biotechnology businesses to develop and commercialise their innovations in Australia instead of overseas. At its maturity, an estimated 816 medical and biotechnology firms would be able to access the patent box under either option, generating additional economic activity and high-skilled jobs in Australia, with flow-on benefits across the economy. Option 3 has a stronger economic benefit than Option 2, as it applies to patents granted, not just patents applied for, after announcement date, and to patents granted in certain jurisdictions overseas.

There are two types of benefits from implementation of a patent box:

- the first is the increase in R&D activity arising from the greater incentive to produce eligible patents for patent box purposes. This has flow on benefits, for instance a November 2021 CSIRO working paper¹³ notes that for every \$1 increase in R&D investment, a \$3.50 return can be expected (before consideration of social benefits).
- In terms of spillovers, a 2006 Productivity Commission study⁷ found that R&D investment results in roughly a 25 per cent spillover benefit outside of the sector of

investment. Not having a patent box, therefore, means Australia is also missing out on the positive externality benefits associated with any potential forgone R&D investment.

While the compliance burden under both Options 2 and 3 is significant (see Table 1), the patent box regime is optional and benefits participating businesses. Its proposed design has been developed in consultation with industry, and the compliance burden is broadly in line with other patent box regimes.

The ATO has provided an estimate of compliance costs as set out in Table 3. The regulatory cost borne by individuals (including consumers) and community organisations is estimated to be \$0.

Moreover, the ATO has advised that Option 3 would have lower non-tax compliance costs than Option 2 as businesses would not be required to maintain a patent in Australia in order to access the concession (if they already have a patent in the EU or US). Note however that non-tax costs are <u>not</u> captured in the quantified assessment as the ATO has not been able to quantify them¹. Option 3 therefore offers an advantage of lower non-tax compliance costs than Option 2 without compromising the integrity of patents allowed into the regime since the EU and the US respective patent offices have comparable patent examination standards to IP Australia.

Table 1: Estimated compliance costs (Option 2 and 3)

Implementation	\$5,077,131
Ongoing (per annum)	\$1,697,060
Aggregate impact over 10-year	\$22,047,728
duration	
Per year (10 years)	\$2,204,773

This preferred option put forward for Government decision is estimated to decrease the underlying cash balance by \$120 million over the forward estimates period. This policy costing only takes into account the direct effects of a policy change and does not include broader economic or 'second-round' effects as detailed in the Charter of Budget Honesty Policy Costing Guidelines.

1.4 CONSULTATION, IMPLEMENTATION AND EVALUATION

Treasury released a discussion paper on the design of the patent box on 5 July 2021 as part of its six-week public consultation process. In its consultation paper, Treasury put forward 29 discussion questions to inform the design of the patent box and the Government's understanding of its impact. Treasury approached selected stakeholders

¹ However, we note that the fees of maintaining a patent in Australia are around \$45,000 over the life of a patent (refer to Attachment C).

ahead of the release of the discussion paper to ensure the questions were informed and covered the key design issues.

Approximately 48 written submissions were received from a range of stakeholders, including in the medical and biotechnology industries, low emissions sector, tax advisory firms, Commonwealth agencies and universities. The variety and volume of submissions received indicated a high level of interest in the policy.

In December 2021, Treasury conducted targeted consultation on draft legislation to further inform the proposed specifications and seek feedback on the practical operation of the proposed regime prior to the Government making a final decision.

The ATO will be responsible for administering the regime. ATO Taxation Statistics data will be provided to Treasury so that the take up of the regime can be understood over time.

2 PROBLEM

2.1 MULTINATIONAL TAX MINIMISATION

Commercial businesses generally exist to maximise after-tax returns to shareholders. Consideration of the tax implications of where and in what form business investments should be made is a normal business consideration alongside non-tax factors that will affect expected returns.

Shifting operations offshore to take advantage of improved business conditions (tax or otherwise) is not straightforward and usually entails increased short term capital investment, investment risk and disruption for the entity. But it also allows the entity to realise more of a tax saving in the long term (and potentially other benefits) relative to keeping operations in the original, but higher tax, jurisdiction. This benefit may outweigh the costs depending on how the risks eventuate.

There are number of factors that influence these decisions, including each jurisdiction's overall tax burden (rate and other aspects), access to relevant infrastructure, the ability to protect IP, availability of relevant skills, distance to market, policy risk from a jurisdiction's levels of Government and other factors.

The lawful shifting of economic activity for tax benefits is not to be confused with the problem of 'profit shifting' where firms enter into arrangements with related parties in another jurisdiction to shift profits to low or no tax jurisdictions artificially (that is, irrespective of their economic activities). That said, a lower tax rate does reduce the attractiveness of profit shifting.

2.2 Onset of foreign patent boxes

A patent box is a tax regime that provides a lower tax rate for certain kinds of income derived from certain forms of intellectual property (IP). Patent boxes typically apply only to patents, but sometimes includes other forms of IP such as designs and copyright material. An increasing number of foreign jurisdictions have introduced patent boxes to increase their tax competitiveness specifically for IP, some of which are called intellectual property boxes, innovation boxes or IP boxes.

The first patent box was introduced by Ireland in 1973. In the 1990s and 2000s a succession of countries introduced patent boxes, including France, Belgium, the Netherlands, Luxembourg and Hungry. The concept soon spread beyond Europe, with Israel and Korea becoming the first to introduce patent boxes outside Europe.

The United Kingdom introduced its patent box in 2012, and shortly thereafter the OECD began negotiations on guidelines that would remove harmful aspects of existing regimes, as part of its broader Base Erosion and Profit Shifting programme. This resulted in the

Action 5 report, which included amongst other things a substantial activity requirement, to minimise the 'poaching' of IP (the offshoring of IP that was developed in another jurisdiction at significant cost and risk). The requirement applied to new entrants from 1 July 2016 and all claimants from 1 July 2021.

While removing harmful aspects of patent boxes, thereby making IP less mobile in the short term, the Action 5 report has not slowed the growth of IP tax competition, with Switzerland, Singapore, Poland and China amongst the countries that have since introduced patent boxes. Currently, over twenty jurisdictions have patent boxes, including eighteen OECD member states.

2.3 AUSTRALIA'S IP TAX COMPETITIVENESS IS NOT FAVOURABLE

Much of Australia's innovation is embedded in IP assets because they provide both a means for investor ownership to be legally understood and provide those investors competitive protection by assigning monopoly rights to the holders of the IP assets for a period of time. The offshoring of these assets is a loss of innovation to another jurisdiction as well as a loss of these monopoly profits from Australia's tax jurisdiction.

The comparatively high Australian headline corporate income tax rate, relative to other OECD countries, and the numerous low-rate patent box regimes in other jurisdictions, means there is an incentive for IP that would otherwise be developed in Australia to be developed and retained offshore. This risk has already grown - and is growing - because Australia's general company rate has not fallen with its peer nations (see **Figure 1**, 2000 vs current), and concessional patent box regimes are becoming more common (see Attachment B).

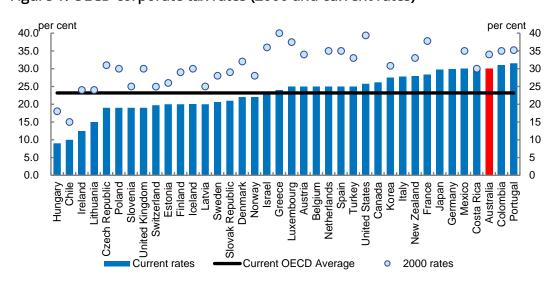


Figure 1: OECD corporate tax rates (2000 and current rates)

Source: OECD Revenue Statistics 2021. Note: All listed rates are combined central and provincial government company tax rates.

In the context of taxation of IP, both the general corporate tax rate and (if applicable) the patent box rate matters to a country's tax competitiveness for IP investments, because

patent box regimes do not cover all income associated with a patented product (this is explained in the discussion of OECD rules in Section 3 Options and Impact).

On average, OECD countries with a patent box regime have headline corporate tax rates of 22 per cent and provide effective concessional rates of 8 per cent for IP income – a difference of 14 percentage points (see **Table 2**). <u>Attachment B</u> has more details. As the concessional rates are on average 22 percentage points lower than Australia's headline corporate tax rate, some taxpayers argue Australia's taxation of IP income is not competitive without a patent box.

Table 2: Average IP regime rates and corporate rates

	OECD Members	All regimes
IP Rate (per cent)	8	6
Corporate Rate (per cent)	22	22
Difference (percentage points)	14	16

Notes: The above table has been updated for changes to the headline corporate tax rate in France (27.5 in 2021) and the 'Innovation Box' rate in Netherlands (9 per cent). It excludes the United States FDII regime, which is not considered a patent box, and Switzerland, as the effective rates differ substantially between Cantons and we do not have this information. It also excludes regimes that have recently been abolished. The OECD data covers IP regimes reviewed by the Forum on Harmful Tax Practices (FHTP).

Source: OECD Intellectual Property Regimes, Treasury

2.4 IMPACT ON MEDICAL AND BIOTECHNOLOGY R&D

Australia already has substantial and well-established programs to support R&D, including the Research and Development Tax Incentive (R&DTI). Nevertheless, Australia places below the OECD average in terms of total government support to business R&D as a percentage of GDP². Medical and biotechnology firms have stressed that Australia's lack of tax competitiveness for IP assets, resulting from its high corporate tax rate and not having a patent box, is an important factor that limits their ability to further expand their Australian R&D capabilities.

ResMed, for example, stated the following in its submission on the patent box:

ResMed grows its research and development (R&D) expenditure globally by 7 to 8%. ... However, without a patent box, it has been increasingly difficult for ResMed to choose Australia for new, incremental innovation investment over other jurisdictions.

Cochlear, likewise, stated the following in its submission on the patent box:

As Cochlear's business and global footprint continues to grow we have greater flexibility in where we conduct R&D whether alongside current R&D capacity in Belgium, Sweden or the United States or co-located with new manufacturing facilities in Malaysia and China. These countries, and many others, actively and aggressively compete for our R&D and manufacturing investment by offering a suite of investment incentives including, in more than 20 other countries, patent

boxes. ... The design of the new Australian patent box will be an important factor in making these [investment location] decisions.

These themes were repeated throughout the patent box submissions that Treasury received from medical and biotechnology firms. Firms argued that tax competition particularly impacts their marginal decision making on R&D operations – while the lack of a patent box will not lead to the immediate deterioration of the sector, they argue that it inhibits the sector's growth and potential.

There have been no academic studies analysing the impact of patent boxes on R&D investment following the introduction of the OECD substantial activity requirement, likely reflecting that the transition to the new regime has only just been finalised, and relevant data is not yet available. However, a 2019 UK government report³, which includes data for the period after the introduction of the substantial activity requirement, found that 'firms using the patent box display an approximate 10 per cent increase in investment'. While the report highlights the limitations of the early data, this initial finding broadly supports the submissions of Australian medical and biotechnology firms.

In terms of marginal decision making, this evidence suggests that if the Government does not establish a patent box to compete with foreign equivalents, Australian multinationals will be less likely to focus their growth domestically, foreign multinationals will have less reason to establish research centres in Australia, and it will be more difficult for domestic start-ups to secure investment.

As well as directly growing the economy and creating jobs, it has long been recognised that R&D investment has significant positive externalities for broader society. For example, a 2006 Productivity Commission study⁷ found that R&D investment results in roughly a 25 per cent spill-over benefit outside of the sector of investment. Not having a patent box, therefore, means Australia is also missing out on the significant positive externality benefits associated with any potential forgone R&D investment.

2.5 IMPACT ON MEDICAL AND BIOTECHNOLOGY COMMERCIALISATION

Once initial R&D has been completed and IP protection has been granted, firms have the option to offshore their IP before further developing the product for commercialisation. This is particularly relevant in the medical and biotechnology sector, where significant further development is required after a product is patented. For example, products such as the chemical composition of a vaccine are often patented before safety and efficacy are demonstrated (e.g. stage I, II, III & IV clinical trials), regulatory approval is sought (e.g. from the TGA) or complex manufacturing processes are devised (e.g. disposable mixing paths and fluid systems).

Australia currently has no specific incentives or regulations from federal, state or local governments to encourage the retention of Australian-designed IP ownership in Australia during commercialisation. This means Australian medical and biotechnology innovations are at risk of being offshored and may be sensitive to Australia's uncompetitive taxation of

IP income. Given that significant returns are not realised in the sector until after commercialisation is completed, offshoring results in loss of tax revenue for Australia.

Medical and biotechnology firms argue that the lack of a patent box is causing the ownership of Australian-developed IP to be offshored during commercialisation. AusBiotech, the peak body for many firms in the sector, stated the following in its submission on the patent box:

The Patent Box is intended as an incentive for companies to make long-term decisions and create long term value for Australia.... For example, it is well accepted that as a product reaches commercialisation, the benefits of the much-valued R&D Tax incentive (RDTI) diminish, the development of highly portable IP may (and does) move the associated benefits offshore, where other countries benefit. An Australian Patent Box incentive would work 'hand in glove' with the RDTI to keep more of the value creation and its benefits in Australia, for longer. This notion of 'additionality' is key to the Patent Box creating an incentive to change and improve the outcomes we might otherwise have.

A number of studies have confirmed that patent boxes affect the location of IP ownership^{4,5,6}. For example, the Institute for Fiscal Studies estimated that foreign patent boxes had caused a 30 per cent decline in UK patent ownership before the UK patent box was introduced⁵. While these studies all rely on data from before the introduction of the OECD's substantial activity requirement, the impact of patent boxes will continue to some extent - the substantial activity requirement minimises the ability of patent boxes to incentivise the onshoring of foreign IP, yet still allows patent boxes to disincentivise the offshoring of domestic IP.

2.6 THE OECD GLOBAL MINIMUM TAX WILL LIMIT THE PROBLEM, BUT NOT ELIMINATE THE PROBLEM

In the context of competing taxation regimes and profit shifting, the OECD/G20 Inclusive Framework Pillar 2 project seeks to set an effective global minimum corporate tax rate at 15 per cent. The OECD's stated objective for Pillar Two is that it seeks to ensure that all large and internationally operating businesses pay at least a minimum level of tax globally. This will help address the problem of countries continuing to lower tax rates in order to compete for investment.

The Government announced at the 2021-22 Budget that Australia's patent box rate would be set at 17 per cent in anticipation of public discussion at the time of a global minimum rate. The global minimum rate will likely be calculated broadly, accounting for both income eligible for the patent box rate and the headline rate. Other tax measures which reduce the effective tax rate also can pull an entity's rate to close or below the global minimum. If this were to occur, the OECD's mechanism to recapture the undertaxed revenue would likely lead to a tax revenue transfer to another country. That is, if Australia does not tax the income at 15 per cent, another nation will receive a taxing right for that untaxed

amount for no tax competitiveness advantage (as the entity still pays 15 per cent overall). The Government indicated to stakeholders that the OECD/G20 Inclusive Framework Pillar 2 would be a key consideration in the context of the design of the patent box.

2.7 PATENTS ARE CLOSELY LINKED TO INNOVATION

IP is knowledge owned as an intangible asset. Australia has six different categories of legally enforceable IP:

- Patents: protection of inventions and processes. Patents are granted by IP Australia
 if there is evidence of the invention or process being new, inventive and useful.
 Standard patents provide protection for up to 20 years.
- Trademarks: protection of packaging and branding. Trademarks are granted by IP Australia, but no evidence is required of it being unique or new. Trademarks provide indefinite protection.
- Registered designs: protection of the visual appearance of products. Registered
 designs are granted by IP Australia if there is evidence of the appearance being new
 and distinctive. Registered designs provide protection for up to 5 years.
- Plant breeder's rights: protection of new plant varieties. Plant breeder's rights are granted by IP Australia if there is evidence of the variety being a new or recently exploited. Plant breeder's rights provide protection for up to 20 or 25 years.
- Copyright: protection for the owner's expression of an idea, but not the idea itself.
 Copyright is claimed rather than granted. The Department for Industry, Transport,
 Regional Development and Communications has responsibility for copyright law.
 Generally, copyright provides protection for up to 70 years.
- Circuit layout rights: protection for integrated circuits used in computer generated equipment. Circuit layout rights are claimed rather than granted. The Department for Industry, Transport, Regional Development and Communications has responsibility for circuit layout rights law. Circuit layout rights provide protection for up to 10 years after commercial exploitation.

Source: IP Australia website

A patent is a right that is granted for any device, substance, method or process that is new, inventive and useful. To be granted a standard patent, the patent holder must satisfy an inventive step.

Extract from IP Australia patent application process

Your invention must:	Be new, useful and involve an inventive step.	
The application should	A title, description, any number of claims, drawings (if	
include:	applicable), an abstract and forms.	
A patent is granted if:	The application is examined and found to satisfy the relevant requirements of the <i>Patents Act 1990</i> .	
Examination:	Mandatory. The relevant requirements of the <i>Patents Act</i> 1990 must be met before a patent is granted. Can only be requested by the applicant.	
Publication in the Australian Official Journal of Patents:	18 months from earliest priority date and again at acceptance.	
Protection period:	Up to 20 years if annual fees are paid (or up to 25 years for pharmaceuticals).	
How long does the process take?	Six months to several years depending on circumstances.	

Source: IP Australia website

The other forms of IP do not require the applicant to demonstrate an inventive step, as is required for patents. Thus, while some of the previously discussed problems may apply to other forms of IP, the effect of not having a patent box on R&D investment will most acutely be felt by patent holders.

2.8 OVERALL PROBLEM

Due to the proliferation of patent boxes in other jurisdictions, Australia's high corporate tax rate has become a particular problem in relation to the taxation of IP income. Not introducing a patent box in Australia has impacted decisions in the medical and biotechnology sector, both in terms of reduced R&D investment and the offshoring of Australian innovations before commercialisation. The introduction of a global minimum tax will reduce, but not eliminate, this problem, which is most pertinent for patents rather than other forms of IP.

3 OPTIONS AND IMPACTS

Policy options and their impacts have been included in this section. Following a description of each policy option, the trade-offs of each option and an overall assessment of the net-benefit is included the Recommendation section.

There are several options the Government could pursue to address the problems raised, within the context of the Government's intention to consult on and design a targeted patent box regime. Option 1 is to *not* introduce a patent box, that is, retain the status quo. Option 2 is to introduce a patent box consistent with the Government's proposed specifications as announced at the 2021-22 Budget and further details as informed by consultation. Option 3 is to introduce a modified patent box, reflecting feedback from stakeholders on the initial proposed design.

Other non-tax options exist, such as providing grants or other direct forms of funding to incentivise the retention and development of IP within Australia. These options would not address Australia's tax competitiveness as outlined in the problem definition. While there are advantages and disadvantages of using the tax system to incentivise innovation, the tax system has an advantage over Government spending options in that taxpayers can self-assess their eligibility (subject to the usual ATO audit process) and would not be subject to Government decisions on the eligibility of each unique investment.

To inform its policy design of the patent box, the Government carried out a 6 week public consultation as well as two targeted confidential consultations with stakeholders (see Section 4 Consultation). This informed the different policy options described below.

3.1 RETAIN THE STATUS QUO - NO PATENT BOX (OPTION 1)

The Government has the option of not introducing any new measures to make the taxation of IP income in the medical and biotechnology sector more competitive.

As detailed in the previous section, this would continue to affect marginal decisions about the location of investment, contributing to IP offshoring and diminished R&D in the Australian medical and biotechnology sector. This would impact the effectiveness of existing government programmes supporting R&D. In the long-term, this could potentially lead to a reduction in the Australian medical and biotechnology sector's global significance, and the sustained loss of tax revenue, economic activity, and skilled jobs. There is no evidence, however, that this will affect the price or accessibility of patented pharmaceuticals in Australia.

There is some academic support for such an option. In November 2015, the Melbourne Institute and the then Department of Industry, Innovation and Science released a paper on patent box policies across the world⁷. This paper suggested that there are 'no solid theoretical or empirical grounds for claiming that patent box regimes induce more

innovation.' Further, 'a policy aimed at attracting mobile IP income is a winner takes-all policy and therefore requires an aggressive lowering of the headline tax rate'.⁷

However, this analysis was completed before the OECD's rules (described in Section 3 Option and Impact) were implemented. No significant studies have been completed since.

Maintaining the status quo would impose no compliance costs in Australia as it would not require changes to legislation and companies would not have to learn or implement a new regime. However, companies choosing to relocate their IP to access patent boxes in other jurisdictions would be subject to the associated relocation and compliance costs.

3.2 IMPLEMENT ANNOUNCED BUDGET PROPOSAL (OPTION 2)

To seek to address the problems identified with the status quo, the Government announced it would consult on a high-level patent box proposal in the 2021-22 Budget. The announcement included a number of proposed design elements to determine which investments could access the concessional tax regime and which industry sectors would be in scope. These are:

- the patent box regime will be ringfenced to the medical and biotechnology sector;
- an effective concessional tax rate of 17 per cent for companies on eligible profits from eligible patented inventions;
- only inventions claimed in standard patents granted by IP Australia, which were applied for after the Budget announcement (that is, have a priority date after 11 May 2021), will be eligible; and
- the patent box will be designed to be consistent with the OECD/G20 Forum on Harmful Tax Practice (FHTP) framework governing IP regimes, including the OECD's Base Erosion and Profit Sharing (BEPS) Action 5 minimum standard (specified in the BEPS Action 5 Report).

The BEPS Action 5 requires a nexus between any eligible IP and the R&D leading to that IP's development. Affected taxpayers would be required by BEPS Action 5 to record R&D activities to later prove where and by whom the R&D activity was conducted.

Therefore, an Australian patent box cannot be designed to incentivise existing offshore IP (where the R&D underlying that R&D was developed offshore) to be moved to Australia. A regime with that intent would be deemed non-compliant by the OECD FHTP (further details in Section 3).

Option 2 considers the merits of implementing the Government's Budget announcement with no changes to the announced specifications, and with the additional required design elements not set out in the budget announcement to be informed by consultation with industry.

The Government also announced it would consult on whether to expand the proposed patent box to the clean energy (or low emissions) sector. Views from stakeholders on the inclusion of low emissions and clean energy technologies are not in scope for this RIS as the Government has not made any policy decision.

3.2.1.1 Rate

The tax rate is proposed to be set at 17 per cent, which provides a broadly similar discount to the headline corporate tax as other patent box jurisdictions. It also minimises the risk of tax shortfalls being imposed by other jurisdictions in future, depending on the outcome of the OECD/G20 global minimum tax (see Section 2 Problem).

3.2.1.2 Eligibility start date

The aim of the patent box is to incentivise new investment in the development of new patents.

Therefore, under this option, eligible patents are those *applied for* after 11 May 2021, and any patents in development that were applied for before 11 May 2021 would be ineligible. This would ensure that the concessional rate would only apply to new patents and would not reward existing investment that has already occurred.

3.2.1.3 Patent filing locations

Under this option only patents filled through IP Australia would be eligible. IP Australia's patent examination standards are well understood by stakeholders. Any increase in the filing of patents through IP Australia owing to the patent box would not require a funding increase for IP Australia as it is a cost recovery agency (applicants fees fund IP Australia's output).

3.3 Further design options for Option 2

'Patent box' is a generic term for a tax regime that provides concessional treatment of income attributable to intellectual property. Different design choices will lead to significantly different regulatory and compliance impacts. To consider how to implement Option 2, there are many design choices that have a large bearing on the regulatory and policy impact that were not addressed in the 2021-22 Budget.

These are the issues raised by the OECD as key design issues and by stakeholders in the industry. There is a large overlap between the issues raised below and the issues raised by consultation. All of these design options were influenced by consultation and are evaluated below. More details on insights collected from consultation can be found at Section 5.0 Consultation.

3.3.1 Codifying Industry boundary

Consultation revealed a strong preference for using an existing definition of the medical and biotechnology sectors, rather than creating a bespoke definition. Stakeholders

overwhelmingly suggested using the TGA's Register of Therapeutic Goods to determine which patents would qualify for the patent box as the vast majority of medical and biotechnology patents are embedded in goods on that register.

This definition is a widely used and understood definition that provides certainty to the vast majority of stakeholders. The Government confirmed with TGA that this would be a workable definition.

This has the additional benefit that tax legislation does not need to make distinctions about the efficacy and safety of medical products. The decision about whether a product is appropriate to be used in a medical setting at any point in time will be solely based on assessments under the Therapeutic Goods Act.

3.3.2 Design a regime compliant with OECD framework governing IP regimes

Patent boxes regimes are known for being complex to design and administer as one part of an entity's income (the income related to the eligible patent) needs to be isolated and identified to allow it to receive concessional tax treatment, while normal tax treatment applies to rest of the entity's income.

Rules governing what can be exposed to the concessional tax treatment need to be clear to taxpayers and be administrable for the ATO. Concessions also create tax integrity issues because the regime creates an incentive for taxpayers to inflate the income attributable to the patent box (which is not the intent of the policy) or underinflate expenses, both of which inflate profit attributable to the regime.

The Government's Budget announcement noted that the patent box will be designed to be consistent with the OECD/G20 Forum on Harmful Tax Practice (FHTP) framework governing IP regimes, including the OECD's BEPS Action 5 minimum standard. This includes the requirement that the concessional tax treatment will only apply to company profits from patented inventions in proportion to the amount of associated R&D that was conducted in Australia by the entity. *Figure 2* outlines the topics where the OECD takes a view on design in their report titled: 'OECD/G20 Base Erosion and Profit Shifting Project Action 5: 2015 Final Report: Countering Harmful Tax Practices More Effectively, Taking into Account Transparency and Substance' (the BEPS Action 5 Report)⁸.

Figure 2: Key design dimensions of IP regimes



Source: OECD

If the regime was found to be a harmful tax practice by the OECD FHTP, then it is likely that Australia would also be listed on the EU List of Non-Cooperative Tax Jurisdictions for Tax Purposes. This listing risks sanctions from any EU member state, including higher withholding taxes, denying deductions and double taxation for Australian persons and entities. The Government has reduced this risk as much as possible by engaging extensively with the FHTP's Secretariat, which advises the FHTP on whether regimes are harmful tax practices.

3.3.3 Eligible IP

Some patent box regimes include wider types of IP (see <u>Attachment A</u>). This option prioritises legally defined IP that is confirmed to entail an inventive step, namely, standard patents granted by IP Australia. This is because standard patents are the type of IP primarily used by firms in the medical and biotechnology sector to protect their innovations, and such innovations (involving an inventive step) are associated with genuine economic activity in the form of research and development and manufacturing.

3.3.4 IP Development conditions

As part of the OECD's substantial activity requirement, the nexus approach creates a link between the benefits of a patent box and the extent that the underlying R&D that generated the intellectual property was undertaken by the taxpayer in the home jurisdiction. The BEPS Action 5 report specifies that the nexus approach, which is a combination of existing transfer pricing rules and an R&D fraction, must be used to limit the amount of patent income which can receive concessional treatment in a patent box.

Each patent box income stream has its own R&D fraction, and income is multiplied by the R&D fraction before receiving concessional treatment. This means that benefits under a patent box must decrease where the taxpayer does not conduct the R&D itself, but either outsources R&D activities to a related party overseas or acquires intellectual property developed by another party. The mechanism to implement the R&D fraction, as specified

in the BEPS Action 5 Report, is in Figure 4 below. In conjunction with the R&D fraction, transfer pricing prevents the taxpayer from benefiting from the patent box to the extent the R&D was conducted overseas by one of its permanent establishments. This means that, in principle, a taxpayer can only benefit from the patent box to the extent the underlying R&D was undertaken by the taxpayer in Australia, which protects profits from being shifted artificially overseas where value is created in Australia.

Figure 4: Nexus fraction as specified by the BEPS Action 5 Report

Determining qualifying profits

- 34. Qualifying income is determined by multiplying IP income adjusted for past and ongoing expenses as well as IP losses if applicable with the nexus ratio, which serves as a proxy of the research activities of the firm.
- 35. The nexus ratio's numerator (shown in equation (1)) equals qualifying expenditure which includes (a) expenditure directly incurred by the taxpayer that currently qualifies for relief under expenditure-based R&D tax incentives plus (b) the cost of outsourcing to unrelated parties. Interest payments, acquisition costs, building costs and any other costs not directly linked to a specific asset, do not enter the definition of qualifying expenditure.
- 36. The denominator equals overall expenditures, which is the numerator plus (c) acquisition costs and (d) costs of outsourcing to related parties. To allow some flexibility in the development mix of the asset, jurisdictions may allow taxpayers to apply a 30% uplift to qualifying expenditures, increasing qualifying expenditure but never over the total amount of overall expenditure.

Nexus ratio =
$$\frac{Qualifying \ R\&D \ expenditure \ to \ develop \ the \ IP \ asset}{Overall \ R\&D \ expenditures \ to \ develop \ the \ IP \ asset} = \frac{a+b}{a+b+c+d}$$

Countries are open to define R&D expenditure for the purpose of the R&D fraction in a variety of ways. For instance, there is the option to leverage existing regimes that already administer R&D activities. Option 2 leverages the R&DTI as a basis for determining qualifying R&D expenditure. This is intended to provide taxpayers with a means to apply the nexus fraction through the existing R&D legislative framework. This approach limits the overall compliance burden and ensures the benefit provided by the patent box is proportional to the R&D that the taxpayer has undertaken in Australia. Given the cumulative effect of the R&D Tax Incentive and the patent box, similar to other patent box regimes, the benefit available under the patent box may be reduced where the outcome is misaligned with Australia's commitment to the OECD's two-pillar solution for addressing the tax challenges of the digital economy.

The OECD FHTP permit countries to take either an entity or jurisdictional approach for their R&D fraction calculations, the difference being that a jurisdictional approach permits domestic related party costs to be included in the fraction's numerator while the entity approach does not. Option 2 follows a jurisdictional approach. The FHTP Secretariat has advised the numerator cannot include costs attributable to overseas clinical trials, regardless of whether an entity or jurisdictional approach is used, despite these being included as eligible expenditure under the R&DTI under certain circumstances.

The OECD allows a 30 per cent uplift, which is implemented by the 1.3 factor placed in the numerator of the fraction (see <u>Attachment A</u>). Option 2 includes this factor in the fraction

because some clinical trials cannot be conducted in Australia due to the lack of expertise, access to equipment, quarantine regulatory requirements, capacity constraints within the supply chain and low population size in Australia.

3.3.5 Qualifying IP income

The common types of income associated with patents reflect both revenue earned from licensing of the patent or capital gains proceeds from the sale of the patent (along with damages from infringement). Consultation proposed these forms of income as the scope of eligible income, which was supported by stakeholders. The Government's discussion paper specifically proposed that the following forms of IP income will be eligible for the patent box:

- Proceeds from the sale of the IP asset
- License fees
- Sale of products using the IP asset (embedded goods)
- Damages for infringement
- Other compensation (from infringement)

Stakeholders raised that income attributable to patents is often earned before a patent product goes to market or even before a patent is granted. Option 2 therefore allows these payments (known as 'milestone payments') to be included in the patent box.

3.3.6 Apportioning eligible income

The OECD requires eligible income to be streamed so that income attributable to marketing is removed. The Government's announcement provides for income attributable to the eligible patent to be treated concessionally.

Firms often do not sell their patent or license it directly, instead they often embed their patent into a product. Therefore, the patent box legislation must outline a method for entities to determine the income attributable to the eligible patent, separating that stream of income from other income streams derived from the final embedded product (e.g. income attributable to marketing).

There is the option to use transfer pricing principles to attribute the income. Transfer pricing refers to the rules and methods for pricing transactions within and between enterprises under common ownership or control. Due to the potential for cross-border controlled transactions to distort taxable income, tax authorities in many countries can adjust intragroup transfer prices that differ from what would have been charged by unrelated enterprises dealing at arm's length (this is known as the arm's-length principle).

There is the option to use simplified transfer pricing mechanisms that provide formulaic assumptions. For instance, the UK uses a 'cost plus methodology' to determine the value attributable to eligible IP. The UK Patent Box assumes a 10 per cent return on certain specified costs as representative of the returns to non-IP. The 'cost plus amount' is

removed from the taxable income that benefits from the UK's concessional rate and is instead exposed to the headline rate. This approach is used by Switzerland, but delivered via a different mechanism (see <u>Attachment A</u>).

Stakeholder feedback indicated a preference for a simplified transfer pricing approach. However, the full transfer pricing approach is recommended by the OECD FHTP Secretariat and provides the highest level of integrity. Formulaic approaches provide more certainty to taxpayers, but often rely on a fixed assumption regarding the proportion of income attributable to patents – this may undervalue the IP of some taxpayers and overvalue the IP of others. Transfer pricing mechanisms rely on the facts and circumstances of each transaction to determine to attribute the income.

There is a trade-off between, on the one hand, minimising uncertainty and compliance costs for taxpayers and administration costs for the ATO with, on the other hand, ensuring that taxpayers can only claim access to this generous concession to the extent merited by their economic activities. On balance, Option 2 proposes the full transfer pricing approach as it would ensure that the benefits from the patent box are more closely targeted towards the commercialisation of eligible research and development performed in Australia, consistent with the Government's intended purpose for the regime.

3.3.7 IP tax base: Expenses and losses

The BEPS Action 5 Report requires that the tax rate at which expenses and losses are deducted must align with the tax rate at which IP income is taxed. This is known as the symmetrical treatment of income and expenses.

A practical implication of this rule is that expenses associated with generating eligible patents would have to be recorded and then deducted at the effective 17 per cent rate. R&D spending that underpins a patent sometimes precedes the patent income by 10 years or more. This requirement reduces the concessionality of the regime and makes compliance complex for taxpayers and administration resource intensive for the ATO. For this reason, Option 2 proposes to leverage the R&DTI regime for determining R&D expenses. Background on the R&DTI regime is below.

Short Primer on the R&DTI regime

The research and development (R&D) tax incentive encourages companies to engage in R&D benefiting Australia, by providing a tax offset for eligible R&D activities. It has two core components:

- a refundable tax offset for certain eligible entities whose aggregated turnover is less than \$20 million
- a non-refundable tax offset for all other eligible entities.

The ATO and the Department of Industry, Innovation and Science (on behalf of Innovation and Science Australia) jointly administer the R&D tax incentive. Taxpayer R&D activities must be registered with the Department of Industry, Innovation and Science before the tax

offset is claimed, and the ATO determines if the expenditure claimed in the taxpayers tax return for their R&D activities is eligible for the tax offset. For patent box purposes, both core and support R&D activities (defined below) that relate to the eligible patent are included in the nexus fraction.

- **Core R&D activities** are experimental activities where it is not possible to know or determine the outcome in advance on the basis of current knowledge, information or experience. They involve a systematic progression of work, using principles of established science.
- A supporting R&D activity is one that is directly related to core R&D activities or, for certain activities, has been undertaken for the dominant purpose of supporting core R&D activities. Activities that must satisfy the dominant purpose requirement are those that produce or are directly related to producing goods or services or are excluded from being core R&D activities.

Source: ATO and AusIndustry websites

3.3.8 Tax relief (extent and form)

Some countries provide patent box tax relief through a lower bespoke rate targeted to eligible patent box income (e.g. UK patent box rate is 10 per cent). Others apply their normal headline rate to that income, but reduce the final tax that would otherwise be payable (e.g. Switzerland reduces the tax that would otherwise be payable by 90 per cent for one canton).

As described above in Section 1.2.1 (page 7), in the Australian context, the Offshore Banking Unit previously provided a 10 per cent effective concessional rate on certain banking activities through the NANEI approach.

This approach makes part of the income NANEI to achieve the effective tax rate. Using this approach would require Australia to comply with the OECD's rules on deductions being claimed at the same rate as income, meaning the NANEI approach must also be applied to expenses incurred in the development of the eligible patent.

Option 2 proposes using the NANEI approach as it has been previously used effectively in concessional tax regimes.

The BEPS Action 5 report established that ongoing IP expenses also need to be deducted from IP income prior to the application of the concessional tax rate. The rules ensure contemporaneous symmetry in the treatment of IP expenses and income, while achieving symmetry between the treatment of income independent of whether it refers to an ongoing profit or a loss.

This symmetry would be achieved by Option 2 because expenses incurred in developing and maintaining eligible patents undergo the same NANEI approach as income. Part of the expense amount (i.e. deductions) is made NANEI which effectively reduces the tax value of deductions associated with the eligible patent from 30 per cent to 17 per cent (i.e. taxpayers deductions are worth 17 cents in the dollar instead of 30 cents in the dollar).

3.3.9 Qualifying (Eligible) Taxpayer

After the introduction of the BEPS Action 5 minimum standard, the scope of qualifying taxpayers was reduced to resident companies, domestic permanent establishments (PEs) of foreign companies and foreign PEs of resident companies subject to tax in the jurisdiction that provides the benefits. The OECD note that IP regimes may vary regarding the type of firms to which the regime applies.

The two most common company vehicles for storing patents in Australia are a company or a trust. Patents are sometimes not stored in the company that has done (or is doing) the underlying R&D that led to that patent.

Option 2 leverages the definition of an eligible entity available in the R&DTI regime. To be an eligible patent box entity, the taxpayer must satisfy the requirements as defined in the R&DTI regime. The definition of an R&D entity for R&DTI purposes is described below.

You are an R&D entity if you are a corporation that is any of the following:

- incorporated under an Australian law
- incorporated under a foreign law but an Australian resident for income tax purposes
- incorporated under a foreign law and you are both
- a resident of a country with which Australia has a double tax agreement that includes a definition of 'permanent establishment'; and
- carrying on business in Australia through a permanent establishment as defined in the double tax agreement.

Source: ATO website

This provides synergies with the R&DTI regime as stakeholders overwhelmingly reported that they already satisfy the requirements of the R&DTI regime, including the entity definition. It also allows foreign corporates who develop R&D in Australia to qualify. This provides broad coverage of the entities currently engaged in R&D operations in Australia.

3.3.10 Electing into the patent box

A design parameter giving consideration to the costs of compliance associated with the patent box is to allow entities to choose whether to opt into the patent box. This would allow an eligible entity to determine its likely eligibility, analyse the costs and benefits of electing into the patent box, and choose whether and when to elect into the patent box.

This is in line with other tax regimes, namely, the consolidation regime.

3.4 IMPLEMENT MODIFIED VERSION OF ANNOUNCED PROPOSAL (OPTION 3)

Option 3 was developed after the 2021-22 Budget announcement and following public consultation. It modifies Option 2 to take into account feedback from consultation on the proposed specifications that were part of the Government's initial announcement.

The approach taken to consider modifications included:

- ensuring new investments in commercialisation activities are adequately captured so that the policy intention of incentivising new commercialisation investment is achieved;
- reducing compliance costs to access the regime (where possible); and
- responding to design issues considered a priority by stakeholders themselves.

In line with this approach, the Government was presented with two key modifications from the Option 2 design basis (to form Option 3).

3.4.1.1 Eligibility start date

Further analysis into the lifecycle of patents following the Budget announcement revealed long lead times to developing and commercialising patents in the medical and biotechnology sectors. This was supported by feedback from a significant number of stakeholders during consultation that the product development cycles are particularly long in the medical and biotechnology sector.

Reflecting these concerns, Option 3 proposes to expand the eligibility criteria to patents *granted* (and therefore, some patents which may have been applied for before) after 11 May 2021.

Regulatory and policy impact from policy modification

The policy impacts will be greater under option 3 than option 2 as this approach benefits more patents in development, with an increased cost to revenue.

Public consultation revealed that entities generally apply for patent protection for new inventions early in the invention's development. Consultation with IP Australia indicated there is a strong incentive to patent early in the R&D cycle because failure to do so could result in someone else patenting the invention first.

There are long product development cycles in the medical and biotech sectors post patent application, with consultation with stakeholders and Treasury research suggesting that the average time from initial research and development to licensing and regulatory approval is on average 3-7 years for medical devices and 9-12 years for pharmaceutical products¹⁰. IP Australia data indicates a 4-6 year time period exists on average between filing patent applications and (if successful) their granting by IP Australia.

Stakeholders therefore noted that the patent box as announced in Budget would not impact their operations until many years after the start date because patents applied after 11 May 2021 would not be commercialised until the development cycles were completed. Allowing patents applied for up to 4-6 years ago essentially allows for the capture of more new patents currently in development into the patent box regime. By expanding the eligibility criteria to capture patents applied for prior to the Budget announcement, but granted after the Budget announcement, more medical and biotechnology products in the earlier stages of development would be incentivised to commercialise in Australia.

Treasury research and consultations with IP Australia revealed that significant new investment is required between patent application and the granting of a patent (given patent application occurs early). This policy specification will incentivise the commercialisation of more early-stage patents in Australia but does run the risk of rewarding investment that would have occurred in Australia anyway. Both Option 2 and Option 3 would incentivise locating in Australia the investment that is required after a patent is granted to embed a granted patent into a product.

3.4.1.2 Patent filing locations

Option 2 applies to patents filed in Australia. Option 3 instead proposes to expand patent registration criteria to include equivalent patents granted under the Convention on the Grant of European Patents or by the United States Patent and Trademark Office (USPTO).

The patent filing location can be separate to where it is developed and where it is owned. There is often no commercial need to seek patent protection in Australia even where the patent was developed in Australia. A patent holder will seek patent protection in large markets because failure to do so allows a competitor to replicate the invention and compete in that jurisdiction. This would be very costly in large markets such as the EU and the US. Not filing in Australia involves the same risk, but the Australian market is comparatively small such that some firms may not seek patent protection here, considering the time and costs involved of earning and defending a patent if necessary.

In consultation, stakeholders confirmed that a significant number of their Australian designed medical patents are filed overseas, and not with IP Australia. This is due to the relatively smaller market size of the Australian consumer base in contrast to larger jurisdictions such as the US and EU. Further, IP Australia advises that while 75 per cent of medical patents filed by Australian applicants were filed with IP Australia, this increases to 97 per cent once filings in the EPO (known as patents granted under the Convention on the Grant of European Patents) or USPTO are included. IP Australia also advises that the EPO and the USPTO have similar patent approval standards to IP Australia.

Regulatory / policy impact from modification

Including patents filed by Australians with the EPO and USPTO would provide comprehensive coverage of Australian patents in the sector while recognising that adding additional jurisdictions would increase the risk of including a jurisdiction that lowers its patenting standards in the future.

In terms of compliance saving, this policy specification saves businesses who use the patent box patent application and registration fees in Australia for patents already granted by the USPTO or under the Convention on the Grant of European Patents. The IP Australia patent fee schedule is available at <u>Attachment C</u>.

From a policy perspective, this option would maintain the objectives of the patent box in targeting patents developed in Australia, because the research and development activity underlying the patent would still need to be conducted in Australia – it is only the location of filing, not the location of patent development, that has been modified.

4 RECOMMENDATION

4.1 OVERALL IMPACT

This section examines the impact of the three options through a number of lenses: regulatory impact; budget impact; policy impact and risks and disadvantages. Overall, it finds Option 3 to be the preferred Option.

4.1.1.1 Regulatory Impact comparison

A patent box has high compliance costs for companies wishing to access the lower tax rate. However, these costs can be significantly reduced by leveraging some of the compliance requirements businesses already incur to claim the R&DTI or meet the TGA requirements. Participation in the patent box regime is optional, so firms whose costs are high relative to the benefits may elect not to take advantage of the concession. It should also be noted that if Australia did not have a patent box (Option 1) and businesses chose to shift patents offshore to take advantage of patent boxes in other jurisdictions, they would be subject to the compliance costs of these jurisdictions' regimes, as well as the costs associated with the relocation.

The requirement for R&D to occur within Australia requires companies to track R&D expenditure and IP income to the IP asset. This requires detailed record keeping and will need to be scrutinised by the ATO. Further, the patent box will only apply to income earned from eligible IP and not income from marketing, manufacturing or other intangible assets (e.g. manufacturing know-how). It is anticipated that this will require complex transfer pricing or alternative calculation methods to be applied in most instances. Such rules, or any alternative calculation method, will also significantly increase compliance costs.

The regulatory costs of Option 3 are not expected to differ remarkably from the announced design (Option 2) as the tax component of the compliance mechanisms for each option are the same. The ATO has provided an estimate of compliance costs as set out in Table 3. The regulatory cost borne by individuals (including consumers) and community organisations is estimated to be \$0.

However, the ATO has advised that Option 3 would have lower non-tax compliance costs than Option 2 as businesses would not be required to maintain a patent in Australia in order to access the concession. That said, non-tax costs are <u>not</u> captured in the quantified assessment.

There would be little compliance saving gained by allowing medical products listed in foreign TGA equivalent registers to be included in the patent box. Stakeholders reported it is exceedingly uncommon for an Australian designed medical product to be registered overseas (e.g. by the FDA in the US) but not in Australia (i.e. by the TGA), unlike decisions around patent filing locations. This is because to sell a product in any given jurisdiction, the

entity is required to have regulatory approval from that jurisdiction (i.e. from a TGA equivalent), but the patents that underpin the products can be filed in any location. This is why the Government was presented with the option for the patent box to only apply to medical products listed on the TGA List of Therapeutic Goods (no foreign registers).

Table 3: Estimated compliance costs (Option 2 and 3)

	` I
Implementation	\$5,077,131
Ongoing (per annum)	\$1,697,060
Aggregate impact over 10-year	\$22,047,728
duration	
Per year (10 years)	\$2,204,773

The impacted population estimates of small, medium and large companies were derived by the ATO's Revenue Analysis Branch using the list of Australian Business Numbers (ABN) holding relevant patents provided by Treasury. The number of hours required for each taxpayer to adapt to the proposal was then estimated based on the qualitative assessment of the proposal's impacts and a compliance cost survey conducted in 2015. The total number of hours are multiplied by an OBPR rate of \$73.05 per hour to arrive at the compliance cost estimates.

4.1.1.2 Policy Impact Comparison

A patent box (Option 2 or 3) would help retain high value IP in Australia. The proposed patent box would make Australia's tax settings more competitive and reduce the incentive for companies to offshore high value IP. Any offshoring that is prevented would help to prevent the erosion of the corporate tax base. However, OECD requirements prevent patent boxes from encouraging foreign-designed IP to relocate to Australia.

A patent box would also encourage further R&D. Although currently an R&D leader, Australia faces increasing global competition. By decreasing tax on IP-related income, the patent box would increase the return on R&D investment. This would ensure that over time Australia lost fewer R&D projects to other countries – and that where R&D is supported through Australian government support, the return on government spending on R&D would be increased (i.e. the patent box improves the efficacy of R&DTI). As the proposal only applies to new IP, the patent box specifically encourages R&D. The concessional rate would also encourage the patenting of existing trade secrets, which would increase knowledge sharing. However, these proposals will not directly encourage onshore production, marketing or branding of Australian designed IP goods as the OECD rules mandate these income components be excluded.

Patent boxes focus on the commercialisation rather than initial investment. As a result, they increase the after tax returns to successful innovations and hence make Australia a more attractive location for these investments. Patent boxes do not provide benefits to R&D that is not commercially successful. The R&DTI is an existing Australian tax measure that provides a benefit to firms that undertake R&D in Australia, irrespective of the commercial success of that R&D.

Evidence presented in Section 3 determined that additional in-development patents captured in Option 3 (beyond those captured in Option 2) are likely to benefit early-stage patents that still have commercialisation investment decisions pending, where tax is a factor in determining whether the investment proceeds.

4.1.1.3 Risks and disadvantages

The patent box (Option 2 or 3) is likely to increase tax planning opportunities for companies by providing a lower rate on certain income. Companies may attempt to patent marginal innovations in order to have more income taxed at the lower patent box effective rate rather than at the higher corporate tax rates (this income would have been taxed at the relevant headline rate). This may erode corporate tax revenues and offset some of the tax revenue gains from retaining higher value patents that might have otherwise been offshored. That said, any marginal innovation would still need to satisfy examination by IP Australia, which is an advantage of leveraging existing regulatory standards.

Targeting the effective lower rate to income attributable to eligible IP will rely on transfer pricing mechanisms. Taxpayers may end up in disputes with the ATO. That said, the ATO is well practiced at administering transfer pricing rules to ensure appropriate income attribution occurs. Most taxpayers engaged in overseas related party dealings have experience dealing with the ATO on transfer pricing matters.

The OECD FHTP member jurisdictions may (via consensus) declare the patent box to be not compliant with the Action 5 minimum standard, deeming it a 'harmful tax practice'. This risk, however, is regarded as very low since the regime was designed with the aim of following the OECD guidelines specified in the BEPS Action 5 Report and there has been significant consultation with the Secretariat of the OECD FHTP.

For IP that would be commercialised in Australia regardless of the patent box, companies would receive a tax windfall gain due to their access to the concessional rate.

4.2 OVERALL RECOMMENDATION

The main benefits and costs of each option are depicted in Figure 5 below. As this indicates, on balance, Option 3 is the preferred option. It addresses the identified problem more effectively than Option 2 as it has a lower regulatory burden. It also captures more new patents currently in development. Based on the factors identified in the qualitative comparison in Figure 5, it is likely to have the strongest net positive impact for Australia out of the three options.

Option 3 provides the highest likelihood that the patent box will achieve its aim. The difference in the effective tax rate between Australia and other jurisdictions will be reduced, as will the incentive to offshore valuable patents for a sector rich in patents. This in turn should ensure that tax becomes less of a factor in medical and biotechnology businesses making decisions about where to conduct R&D and commercialise successful patents.

Figure 5: Heat Map summarising the net benefits of each option

RIS Heat Map	Option 1 Status quo (no concession)	Option 2 Budget announcement proposal	Option 3 Modified proposal (design reflecting public consultation on Budget announcement)
Improves Australia's international tax competitiveness			
Incentivises research and development in Australia			
Likely cost to revenue			
Increases regulatory cost/compliance burdens			
Incentivises commercialisation in Australia			

5 CONSULTATION

5.1 SIX-WEEK PUBLIC CONSULTATION ON PATENT BOX FOR MEDICAL AND BIOTECH SECTOR

Treasury released a discussion paper⁹ on the design of the patent box on 5 July 2021 as part of its six-week public consultation process. Approximately 48 written submissions were received from a range of stakeholders, including in the medical and biotechnology industries, low emissions sector, tax advisory firms, Commonwealth agencies and universities. The variety and volume of submissions received indicated a high level of interest in the policy.

In its consultation paper, Treasury put forward 29 discussion questions to the public. Treasury reached out to 12 stakeholders before releasing the discussion paper to test if these questions were relevant for their sector and covered the key issues. The final published questions focused on the following topics:

- 1. Eligible IP to enter the patent box
- 2. Targeting medical and biotechnology
- 3. Low emissions technologies
- 4. Applying the substantial activity requirement
- 5. Definition of R&D
- 6. Implementation and start date
- 7. Eligible revenue to enter the patent box
- 8. Subtraction of related patent expenses from eligible revenue
- 9. Treatment of losses and related offsets with the patent box
- 10. Administration and compliance
- 11. Other considerations

The full discussion paper can be found here:

https://treasury.gov.au/sites/default/files/2021-07/c2021 177849.pdf

While some of the views put forward by stakeholders were considered in line with the policy intent and adopted into the proposed policy design for the patent box, several other proposals were not incorporated as they were considered to bear disproportionate integrity risks and potential revenue costs.

The key messages from stakeholders have been summarised below (views from stakeholders on the inclusion of low emissions and clean energy technologies are not in scope for this RIS as the Government has not made any policy decision on their inclusion). The issues raised overlap heavily with the key design options discussed in the Option section.

Key themes from submissions

- Expand eligibility to include at least some patents applied for before the Budget announcement.
- Expand eligibility to include patents filed outside of Australia in certain foreign jurisdictions (on the basis of eligible R&D having been undertaken in Australia before commercialisation).
- Expand eligibility criteria to include wider types of intellectual property.
- Leverage the existing R&DTI regime as a nexus for compliance purposes.
- Overseas clinical trials should be included in eligible R&D with respect to the nexus fraction.
- Some form of manufacturing returns should be eligible for the patent box concessional rate.
- Patent income should be grouped by a whole-of-product approach.
- Make the patent box concessional tax rate lower than 17 per cent.

5.1.1 Expand eligibility to include some patents applied for before the Budget announcement.

Stakeholders conveyed that there are long product development lifecycles in the medical and biotechnology sectors, with certain industry stakeholders claiming it takes on average up to 9 – 12 years to develop pharmaceutical products⁵. Consequently, there was strong support for expanding eligibility dates for the regime from patents applied for after 11 May 2021 (as announced at Budget) to an earlier date, or to patents granted after 11 May 2021. Treasury considered this in designing the policy and is now proposing that eligible patents be those granted after 11 May 2021 (meaning, they were applied for prior to the date).

5.1.2 Expand eligibility to include patents filed outside of Australia in certain foreign jurisdictions.

Stakeholders in the industry argued that limiting the patent box to patents filled in Australia would exclude a majority of the commercialisation revenue of Australian-owned IP.

Some stakeholders suggested that eligibility be expanded to include patents filed in the IP5 jurisdictions (European Union, Japan, USA, South Korea, China), which together handle around 85 per cent of the world's patent applications. However, most stakeholders

indicated that just expanding to the United States and European Union as patent locations would capture most existing and emerging patents since they are the largest markets.

IP Australia advised that patents filed under the European Patent Convention (UPC) and with the United States Patent and Trademark Office (USPTO) face comparable examination standards to patents filed under IP Australia. Examination from a patent office ensures a potential patent contains the necessary inventive step to be granted as a patent.

5.1.3 Expand eligibility criteria to include wider types of intellectual property.

The inclusion of wider types of intellectual property and qualifying assets was suggested by several stakeholders. Stakeholders pointed to foreign jurisdictions such as the Netherlands which allows 'copyrighted software' as a qualifying IP asset in its patent box regime. Other suggestions included expanding criteria to allow trade secrets and plant breeders' rights in the patent box. The Government was presented with the option to target the regime to patents only.

5.1.4 Leverage the existing R&DTI regime as a nexus for compliance purposes.

Most stakeholders noted that the R&DTI framework is robust and appropriate for R&D expensing purposes and that it would not be difficult to add another layer of analysis to confirm that the expenditure would relate to a future patent or product that is generating revenue. Some stakeholders simply noted that the R&DTI is a good starting point for a compliance system.

However, there was also strong support for including overseas R&D which is conducted either via an unrelated party or a 'positive advance' finding, and some support for using a definition broader than the R&DTI to capture non-experimental R&D. Stakeholders also provided insight into their record-keeping processes, noting that large company processes can capture offshore R&D expenditure separately to domestic R&D expenditure, although this is not always the case. One stakeholder noted that all firms will need lead time to implement a system that adapts the R&DTI expensing and recording system for patent box purposes. The Government was presented with the option to leverage the R&DTI regime.

5.1.5 Overseas clinical trials should be included in eligible R&D with respect to the nexus fraction

There was some support for overseas clinical trial costs undertaken in the R&D stages of a project to be included in the R&D nexus fraction, where those trials could not be conducted in Australia due to the lack of expertise, access to equipment, quarantine regulatory requirements, capacity constraints within the supply chain and low population size in Australia.

As stated in Section 3 Options and Impact, the Government was presented with the option to not include overseas clinical trials owing to advice from the OECD Forum of Harmful Tax Practices Secretariat that according to the BEPS Action 5 report, the inclusion of overseas

clinical trial costs in eligible R&D costs is not permitted. This advice was received during targeted consultation.

5.1.6 Some form of manufacturing returns should be eligible for the patent box concessional rate.

Nearly all industry stakeholders argued that including manufacturing returns in the patent box would increase the policy impact of the measure. There was support in eight submissions for providing the patent box concession to manufacturing activity.

It was noted that many stakeholders do not seek patents on its manufacturing processes. Most manufacturing processes are kept highly confidential in the form of trade secrets. It is generally difficult to enforce an IP right over a manufacturing process when the use of that process is not identifiable in the finished product.

5.1.7 Patent income should be grouped by a whole-of-product approach.

Stakeholders reported that most of their medical and biotech products comprise of a group of related patented innovations. As such, these stakeholders supported the adoption of a whole-of-product approach for grouping patent income. This would mean that an entity's revenue flow from the sale of products and patent licencing could be used as the starting point for determining eligible revenue.

It was contended that instead of carving apart a single product (and a single revenue stream) into components, the R&D fraction (i.e. the "nexus ratio") should be applied on a whole-of-product basis.

5.1.8 Make the patent box concessional tax rate lower than 17 per cent.

Many stakeholders argued for a lower patent box rate, contending that the proposed tax rate of 17 per cent is high by international patent box standards. Some stakeholders were aware of the OECD global minimum tax rate discussions but argued the rate should be lowered even if it were to fall below that, at least until the global minimum rate is implemented.

5.1.9 Views on expanding patent box to low emissions sector

Treasury sought views on the potential expansion of the patent box to low emissions technologies and whether it is an effective way to support the development of these technologies in its discussion paper. The Government has not made any decision on the inclusion of low emissions technologies in the patent box and therefore, views on it are not included in this RIS.

5.2 OUTCOMES OF TARGETED CONSULTATION ON EXPOSURE DRAFT LEGISLATION

In December 2021, Treasury conducted targeted consultation on the patent box exposure draft legislation with:

- three significant companies in the industry;
- the OECD Secretariat supporting the OECD FHTP; and
- three major accounting firms which provide tax advice to the relevant industry.

Treasury received a variety of feedback and has implemented some changes to the draft legislation to address feedback where necessary appropriate.

5.2.1 Feedback from industry stakeholders

All three industry stakeholders strongly supported the two significant expansions to the patent box since the Budget announcement, these being the inclusion of patents issued by the USPTO or granted under the EPC, and patents granted after 11 May 2021, rather than only those applied for after this date.

All three stakeholders argued that a formulaic or safe harbour approach to determining which income is eligible for the patent box is preferable to relying on OECD transfer pricing principles. Notwithstanding this preference, all stakeholders understood that a formulaic method would need to produce outcomes consistent with OECD transfer pricing guidelines and would be concessional for some product-lines and punitive for others, due to the unique nature and wide variation in the value of particular patents.

All stakeholders noted the legislation was highly complex.

In response to feedback from stakeholders, the Government was presented with the option to make the following changes to the legislation:

- Clarify the intended operation of the transfer pricing rules when apportioning income attributable to eligible patents. This change will increase flexibility as long as taxpayers make apportionments on a 'reasonable' basis.
- Adjust the wording around the link between patents and the Therapeutic Goods Register (TGR) to ensure all relevant inventions are captured. The exposure draft wording was unnecessarily narrow and unclear where a good on the TGR is covered by multiple patents.
- Expressly provide for milestone payments to make it clear that such payments are able to benefit under the patent box.

5.2.2 Feedback from the OECD Forum on Harmful Tax Practices (FHTP) Secretariat

The OECD FHTP periodically conducts reviews of preferential regimes, such as patent boxes, to determine if the regimes could be harmful to the tax base of other jurisdictions.

As a member of the OECD, it is important Australia complies with the OECD guidelines as it is subject to these reviews.

Ensuring compliance with OECD guidelines was a key factor in the policy design of Australia's patent box. Treasury consulted with the FHTP Secretariat to ensure the patent box was compliant and to address any issues identified. The FHTP member jurisdictions will decide on a finding of compliance or non-compliance for the regime by consensus, after considering the FHTP Secretariat's analysis of the legislation.

5.2.3 Advice from firms which provide tax advice to industry

Treasury consulted with three major accounting firms who provide tax advice to companies in the medical and biotechnology industry, and are therefore familiar with the technical and operational implications of tax policy, as well as familiar with the industry due to experience working with a range of companies in the medical and biotechnology sectors. A fourth firm was contacted but was unavailable to engage.

The key messages received were:

- One firm expressed support for the 30 per cent uplift on qualifying expenditure and noted it conformed to the OECD guidelines. It was also noted that a large component of R&D expenditure is undertaken offshore due to clinical necessities, and it was suggested that the government reconsider applying a higher uplift factor to Australian-based R&D, in contrast to the uplift provided to foreign R&D.
- A lack of clarity in a certain provision of the legislation relating to the identification of patent box income stream was raised by another firm. Consequently Treasury clarified the intent in the Explanatory Memorandum for the legislation.
- One of the firms consulted noted that there is potential that the compliance costs involved would be significant for a company that elected into the patent box in light of the requirement that transfer pricing principles be used. It was suggested that the legislation include an option for companies to use a safe-harbour method or formulaic approach.

6 IMPLEMENTATION AND EVALUATION

The preferred option (option 3) will require legislative changes to Australia's tax laws.

In relation to implementation, the ATO would be responsible for administering the regime in terms of reviewing and auditing tax self-assessments of taxpayers. AusIndustry will maintain its role in determining whether an R&D activity is an eligible R&DTI activity for all entities involved in the R&DTI regime whether or not they are accessing the patent box.

The implementation of the policy will require record keeping updates for industry and broadly require learning for each entity's Head of Tax. Companies below the Small to Medium size threshold of \$50 million will likely require advice from tax advisers.

The ATO will monitor the functionality of the patent box regime. Treasury will receive feedback from stakeholders on the operation of the regime. Treasury will also continue to work with the ATO to identify any integrity risks that may arise from the preferred option, and to the extent such risks are identified, we would seek to progress consequential amendments to ensure they are consistent with the policy intent.

In relation to Government implementation, all eligible entities will be able to elect into the patent box, and ATO Taxation Statistics data will be provided to Treasury so that the take-up of the regime over time can be understood.

A proposed implementation timeline is provided in Table 4.

Table 4: Proposed Implementation timeline

Approximate date	Work Item
11 May 2021 (Budget night)	High level Budget announcement of the patent box and flagging
	consultation
June 2021	Pre-consultation with twelve stakeholders to inform the
	upcoming consultation's discussion paper
5 July 2021 – 16 August 2021	Six weeks formal consultation period
August – October 2021	Policy development
October – November 2021	Legislative design development
November – December 2021	Legislative drafting
November – December 2021	Consultation on legislative approaches
10 January 2022	Q&A of the legislation and development of Parliamentary
	introduction documents
8 February 2022	Legislative introduction
January – July 2022	Development of ATO guidance (ATO determine precise timing)
1 July 2022	Start of first financial year of regime's operation

7 REFERENCES

- (1) Australian Government (2020), Guide to Regulatory Impact Analysis
- (2) OECD: Measuring Tax Support for R&D and Innovation
- (3) HMRC: Patent Box Evaluation
- (4) Gaessler, Hall & Harhoff: Should there be lower taxes on patent income?
- (5) Institute for Fiscal Studies: Simulating the Effect of Patent Boxes
- (6) Ciaramella: Patent Boxes and the Relocation of Intellectual Property
- (7) Patent Box Policies (industry.gov.au)
- (8) OECD Guidelines on BEPS Action 5: Harmful Tax Practices
- (9) Treasury, Patent Box: Discussion Paper on Policy Design (July 2021)
- (10) <u>Drugs, Devices, and</u> ... ~https://www.sciencedirect.com/science/article/pii/S2452302X16300183
- (11)Submissions received in response to Treasury's Patent Box to be made public on:

 Patent Box | Treasur...~https://treasury.gov.au/consultation/c2021-177849
- (12) Productivity Commission: Econometric Modelling of R&D and Australia's Productivity
- (13)CSIRO: Quantifying Australia's returns to innovation

Attachment A – Comparison of 'patent box' regimes of United Kingdom, Switzerland and Singapore (technical options)

Topic	United Kingdom Patent Box	Switzerland Patent Box	Singapore - Intellectual Property Development Incentive (IDI)
1. Qualifying IP assets	 Qualifying IP assets include: Patents granted by the UK, EU or certain EEA countries. Supplementary protection certificates granted by the UK or EU. Plant breeders' rights granted by the UK or EU. Marketing authorisation granted under certain UK and EU regulations. Full details are in sections 357BB and 357BBA of the Corporate Tax Act 2010. 	 Qualifying IP assets include: Swiss patents European patents with designation of Switzerland; Patents for inventions in other jurisdictions, utility models*; and comparable IP rights such as supplementary protection certificates and regulatory data protection for pharmaceutical products and pesticides. See Swiss legislation (OECD English version) for full list of qualifying 'similar rights'. *Note: Utility Models are the equivalent of Australian Innovation Patents. 	Qualifying Intellectual property rights (IPRs): • A patent; • An application for a patent; • A copyright subsisting in software; or • A "family" of qualifying IPRs (see below). Family of qualifying IPRs Two or more IPRs may be grouped into a "family" if either the expenditure or the income of the IPRs cannot be reasonably identified or separated from each other, i.e., it is interlinked. A "chain rule" further applies where two IPRs are part of a chain of three or more qualifying IPRs each of which is interlinked with another. The grouping of the family of IPRs is critical in the calculation of the nexus ratio. Note: Full details are available in Singapore legislation and Regulations (known as subsidiary legislation). The subsidiary legislation sets out the details on the application of the IDI, such as the percentage and computation of qualifying IP income subject to concessionary rate of tax, change in composition of elected family of qualifying intellectual property rights (IPRs), application of deemed income and record-keeping requirements.
2. IP Development	Nexus ratio: $\frac{(D+S1)\times 1.3}{D+S1+S2+A}$ D = qualifying expenditure on relevant R&D	Nexus ratio The modified nexus ratio is calculated as the ratio of Swiss R&D expenses and R&D expenses contracted to third parties multiplied by 130% (30%)	Nexus ratio The percentage of qualifying IP income from an elected qualifying IPR is determined by the nexus ratio (C x 130%)/C+D where:
conditions	undertaken in-house, including expenditure: Incurred on staffing costs Incurred on software or consumable items Incurred on externally provided workers	uplift), divided by the overall global R&D expenses, including the costs of acquiring the IP. The qualifying income (direct patent income or embedded patent income, i.e., income attributable	C = Qualifying expenditure: Includes R&D carried out directly by the IDI company, qualifying outsourced R&D, and payments under cost-sharing agreements (CSAs); and

	Incurred on relevant payment to the subjects of clinical trials S1 = qualifying expenditure on relevant R&D subcontracted to unconnected persons S2 = qualifying expenditure on relevant R&D subcontracted to connected persons A = qualifying expenditure on the acquisition of relevant qualifying IP rights, including exclusive license	to a patent, by-product, or product family determined based on the residual approach), multiplied by the modified nexus ratio, results in the income qualifying for tax relief of up to 90%. Documentation duties Swiss legislation instructs the Swiss Federal Council to issue further provisions for documentation duties.	D = Nonqualifying expenditure: Includes acquisition costs, licensing, amalgamation, buy-in payments for CSAs, and nonqualifying outsourced R&D, etc. The nexus ratio focusses on establishing a nexus between cumulative expenditure, the family of IPRs, and the associated income by apportioning overall qualifying income from the family of qualifying IPRs according to the above ratio of expenditure.
	Full details are in sections 357BLA, 357BLB, 357BLC, 357BLD and 357BLE of the Corporate Tax Act 2010.		Note: In the absence of records, transitional modifications to the calculation of the modified nexus ratio are available (see source)
3. Qualifying income	The following are included in qualifying IP income: Sales income (sale of embedded goods) License fees Proceeds of sale (sale of IP) Damages for infringement Other compensation (from infringement) Subject to the following exclusions: Income arising from oil extraction activities or oil rights Income attributable to non-exclusive licences Full details are in sections 357BH and 357BHB of the Corporate Tax Act 2010. Marketing returns are excluded using standard transfer pricing rules. Small businesses can instead use safe harbour mechanisms to calculate marketing returns, namely 25% of the overall return. Other returns (inc. manufacturing) are calculated using a normal return on 10 per cent on specific expenses.	The profits attributable to the patent box can include royalties, capital gains from the sale of the patent. Qualifying income is direct patent income, or embedded patent income (i.e., income attributable to a patent, by-product, or product family determined based on the residual approach), subject to the modified nexus ratio (see source). Where the IP is contained in a product, the box profit is calculated by using the residual method, i.e. by deducting income for routine functions (equal 6% of the product costs) and brand fee (ad hoc) from the net profit of the product (see source). Manufacturing The Swiss patent box essentially applies to manufacturing activity minus a 6 per cent return. This would mean any manufacturing with returns above 6 per cent would benefit from the regime.	Qualifying IP income refers to royalties or other income receivable by the approved IDI company as consideration for the commercial exploitation of an elected qualifying IPR. Manufacturing Singapore provide equivalent manufacturing tax relief through the Pioneer Certificate Incentive (PC) and Development and Expansion Incentive (DEI) (see source). An approved company* under the PC or DEI is eligible for a corporate tax exemption or a concessionary tax rate of 5 per cent or 10 per cent, respectively, on income derived from qualifying activities (see source). IP income was in the PC and the DEI pre-BEPS (see source). Note: The DEI and PC are administered by the Economic Development Board (EDB) and awarded to companies making significant economic contributions to Singapore.

4. Qualifying Profits and Losses	Full details are in sections 357BJ and 357BK of the Corporate Tax Act 2010. If an IP stream generates a loss in accounting periods from the point an IP asset is granted or an entity elects into the patent box regime, this must be carried forward as a set-off amount. Eligible income can only receive concessional treatment if the set-off amount has been reduced to zero. A company may also elect, for each IP steam, for all IP profits and losses in that IP stream, for the period in between the IP protection is applied for and granted, to be included in the patent box calculation for the first accounting period after the IP protection is granted. Full details are in sections 357CQ and 357EC of the Corporate Tax Act 2010.	The net profit from patents and similar rights contained in products is calculated by subtracting 6% of the costs allocated to these products from the net profit from these products as well as the remuneration for trademarks. Entry into the patent box is linked to a "buy-in" mechanism in which the qualifying R&D costs over the last 10 years, which were deducted from the taxable base, need to be taken into account. In Zug and Zurich, these entry costs may be offset against patent box profits in the first five years. In Basel, the entry costs are taxed at a very low rate (0.5%) in the first year (see source).	Full details are available in Singapore legislation and Regulations (known as subsidiary legislation). The subsidiary legislation sets out the details on the application of the IDI, such as the percentage and computation of qualifying IP income subject to concessionary rate of tax, change in composition of elected family of qualifying intellectual property rights (IPRs), application of deemed income and record-keeping requirements.
5. Tax Relief (extent and form)	There is no limit on the extent of relief a taxpayer may receive from the patent box. The concession takes the form of a tax deduction calculated to provide the taxpayer an effective 10% rate on relevant IP profits in an accounting period. Full details are in section 357A of the Corporate Tax Act 2010.	Tax relief of up to 90 per cent of patent income, subject to an overall maximum deduction of 70% of taxable profit (when factoring the R&D super deduction of 150% of the eligible R&D base).	Preferential tax rate 5 per cent or 10 per cent granted for eligible income (depending size of investment promised and incremental jobs created)). Achieved via tax reduction formula (see Singapore legislation). The concessionary tax rate will also increase by 0.5% at regular intervals as prescribed in the Income Tax Act. The incentive period is limited to an initial period not exceeding ten years, and may be further extended for a period or periods not exceeding ten years each (source).
6. Qualifying (Eligible) Taxpayer	All companies are eligible. Full details are in section 357B of the Corporate Tax Act 2010.	Corporation or cooperative. See English version of legislation provided by the OECD.	A company approved must be approved by minister or delegate to receive the lower rate. Non-eligible income must be in a separate company account.

	UK previously allowed patents to be held by 'holding companies', but this was not allowed under the revised UK patent box. This may indicate that OECD rules don't allow for entities beyond companies.		
7. Industry definitions	The oil industry is excluded, with definitions tied to activity rather than the IP asset. Full definitions can be found in sections 272 and 273 of the Corporate Tax Act 2010.	Applies to whole of economy.	Applies to whole of economy.

Attachment B: Patent box rate and design

- Rate and Discount: The average rate is around 9 10 per cent and the average discount from the headline rate is around 13 15 per cent.
- Base: All countries apply their IP regimes to patents. Many apply it to software. Some apply it to plant variety rights, industrial designs and models and circuit topography. A few countries apply it to medicine rights, such as market authorisations by regulators (e.g. Therapeutic Goods Administration equivalents). Some apply it to IP in small and medium businesses that are patentable (but not necessarily patented).
 - A few countries apply additional restrictions based on R&D expenditure, employment or tying it to other declarations such as R&D tax incentives.
- **Definition of income:** All countries use net income. This typically includes royalties, licence fees, embedded royalty income in the sale of goods and services, income from the sale of IP and damages. However, some countries exclude capital gains and others countries exclude embedded income.
- All countries in the table exclude acquisitions of IP from the patent box consistent with OECD guidelines. However improvements after acquisition will be included provided taxpayer undertakes the R&D.
- All countries in the table apply the modified nexus approach, adjusting profits from IP by the proportion of R&D that occurred in the country (or contracted to unrelated parties). Most countries allow local expenditures in this ratio to be uplift by a 30 per cent factor up to the total spent on the IP.

Country	PB Rate (per cent)	Corporate rate (per cent)	Discount (per cent)	Types of IP	Definition of income
Belgium	4.44	29	24.56	 Patents Software Plant variety rights Orphan Drugs Data and marketing exclusivity 	 Royalties Licence fees Embedded income Capital gains Damage
Luxembourg	4.99	24.95	19.95	PatentsSoftwarePlant breeders' rightsOrphan drugs	RoyaltiesEmbedded incomeDamages
Lithuania	5	15	10	PatentsSoftware	 Royalties Licence payments Damages Other income from use or transfer of IP
Poland	5	19	14	PatentsSoftwareIndustrial designs	RoyaltiesEmbedded incomeGains from sale of IP

Country	PB Rate (per cent)	Corporate rate (per cent)	Discount (per cent)	Types of IP Circuit topography Plant Breeders Rights Medicine or veterinary rights	Definition of income • Damages
Turkey	0 – 11	22	11 - 22	 Patents Software Patentable innovations by SMEs* 	 Royalties Licence fees Embedded income Income from sale of IP Damages
Ireland	6.25	12.5	6.25	 Patents Software Plant Breeders' rights. Patentable innovations by SMEs* 	RoyaltiesEmbedded incomeDamages
Netherlands	7	25 (15 for SMEs)	8 - 18	 Patents Software Plant Breeders' rights IP where R&D declaration has been issued. Market authorisation of a medical product. Patentable innovations by SMEs* 	Profit from innovation* connected to a R&D certificate
Singapore	5-10	17	7 - 12	PatentsSoftware	Royalties or other income receivable by the approved IDI company as consideration for the commercial exploitation of an elected qualifying IPR.
Israel	6 – 12	23	11 - 17	 Patents Software Medicines registered under the IPO Patentable innovations by SMEs* 	Net royaltiesEmbedded incomeDamages

Country	PB Rate (per cent)	Corporate rate (per cent)	Discount (per cent)	Types of IP	Definition of income
UK	10	19 (25 from 1 April 2023)	9 (15)	 Patents Plant variety rights Human and veterinary medicine rights (such as marketing authorisations) 	RoyaltiesEmbedded incomeDamages
Spain	10	25	15	PatentsSoftwareDesigns and ModelsSecret formula or processes	Income from licencing or transfer of IP
Switzerland	Approx. 9 – 12	Approx. 12 – 21	n.a.	 Patents Topographies Plant varieties Document protection as per the Swiss Therapeutic Products Act 	RoyaltiesEmbedded incomeCapital gainsDamages
France	10	28	18	 Patents Software Plant variety certificates Processes directly related to the patent Patentable innovations by SMEs* 	 Royalties Licence Fees Capital gains on the sale or transfer between unrelated parties.
Greece	10	24	14	• Patents	-
Korea	5 – 18.75	10 - 25	2.5 – 12.5	PatentsPatentable innovations by SMEs*	Income from the sale or transfers
Portugal	10.5	21	10.5	PatentsSoftwareIndustrial designs and models.	Income derived from the use or exploitation of patents
Slovak Rep	10.5	21	10.5	PatentsSoftware	RoyaltiesEmbedded income
India	10.3 - 11.85	30.91 – 35.54	Around 20 - 25	• Patents	RoyaltiesLicence fees
Italy	12 + 1.95 IRAP	24 + 3.9 IRAP	13.95	PatentsSoftware	RoyaltiesEmbedded income

Country	PB Rate (per cent)	Corporate rate (per cent)	Discount (per cent)	Types of IP	Definition of income
				 Designs and models Processes, formulas related to business, commercial and scientific knowledge 	Capital gains
China	15	25	10	PatentsSoftwarePlant variety rightsCircuit layouts	-

Attachment C – IP Australia patent fees (IP Australia website)

Last updated:

1 January 2022

This page sets out some of the basic fees associated with patent applications. A full list of fees* is available in Schedule 7 of the *Patent Regulations 1991*.

Fees are payable at different stages through the patent process and will depend on the type of application you are making.

It is important to remember that these are the fees our office charges for each action. You should expect additional costs if you are using legal representation.

Fees are subject to change. GST does not apply to these statutory fees under division 81 of the <u>Goods</u> and Services Act 1999.

Fees may vary depending on how you apply and your chosen payment method, with online filing channels and payment methods typically being cheaper. Different filing and payment options are offered to ensure our services remain available to everyone, regardless of their access to our online services. The distinction between these options is referred to as 'preferred or other means' and shown in the tables below as 'online services' and 'other means'. More information on preferred or other means can be found here.

Application fees

The application fees you need to pay will depend on the type of patent you apply for.

If you file an application and do not pay the filing fee within two months your application will lapse.

The first fee is if an application is filed through <u>online services</u>. The second is if an application is filed by other means (e.g. post).

Schedule 7 item	Action	Fee (online services)	Fee (other means)
201	Provisional patent application	\$110	\$210
203	Standard patent application	\$370	\$570
202	Innovation patent application (divisional only)	\$180	\$380
214A	National phase entry (a standard patent application after going through the Patent	\$370	\$570

Schedule 7 item	Action	Fee (online services)	Fee (other means)
	Cooperation Treaty application process)		

Renewal fees

Annual renewal fees must be paid on all standard and innovation patent applications if you want them to remain in force. The cost will vary depending on the type of patent and the number of years that have passed since you filed it. These fees are usually due on or before the anniversary of the filing date of your application.

It is up to you to pay on time. Patent protection will stop if the renewal fee is not paid.

It is important that you keep your contact details up to date by using our online services.

Standard patent renewals

Schedule 7 item	Action	Fee (online services)	Fee (other means)
211	4th anniversary	\$300	\$350
211	5th anniversary	\$315	\$365
211	6th anniversary	\$335	\$385
211	7th anniversary	\$360	\$410
211	8th anniversary	\$390	\$440
211	9th anniversary	\$425	\$475
211	10th anniversary	\$490	\$540
211	11th anniversary	\$585	\$635
211	12th anniversary	\$710	\$760
211	13th anniversary	\$865	\$915
211	14th anniversary	\$1050	\$1100
211	15th anniversary	\$1280	\$1330
211	16th anniversary	\$1555	\$1605
211	17th anniversary	\$1875	\$1925
211	18th anniversary	\$2240	\$2290
211	19th anniversary	\$2650	\$2700
211	20th anniversary (pharmaceutical patents only)	\$4000	\$4050

Schedule 7 item	Action	Fee (online services)	Fee (other means)
211	21st anniversary (pharmaceutical patents only)	\$5000	\$5050
211	22nd anniversary (pharmaceutical patents only)	\$6000	\$6050
211	23rd anniversary (pharmaceutical patents only)	\$7000	\$7050
211	24th anniversary (pharmaceutical patents only)	\$8000	\$8050
211	Renewal payment late fee	\$100 for each month, or part thereof that the fee is late (up to six months).	

Innovation patent renewals

Schedule 7 item	Action	Fee (online services)	Fee (other means)
212	2nd to 4th anniversaries	\$110	\$160
212	5th to 7th anniversaries	\$220	\$270
212	Renewal Payment Late Fee	\$100 for each month, or part thereof that the fee is late (up to six months).	

Examination and searches

Fees are payable for examination for both standard and innovation patent applications.

Schedule 7 item	Action	Fee
	Preliminary search and opinion (PSO)	\$950
205	Standard patent examination request	\$490
207	Innovation patent examination request (applicant)	\$500
208(a)	Innovation patent third party examination request (third party payment)	\$250
208(b)	Innovation patent third party examination request (applicant payment)	\$250
210	Re-examination request	\$800

Innovation patents

<u>Innovation patents</u> do not have to be examined. You can choose to keep your patent as an unexamined innovation patent and never request examination. If competitors request examination of your innovation patent, they have to pay half of the examination fee and you will have to pay the other half. If you do not pay, your patent will cease.

The Australian Government has begun the process of phasing out the innovation patent. Applicants can only apply for innovation patents in limited circumstances for the next 8 years. This includes through divisional applications and the conversion of a standard patent to an innovation patent. This can only occur if the parent application was filed before 26 August 2021. You can learn more about the phase out of the innovation patent here.

Standard patents

<u>Standard patent</u> applications must be examined. You must request examination and pay the examination fee within five years of your filing date. If you haven't requested examination yourself, you may be directed to request examination and pay the examination fee anywhere up to 55 months from your earliest priority date. In this case, you will be given two months to request examination. If you fail to request examination and pay the fee within the required period your application will lapse.

Both innovation and standard patents must be examined before you can enforce your rights.

Acceptance and excess claims

An acceptance fee is only applicable for a standard patent.

Schedule 7 item	Action	Fee
213(a)	Standard patent acceptance	\$250
213(b) If the specification contains more than 20 claims at acceptance	The sum of:	
	20 claims at acceptance	(a) \$250; and
		(b) \$125 for each claim in excess of 20, up to and including the 30th claim; and
		(c) \$250 for each claim in excess of 30 (if any)

Voluntary amendments

Amendments to a patent application will incur a fee if they are made at either of these stages:

- before you request examination
- after the standard patent application has been accepted.

There is no fee for filing a voluntary amendment on a provisional application. It is also free to amend an innovation or standard patent application after examination has been requested.

Schedule 7 item	Action	Fee
222	Amend standard patent specification before examination or after acceptance	\$250
222A	Proposed amendment increases the claims in the complete specification and exceed 20 claims	\$250 for each additional claim

International fees

Fees for patents overseas will vary depending on the country you apply in.

Filing separate patent applications in each country may be cost effective if you choose to file in only a few countries.

If you file an application under the <u>Patent Cooperation Treaty</u> (PCT), your application will have automatic effect in the 151 countries in the treaty. This gives you more time to decide whether you want to pursue patent protection and in which countries. Most countries require you to file a patent application within 30 months from your priority date. You have 31 months if you file in Australia. Please check each country's requirements to ensure the correct fees are paid on time.

If you choose to pursue patent protection without professional advice you should take extreme care to understand the fees you will be required to pay and when you are required to pay them.

If you have filed an Australian provisional application with a view to filing a PCT application, you can pay for a <u>patentability search</u> to be carried out by us on your invention before you file your PCT application.

When you file your PCT application you must pay the full international search fee. If we have already conducted a search for your provisional application, you may request a partial refund of the international search fee. The amount of the refund will depend on how much additional searching we need to do on your PCT application.

Fees must be paid for a PCT application within one month of filing the application. Failure to pay these fees will result in the application being withdrawn.

You will also need to pay various national fees in each country where you choose to begin the national phase. Failure to pay a fee can have serious consequences for the protection of your rights.

Schedule 7 item	Action	Fee
301	Transmittal fee	\$200
302	International search fee	\$2200
236	International-type search request	\$950
401	International filing fee If the application contains 30 Pages or less including the request form	\$1970
	For each page in the application in excess of 30 Sheets	\$22
403	Electronic filing discounts for:	
	Using ePCT filed in PDF format	\$296

Schedule 7 item	Action	Fee
	Using ePCT filed in XML format	\$444
	Additional international search fee	\$2200
	Cost of preparing certified copy of Basic Document	\$50 per document
	Copies of Specifications cited in the International Search Report	\$50 per copy
304(a)	PCT International preliminary exam (with Australian ISR)	\$590
304(b)	PCT International preliminary exam (without Australian ISR)	\$820
402	International preliminary examination handling fee	\$296

Oppositions and hearings

Parties involved in patent oppositions and ownership disputes can give evidence in a hearing overseen by a delegate of the Commissioner for Patents.

Some of the costs involved in opposition proceedings are detailed below:

Schedule 7 item	Action	Fee
216	Filing a notice of opposition	\$600
231	Appearing at a hearing	\$1000 per day
231A	Hearing on the basis of written submissions only	\$600

Sale of documents

Replacement certificates can be ordered via our <u>online services</u>. Options are: photocopies, certified copies and duplicates. Depending on which option you select the cost will vary.

When ordering a document, an expedited post service is available if you require your document to be sent to you faster than normal postage timeframes. This fee will not increase IP Australia's processing time for any document request.

<u>Commemorative certificates</u> can be purchased from a third-party provider. The price ranges from \$80 plus GST (Certificate Only with domestic postage) to \$240 plus GST (Certificate with Frame & Mount Board with domestic postage). These can be used for display only and do not replace your certificate for legal purposes.

Number	Fee
Copy of one to three documents from the same file	\$50 each
Copy of four or more documents from the same file	\$200
Expedited post of a document request	\$20 each